2025 Home Weatherization Pathway Manual

January 2025

SOUTHWESTERN ELECTRIC POWER COMPANY℠

An AEP Company

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Home Weatherization 2025 Pathway Manual

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Section 1: Introduction

This pathway manual outlines the policies and procedures for Southwestern Electric Power Company's (SWEPCO's) Home Weatherization Pathway (HWP). Its intention is to guide "implementation and participation" activities, making certain all parties understand the pathway requirements and their responsibilities. The manual is designed for use by SWEPCO personnel, its customers, and participating contractors. SWEPCO has contracted with CLEAResult (Implementer) to serve as the pathway administrator and implementer.

1.1 Pathway Overview

SWEPCO's Home Solutions Program offer incentives for the quality installation of eligible products and services that improve the energy efficiency and comfort of SWEPCO residential customers in Arkansas. These incentives are designed to reduce the initial costs associated with energy efficient home improvements. This manual provides a roadmap for implementing residential energy improvements through the Home Weatherization Pathway which is one of 4 residential Pathways within the broader SWEPCO Home Solutions Program.

The Arkansas Public Service Commission's (APSC's) Order No. 7 in Docket No. 13-002-U directed the development of a consistent weatherization approach across all investor-owned utilities (IOU), which resulted in an APSC approved consistent approach for weatherization programs called the Core Program. Order Nos. 22 and 23 approved the Core Program, which will offer eligible residential customers the following core energy efficiency measures at no cost:

- Comprehensive energy assessment
- Air sealing
- Attic insulation
- Duct sealing
- Wall insulation
- Direct installation of
    - Advanced power strips
    - LED lamps
    - Faucet aerators with electric water heating
    - Low-flow showerheads with electric water heating

SWEPCO has developed the 2025 HWP to align with the Core Program. The HWP will be run in conjunction with the local gas utilities that share service territory. To supplement the HWP measures, SWEPCO will offer additional measures through the Residential Energy Improvement Pathway (REIP). REIP measures are incentivized to help reduce the cost of installing more energy efficient measures and are not included in the no-cost HWP. Contractors will work with both pathways wherever possible.

1.2 Pathway Goals

The table below outlines the HWP goals and objectives for 2025. Annual energy and demand savings are based on a list of eligible measures installed through the pathway. Actual energy and demand savings will be calculated using deemed savings calculations as approved by the Arkansas Public Service Commission.

Table 1: Pathway Goals – Home Weatherization Pathway

Pathway Year	kWh Savings	kW Savings	Incentive Budget
2025	7,154,459	2,540	$2,348,401

1.3 Contact Information

SWEPCO Home Weatherization Pathway
C/O CLEAResult
122 Grant Place Ste B
Lowell, AR 72745

1-888-266-3130
Fax: 479-234-4972
info@SWEPCOsavings.com
SWEPCO.com/ARsaves

Table 2: Pathway Contacts

Name	Company	Role/ Responsibility	Telephone	E-mail Address
Nancy Guisinger	SWEPCO	EE & Consumer Program Coordinator	479-973-2403	nsguisinger@aep.com
Jacob Nielson	CLEAResult	Portfolio Manager	479-935-2998	jacob.nielson@clearesult.com
Elisha Patterson	CLEAResult	Residential Pathway Manager	479-439-8627	elisha.patterson@clearesult.com
Charles Haight	CLEAResult	Program Consultant	479-755-2517	charles.haight@clearesult.com

Section 2: Contractor Participation Process

2.1 Contractor Eligibility

The HWP is implemented by participating contractors, who are responsible for properly installing qualifying improvements and providing eligible services to qualified SWEPCO customers. Participating contractors are required to meet the participation requirements including minimum general liability insurance requirements, state licenses, and pathway trainings in order to perform specific services associated with the pathway. To become a participating contractor, the contractor must apply through the annual Request for Qualifications (RFQ) process. In

addition to the RFQ process, the following items must be completed and submitted by those chosen via the RFQ process*:

- A 2025 Contractor Network Application and Agreement
- 2025 HWP Addendum
- An IRS W-9 Form
- A Certificate of Insurance, including Worker's Compensation coverage and verifying the following commercial general liability insurance minimums:
  - $500,000 per occurrence
  - $1,000,000 general aggregate
  - $1,000,000 aggregate for products and completed operations
- The applicable license and/or certification as listed below:

Table 3: Required Contractor Credentials

Measure/Service	Required Certifications and Trainings
Insulation	Arkansas Home Improvement Specialty License http://www.aclb.arkansas.gov/apply-for-contractors-license
Duct Sealing	BPI Building Analyst Professional (BA-P)
Air Infiltration	BPI Building Analyst Professional (BA-P)
Comprehensive Assessment	BPI Building Analyst Professional (BA-P)

*Program may add additional contractors outside of RFQ if program needs dictate.

Building Performance Institute Inc (BPI) discontinued the BPI Building Analyst (BPI-BA) certification in June 2023. Contractors with current BPI Building Analyst certifications are approved for any measure/service that requires BPI Building Analyst Professional until the expiration date on their current BPI-BA certification. Once the contractor's current BPI-BA certification expires, contractors are required to obtain the new BPI Building Analyst Professional (BA-P) certification as required credentials.

2.2 Contractor Application Process

Step 1: Apply to the Pathway via the Annual RFQ Process

SWEPCO will release an annual RFQ in Q4 to all current contractors, and those who have expressed interest in participation, in order to select the following calendar year's HWP contractors. The RFQ will detail the pathway requirements and scope, as well as contractor eligibility and expectations for participation. The RFQ process is such that contractors will provide answers to a uniform scored questionnaire as well as submit any supporting documentation (insurance, organizational chart, staff certifications, etc.) required. Each contractor's submission is scored, and supplemental documentation reviewed in order to select the most qualified contractors for the pathway. While the score will be a factor it will not be the only metric used by the pathway to choose the contractors who will participate. Once the selected contractors are notified, the Implementer schedules a preliminary meeting to discuss next year's anticipated pathway allocation.

Step 2: Allotment Process

Each contractor will be assigned an estimated annual allotment forecasted over 12 months before the new pathway year begins so the contractor can gauge staffing needs for the coming year. This allotment will be reviewed monthly and may fluctuate as the pathway year progresses. Factors that may affect allotments are pathway budget, pathway progress to goals, contractor performance, and unforeseen pathway needs. Contractor's performance factors may include monthly allotment completion, energy savings per home, incentive spend per home, and customer satisfaction.

Step 3: Pathway Training and Kickoff

Prior to the start of the new pathway year, a mandatory Pathway Training and Kickoff Meeting will be held for all participating contractors. During this meeting the scope of HWP will be detailed. It is expected that company principals, assessors, crew leads, and crew members be in attendance. Office staff and other field staff who will work on HWP are highly encouraged to attend. A live webinar may be made available for office staff and principals that cannot attend in person. Each contractor will receive a Contractor Resource Kit that includes the pathway guidelines, standards, reporting requirements, marketing materials, quality assurance process, and templates. The Contractor Resource Kit will also include a Deemed Savings Calculator that is used to calculate the incentive and savings for each project.

Step 4: Pathway Review of Contractor Equipment

As part of the quality assurance (QA) process, it will be the responsibility of the contractor to provide the Implementer access to field tools and equipment for inspection purposes. Prior to starting the new pathway year and during live QA inspections, each crew working in the pathway will be required to demonstrate that they have all the required equipment to complete a comprehensive home assessment, including any safety testing. The following is the minimum required equipment expected to be with each crew at every job:

- Blower door, either Minneapolis or Retrotec brand, and proof of calibration in the last 24 months
- Duct tester, either Minneapolis or Retrotec brand, and proof of calibration in the last 24 months
- Monometers (2), one each for blower door and duct blaster, and proof of calibration in the last 24 months
- Combustion analyzer that meets the BPI1200-S-2017 Standard section 7.1.1.
- Personal CO monitor for crew members
- Spillage verification device (mirror, smoke stick, puffer, etc.)
- Combustible gas leakage tester capable of testing Undiluted CO (air free), and proof of calibration in last 24 months
- Safety equipment such as eye protection, gloves, and respiratory protection
- "No touch" voltage detector
- Pressure pan(s)

- Flow box to measure exhaust fans (for ASHRAE 62.2 compliance)
- Basic hand tools as dictated by the work being performed
- Binder(s) with Pathway manuals, BPI standards (BA, 1100, 1200) etc.
- Binder with the MSDS for any materials used

Additional tools and equipment may be added by the Implementer at any time, and proper notification to contractors will be given prior to inspection of added equipment and tools. During the inspection, should the required equipment not be on the job site, the Implementer reserves the right to stop all work until proper equipment can be provided. Any inspection failures will result in the necessary corrective action detailed in Section 6.

Section 3: Customer Participation Process

3.1 Customer Qualification

SWEPCO residential customers who meet the following requirements are eligible to participate in the HWP:

- Residential customers served by a SWEPCO electric meter.
- The residence must be individually metered, as verified by an active SWEPCO account number.
- Tenant-occupied dwellings are eligible providing the property owner provides permission.
- The customer must have had a bill in the last twelve months that exceeded ten cents per square foot or the home's age is 10 years old or greater.
- The home must also have been occupied the previous 12 months and cannot have previously participated in the Arkansas Weatherization Program (AWP), SWEPCO HPwES/HWP Pathway, Black Hills Energy Home Energy Solutions Program, or Arkansas Oklahoma Gas (AOG) Weatherization Program. Those that have previously participated may still participate in SWEPCO's Residential Energy Improvement Pathway.

Manufactured and mobile homes are eligible for incentives, providing all mobility devices have been removed. Manufactured and mobile homes must have a complete belly board and belly insulation. Homes with diminished belly boards or belly insulation will need those areas repaired prior to installing any measures. Any water or other water-related issues must also be remedied prior to any work being conducted. Any existing factory ventilation will be maintained as found at the time of assessment. The contractor may elect to repair any of the above-listed issues either as part of the pathway measure installation or at a cost agreed upon by the customer and contractor. Any identified issue must be fully resolved before any pathway measure may be installed except for Direct Install measures.

Other items that may exclude any home from eligibility include but are not limited to:

- The presence (actual or assumed) of mold, asbestos, water intrusion or overall sanitary health concerns.
- Homes that are currently or will be under renovation.

- Homes that have excessive air infiltration or structural issues that present long-term durability concern over any installed measures.
- Homes that have open wiring connections, active knob and tube wiring or other unresolved electrical connections.
- Mobile/manufactured homes with diminished or missing belly board or belly insulation.
- Homes with active water leaks (roof, wall, plumbing, etc.).
- Homes that have vent-free fireplaces or appliances that do not have the appropriate ANSI standard as referenced in the current BPI 1200 standard.

3.2 Customer Participation

The participation process described below has been developed for SWEPCO residential customers interested in improving their home's energy efficiency using the HWP. See Appendix A for illustration of the Participation Process.

Step 1: Verify Eligibility

A customer may verify their home's eligibility in one of three ways: 1.) Apply online via an online form; 2.) Call the Implementer Call Center at 1-888-266-3130 to speak to one of our Energy Advisors; 3.) Customers may also submit via fax, email or mail an Authorization to Release Information Form (available for download on SWEPCO.com/ARsaves). An Energy Advisor will verify the customer is eligible to participate and will contact the customer in 3 to 5 business days. The customer will be provided with a participating contractor, or if there is a waiting list, the customer will be added to the list. In the event the customer is not eligible for HWP, the Implementer will inform them by either a letter or an email. The customer will also be informed of other SWEPCO pathways for which they may be eligible or what criteria, if any, is needed to become eligible. The contractor may also submit a signed and completed Authorization to Release Information Form for the customer.

A waiting list will be established if customer demand is higher than HWP or contractor capacities allow. Customers who are on this list will be provided to contractors as the contractor's allotment and schedules allow. They will be distributed in proportion to that contractor's allotment as it relates to the overall yearly goal. It is expected that these customers are contacted and scheduled within 10 business days of receiving the lead. If they are not, the name may be reassigned to another contractor by the Implementer. The customer will be provided, by either email or mail, the name and number of their assigned contractor. The customer may also freely request another contractor.

Step 2: Select a Participating Contractor

All projects must be completed by a participating SWEPCO HWP Contractor. For information on becoming a participating contractor, please see Section 2 of this pathway manual. Customers may elect to be provided with up to three participating contractors following their home's eligibility verification. In the event the customer is put on the waiting list, the next available contractor will

be provided with the customer's name to contact. The customer may request another contractor if the assigned contractor does not fit their needs. The selection of a participating contractor to perform the work is the sole decision of the customer. An approved contractor list is available on SWEPCO.com/ARsaves or by calling 1-888-266-3130. SWEPCO does not endorse any one company, product, or service with the participation of this pathway, and an Energy Advisor will select three contractors that will best be able to address the needs of the homeowner.

An authorized SWEPCO HWP Contractor must be used for all HWP projects. HWP contractors are required to have at least one Building Performance Institute (BPI) certified Building Analyst, Building Analyst Professional (BA-P), BPI QCI, BPI Energy Auditor or RESNET HERS Rater certified staff member at each location for the duration of the project, and act as the point of contact throughout the course of the project. If the crew lead has a RESNET HERS certification, he/she will be expected to have an equivalent BPI Certification within 4 months of starting work within HWP.

Step 3: Install Measures

Upon selecting a contractor, the customer contracts directly with them for the services to be performed. All measures installed or services performed must meet the eligibility requirements in Section 3.1 of this pathway manual. All measures installed must meet local building codes. The customer is solely responsible for any additional costs associated with services or materials provided by the contractor beyond the Core Measures. Additional measures may be eligible for incentives through REIP, such as HVAC systems and ENERGY STAR® windows. For a full list of available REIP incentives, visit SWEPCO.com/ARsaves.

To participate in HWP, the customer must have a comprehensive energy assessment completed by a qualifying HWP contractor. The customer should expect the contractor to conduct a brief interview regarding the home and the owner's comfort needs prior to conducting the assessment. They may also collect energy consumption data from the past year in order to establish base load versus seasonal energy use. The homeowner can request twelve months of electric usage data using an Authorization to Release Information Form. The homeowner may identify the assessment contractor they are using, sign the form, and allow the contractor access to their usage data sent by the Implementer.

The home energy assessment will include, but not limited to a complete visual and diagnostic assessment of the home's exterior and interior, including basement or crawl space and attic, heating and cooling equipment, hot water system, duct work, windows, major appliances, and lighting. The assessment contractor may also perform diagnostic testing, including blower door, duct blaster, and combustion appliance zone (CAZ) testing. Direct Install measures, such as low-flow showerheads, faucet aerators, LEDs, and Advanced Power Strips, may be installed by the contractor during the assessment. The comprehensive assessment of the home will result in targeted recommendations made by the contractor. The contractor will produce a report on all assessment findings, improvements completed, additional recommended cost-effective

improvements including those outside of the HWP and will calculate the potential incentives and estimated energy savings of those improvements.

If work was not installed in conjunction with the assessment, the customer, after reviewing the assessment report, will select the measures to be installed. The assessment contractor will install the measures or sub-contract the work to a member of their Home Performance Team to complete the project. Upon completion of measure installation, the assessment contractor will conduct a final inspection and any required test-out procedures to verify the results.

Step 4: Project Submission

Upon completion of the project, the contractor enters all project data into the Implementer's online weatherization portal, uploading any required documentation including photos, invoices, customer agreement and the assessment report. The Customer will sign the participation form prior to contractor submission. The Customer will receive a paper or electronic copy of the Terms and Conditions at the time of the assessment.

In the case where the online portal is not available for an extended period the Implementer will provide contractors with a paper form and instruction on its use. All required project paperwork must be submitted to the Implementer within 30 days of invoice date for review and verification that the upgrade or service performed meets pathway standards.

The contractor will have 90 days from date of payment to notify the program team of any underpayment discrepancy. Following those 90 days, the project will be considered paid in full and no adjustments will be made.

Step 5: Receive Incentive

The customer's incentive is automatically assigned to the contractor who will receive their incentive check or direct deposit within four to six weeks of the receipt of a completed online portal submission. The Implementer will contact the contractor if additional documentation is required, or if calculations need to be clarified, which can delay payment on the project.

Step 6: Schedule Inspection

The HWP Pathway provides a quality assurance inspection for a minimum of 5% of all completed projects. Customers who participate in HWP agree to make their homes available to the Implementer or to a third party to verify the proper installation of eligible equipment. During the final inspection, technical information will be collected from the homeowner, and/or contractor and performance testing may be performed to verify the work that has been completed meets pathway requirements.

3.3 Core Measures and Incentive Rates

Table 4: Incentive Rates by Measure

Measure	Existing Condition	improvement Levels	Contractor Incentive Rates	
			SWEPCO Only Project	Joint Utility Project
Comprehensive Energy Assessment (CEA)	CEA as defined in Pathway Manual, Customer CEA Report and Direct Installs installed	Up to 750 Sq. Ft. Over 750 Sq. Ft.	$150.00 $300.00	$75.00 $150.00
Duct Sealing	Leakage to outside test ≤40% total fan flow & >80 CFM_{25}	>10% reduction	$1.55/CFM Reduction	$0.72/CFM Reduction
Air Sealing	≤1.25 air changes/hr & >building air tightness limit (MVR)	≥10% reduction at CFM_{50}	$.18/CFM Reduction	$.10 Reduction
Ceiling Insulation	Existing levels of R-14.9 or less in installed area R-38 Final Insulation level	≤R-1 >R-1 – <R-5 ≥R-5 – <R-8 ≥R-8 – >R-15	$1.15/sq. ft. $1.05/sq. ft. $0.90/sq. ft. $0.80/sq. ft.	$0.58/sq. ft. $0.53/sq. ft. $0.47/sq. ft. $0.40/sq. ft.
Wall Insulation	None installed May only be installed where vinyl siding can be removed to drill and fill from the outside	R-13	$1.45/sq. ft. of insulated wall	$1.45/sq. ft. of insulated wall
Direct Install Measures	**Contractor Installation only All replaced equipment removed from home**		**Electric Water Heating**	**Gas Water Heating**
Advanced Power Strips	Pathway approved APS Customer informed on use and provided with owner's manual	Home Entertainment Home Office	$36.00/Unit	$36.00/Unit
ENERGY STAR LED Bulbs Max of 20 total	Replaces Halogen and Incandescent in High use areas indoors or outdoors	A19 Bulbs Specialty Bulbs B11 or G25 BR30 Bulbs	$5.00/unit $5.00/unit $8.00/unit	$5.00/unit $5.00/unit $8.00/unit
Energy Saving Showerheads	Existing ≥2.5 GPM	1.5 GPM or Less	$12.00/unit	Paid by Gas Program
Energy Saving Aerators	Existing ≥2.2 GPM	Kitchen 1.5 GPM Bath 1.0 GPM	$4.00/unit	Paid by Gas Program

3.4 Incentive Rate for Gas Served Homes

Incentives are paid to the contractor in accordance with the available utility program for the home. If the home is an all-electric SWEPCO home, the SWEPCO Incentive Rate in Table 4 will be paid to the contractor by SWEPCO. In the case where the home has SWEPCO electric service but is heated by gas, and the home is eligible for a gas company program, the Joint Utility Incentive Rate as shown in Table 4 will be paid. In the case where the gas utility program servicing the home runs out of program budget, SWEPCO will pay the SWEPCO Incentive Rate for the project. The contractor must utilize all available utility programs applicable to the home, within respected allotments.

The following limitations apply to the payment of incentives:

- Homes that have previously been paid an incentive on any measure are not eligible to be paid again for that same measure in any pathway.
- Where applicable, incentives will be submitted to both SWEPCO and any applicable Gas Utility program.
- Multiple incentives can be paid for more than one installation of the same “type” of measure. For example, a home may have two duct systems sealed, or two separate ceiling areas with differing pre-insulation levels.
    - A Project Completion Form or online project form must be submitted within thirty (30) days of installed measures
- Before an incentive is paid for any work performed on a project, the Implementer will provide a complete review of all projects and submitted documentation. See Section 6 of this pathway manual for an overview of the Quality Assurance Plan.

The Implementer reserves the right to conduct a quality assurance inspection prior to paying on a project, and upon passing inspection the project will be paid accordingly.

Section 4: Contractor Participation Process

4.1 Customer Acquisition

Customer acquisition is the responsibility of the contractor and may be accomplished by typical and accepted marketing efforts such as print, social media, word of mouth, etc., detailed in Section 5. Customers who contact the Implementer may be provided with contractor names or assigned to a contractor through the waiting list process as described in Section 3. Contractors should limit their marketing efforts to keep within their allotments, and they shall refer any customers they cannot reasonably service back to the Implementer to be reassigned. At no time should a customer be led to believe HWP is out of funds or not running when the contractor may be fully subscribed or out of budgeted allotment. In such cases the contractor will refer the customer to the Implementer to be assigned to a contractor who can serve their needs.

The contractor will need to gather the appropriate information to confirm the house meets the participation requirements of HWP. This is done by submitting an eligibility form through online submission or an Authorization to Release Information Form. The contractor will either obtain a signed Authorization to Release Information Form from the homeowner or direct the homeowner to SWEPCO.com/ARsaves to submit one to the Implementer either by paper or through the web form, citing their company as the customer's preferred contractor. Upon receipt of the signed Authorization to Release Information Form, the Implementer will verify the home's age, pathway history, high bill, and that occupancy requirements meet the eligibility criteria, and upon approval, the contractor will receive detailed electrical usage history (see Section 3.1). If the home does not qualify, both the homeowner and contractor will be notified.

4.2 Scheduling

Assessments and retrofit work should be scheduled as close together as possible. Customer time is valuable and should be respected. Ideally, the project retrofit work is scheduled within a couple weeks of each other. If the scope of work includes adding attic insulation, the attic insulation should be installed within 4 weeks of the assessment date. Exceptions to this may fall into safety or code issues, e.g., open wires or knob and tube wiring in the attic. In the case of excessive gaps between assessment and energy improvements, contact with the Implementer should be made in order to keep the Implementer informed and to prevent any potential Corrective Action.

4.3 Assessment & Installing Measures

The customer contracts directly with the contractor for the services to be performed. All measures installed or services performed must meet the eligibility requirements in Section 3 of this pathway manual as well as the best practices found in Section 4.6. All measures installed must meet local building codes and any other State, Federal or applicable Safety codes. The customer is solely responsible for any additional costs associated with services or materials beyond the Core Measures provided by the contractor.

4.4 Comprehensive Energy Assessment

The Comprehensive Energy Assessment (CEA) shall include, at a minimum, the following elements:

- **Customer Interview:** At some point before, during, or after the physical inspection of the property, the participating contractor shall interview one of the primary occupants of the home to identify any specific issues the customer is seeking to address through the HWP pathway and typical occupant behavioral patterns as they relate to the performance of the home.
- **Review of Energy Bills:** The participating contractor shall also request historical energy (electric and gas) bill data from the customer as part of the CEA. This usage may be obtained directly from the customer or via the Authorization to Release Information Form. A review of energy consumption data is critical to determining how the homeowner uses energy; not having this information limits the effectiveness of the CEA. When historical fuel-use data is available, the participating contractor shall review that data to identify

patterns that will inform the prioritization of recommended measures and confirm that projected energy savings estimates are realistic. At a minimum, the participating contractor shall review customer-reported annual or monthly energy costs and use it as a benchmark against estimated cost-savings predictions.

- **Combustion Appliance Safety Evaluation:** When combustion appliances and/or space heating equipment are present in the home, a combustion appliance safety evaluation shall be completed following BPI 1100 and 1200 protocols found in Appendix C.
- **Visual Home Inspection**: A visual inspection shall be completed of the home's exterior, interior, thermal envelope and enclosure, and all mechanical systems (including equipment, distribution systems, and controls). Any safety hazard or otherwise unsafe conditions should be identified such as asbestos, mold, water intrusion, knob & tube wiring, etc.
- **Diagnostic Tests:** Instrumented diagnostic testing shall be completed as part of the CEA process as required to effectively assess the home's energy performance, produce energy savings estimates, and develop an accurate list of recommended improvement measures.
- **Data Collection:** Observed and measured data shall be recorded during the CEA including: documentation of the home's physical geometry, features, and measurements; identification and performance data for space heating, cooling, ventilation, and domestic hot water equipment and systems; existing type, quantity, and condition of thermal elements of the building enclosure; evaluation of envelope air leakage paths; and information about existing lighting and major household appliances which may be used to inform customers of opportunities for improvements.
- **Pictures.** The following pictures (at minimum) will be taken, retained, and made available to the Implementer for quality assurance/quality control (QA/QC) or other purposes.
    - Front of the house from street showing whole house and house number
    - All equipment data plates (HVAC, water heating, etc.)
    - Pre- and post-monometer readings for ducts and air infiltration, taken side-by-side with top portion of project completion form w/address & name visible
    - Pictures of any major issues, e.g., water damage, mold, air leakage, duct leakage etc.
    - Picture of energy bill summaries
    - Picture of electric meter

4.5 CEA Customer Report

The contractor should utilize the Pathway provided CEA report template and will produce a report on all assessment findings; measures installed, additional recommended cost-effective improvements, and calculate the potential incentives and estimated energy savings via provided incentive/savings calculator. Additionally, a summary of completed work should be included or detailed in each section. If work was completed in conjunction with the initial CEA, the report should reflect what improvements were made, other recommendations, and savings estimates as well as all other aspects listed below. The customer should receive their report preferable the day of the assessment or within 14 days.

Table 6: Required Elements of Comprehensive Energy Assessment Report

	Required Elements	Description
General Information	– Participating contractor name – Contractor contact information – Identification of the contractor's qualifying credential(s) – Name of technician completing the CEA	Annotates the company taking primary responsibility for the HWP project. This is the contractor of record who will be credited with the project in data reported to DOE.
	– Customer name – Assessed home's address	A picture of the home's exterior will be incorporated into report cover sheet along with customer name and address (as shown on the customers bill).
	– Date of CEA	The date that the primary assessment site visit was conducted.
	– Executive summary	A quick summary of 1 page or less, detailing all found and addressed issues, and any improvements made at the time of work. Directly address any of the customer's initial concerns, energy usage and behavior factors.
Existing Conditions	– Building envelope air leakage evaluation	Results of the visual inspection shall be recorded, including a preliminary identification of leakage paths to be sealed or general scope of air sealing work to be completed as a recommended improvement measure
	– Thermal barrier condition assessment	Includes all walls, floors, ceilings and other enclosure elements comprising the envelope of the building. The report shall document the general conditions and estimated existing R-value (or U-value) for each unique surface.
	– Mechanical systems inventory and condition assessment	Includes identification of all heating, cooling, domestic hot water, and ventilation systems in the home by system and distribution type; fuel type; make and model numbers; rated and/or measured operating efficiencies; and condition evaluation.

	Required Elements	Description
	– Heating and cooling distribution system condition assessment	Includes a description of the existing heating and/or cooling distribution system by location, insulation condition, leakage assessment, and general condition evaluation including potential design flaws to be considered for improvement.
	– Lighting and appliance assessment	Includes a general description of the overall condition, age, and efficiency (if available) of major household appliances in the home as well as a general evaluation of the opportunity for efficiency improvements to the existing lighting. Note: a detailed inventory of all lighting and appliances in the home is not a requirement.
Proposed Improvement Measures	– Prioritized list of recommended improvements	Includes home performance improvement measures identified during the assessment. Prioritization shall be determined based on: (1) resolving health and safety related issues; (2) satisfying customer needs and desires; (3) overall cost-benefit to the customer; and (4) pathway goals. The loading order of recommended improvements shall be consistent with industry-accepted standards and building science principles.
Health and Safety	– Documentation of moisture-related problems	Includes signs of water intrusion, condensation, mold, and water stains; suspected sources and causes; and recommended repairs.
	– Results of combustion appliance evaluation	Includes a general condition assessment based on visual inspection as well as results of diagnostic tests used to evaluate fuel leaks, carbon monoxide, and drafting of flue gases.
	– Identification of hazardous conditions and recommended mitigation measures	Includes repairs that must be completed prior to or concurrent with energy-related improvements (e.g. electrical repairs, roof replacements, water leak repair, asbestos removal, etc.).
Savings	– Estimated energy savings	Includes projected site energy savings associated with the completed measures and any recommended improvements. This may be presented in terms of reduced fuel consumption, reduced costs, and a percentage improvement over existing conditions. Savings estimates shall clearly indicate whether savings are projected for electricity, heating, cooling, or total household energy consumption.

	Required Elements	Description
Signature	– Signature of Assessor and date of signature	Final requirement.

After reviewing the assessment report the customer will select the measures to be installed. The HWP contractor will install the measures or sub-contract the work to a member of their Home Weatherization Team to complete the project. Upon completion of measure installation, the assessing contractor will conduct a final inspection and any required test-out procedures to verify the results.

In the event the assessment and installed improvement are done concurrently or in tandem, the report may be developed following the work and should reflect all of the above requirements as well as address the completed improvements and detail estimated savings for both the completed measures but also any other suggested improvements.

4.6 Best Practices

All installed measures will be installed using best industry practices and done so in a durable and lasting manner. Any question on methodology or material use should be directed to the Implementer for clarification/approval. Best practices are detailed below in general terms and should be used as a guide only. Practices, methods, or materials that are used that do not meet the Pathway's intent may require homes to be rectified by the contractor.

Table 7: Measure Best Practices

Measure	Best Practice	Cautions, un-approved methods
Air Sealing: General	Sealing should be done in a manner that is durable and where visible done in a clean and unobtrusive manner Approved Materials: • Expanding Foam - used only in non-visible area, large excesses of foam cut back • Caulking – Clear paintable caulk is preferred where visible • Caulking with backer rod – for larger gaps where expanding foam is inappropriate • Gaskets – switch plates, etc. • Spray mastic – non-visible areas • Drywall spackle	Foil tape will not be used for air sealing. "Duct" tapes are not an appropriate sealant for any measure. Adhesive sheeting will not be used on wood or sheetrock. Any other use must be approved prior to use. Active Knob and Tube wiring must not be present in the home if insulated or air sealed.
Air Sealing: Exterior doors	• Screw or nail on weather stripping (w/s) with metal flange is preferred. • Kerf weather stripping is preferred on newer doors with existing kerf. • It is preferable to raise adjustable thresholds rather than adding a door sweep to any exterior door.	Adhesive w/s will not be used on exterior doors. Customer approval is required if using mechanically fastened w/s, primarily in color choice.
Air Sealing: Mechanical Doors	• Adhesive weather stripping may be used on mechanical closets if stapled in place to ensure longevity. • If louvered doors are covered to isolate a CAZ, 1/8" plywood screwed to door with edges caulked is preferred. • If isolating a CAZ by sealing the mechanical door, the entire doors (four sides) must have a combination of w/s and/or door sweeps installed.	Mastic and foil tape are not acceptable to seal a mechanical door. Do not seal mechanical doors with combustion appliances if the CAZ lacks proper combustion makeup air
Air Sealing: Windows.	• V-strip may be mechanically fastened to help seal windows. • Weight pocket covers should be used on older windows to seal off weight pockets.	Windows should not be caulked shut, even if requested by the customer. Weight pockets should never be foamed or caulked. If customer has seasonal plastic coverings on windows (winter), the home should not have air infiltration done until those

		coverings are all completely removed.
Duct Sealing	Preferred methods • Mastic with mesh tape: layer of mastic followed by fiberglass mesh tape topped with mastic • Mastic – bucket or tube based • Aerosolized Mastic • UL 181 tapes – appropriate rating for duct type being sealing. • Caulking • Expanding foam	Compliance with product MSDS is required. Mechanical data tags should never be covered. Filter doors should not be sealed shut. Registers/grills should never be caulked to the surrounding sheetrock Or floor.
Attic Insulation	General notes: • Insulation paid by the Pathway may only be installed over conditioned space. • Converted spaces such as garages and porches may be insulated if those spaces are actively conditioned and in a livable state. • Insulation for new construction is not allowed. • Insulation on large in-depth remodels may be allowed with prior Pathway approval. If existing attic insulation is not verifiable or has been recently evacuated, the measure may no longer be eligible. Contact Pathway to evaluate the situation as early as possible. Existing Insulation level evaluation • If batts are present, use the BPI "Effective R-values of Batt Insulation" in the BPI standards in Appendix C. • To determine insulation levels, the area to be insulated should be evaluated to an average number of inches and multiplied by the R-Value of the existing insulation type: see Appendix C. • Large areas missing or substantially lower than that of the rest of the attic should be noted and factored into the overall average. Attic Prep General: • Electrical inspection should be done to identify any possible issues/hazards. • Baffles installed in all vented bays and mechanically fastened to prevent falling. • Insulation depth markers are required to be installed, spread out and visible from the attic access at a	Open wire connections must be enclosed to code specs before insulation is installed. Active Knob and Tube wiring must not be present in the home if insulated or air sealed. Care should be taken to avoid any insulation falling in HVAC or DWH drain pans. Any insulation in those pans should be fully removed If vermiculite insulation is present. Obtain professional advice. Vermiculite insulation may contain asbestos and must be tested for such prior to the attic being insulated and or air sealed. Contact the State Department of Health at (501) 661-2171.

	minimum of 4, or 1 per 300 square feet whichever is higher. Attic Prep Can Lights/B-Vents: • Non-IC rated can lights should have cones, boxes or some other device (purchased or site made) installed to keep insulation out of direct contact with can and providing a 3" air space unless otherwise specified by manufacturer. Using boxes can aid considerably with air sealing if installed with sealant. • "B-Vents" should have nonflammable devices installed to keep insulation from making direct contact and maintaining a minimum of 1" air space from all combustibles unless otherwise specified by manufacture/code. Attic Prep Dams: • Dams should be high enough to extend beyond the installed height of insulation ensuring full insulation height to edge of area insulated. • Dams are installed wherever a change in ceiling height or adjacent to an uninsulated section. • Dams should be installed around whole house fans. • Dams should be installed around attic accesses where access is directly adjacent to or in insulated area. Attic Prep Hatch: • Attic hatches (scuttle holes) must be insulated to the same final level of the rest of the attic (R-38) if it sits over conditioned space. • The insulation must be attached to the cover by adhesive or mechanical means. • The attic hatch should also be weather-stripped for air sealing. Attic Prep Drop-down stairs: • Attic stairs that sit over conditioned space should be insulated to the same level (R-38) as the attic surround. • The stairs also should have a dam installed to maintain insulation levels of surrounding attic and prevent insulation falling in. Some foam board with batts attached is a low material cost and labor cost solution.	Dams around attic accesses should be made from a durable material that will sustain a person climbing through such as OSB or dimensional lumber (ie:2"x12"). Foam board or other such materials should not be used in this area.

	Attic Prep Decking: • The customer should be instructed to remove all storage items from attic to ensure proper insulation levels are achieved, safety is ensured, and items are not covered with insulation. • Areas with decking or flooring installed over conditioned space require a full R-38 value. • Decking must be pulled up to be fully insulated underneath. • Decking with insufficient space under to achieve a full R-38 value should be removed completely, framed up to achieve a full value, or pulled up, insulated under, then insulated over top to achieve a full value. Attic Prep Wall Cavities, Interior Soffits & Chases: • Open wall cavities should be blocked and sealed prior to insulating. • Interior drop-down soffits like those in kitchens and bathrooms should be either filled full with insulation or securely covered over and sealed. • Open chases should be securely covered and sealed prior to insulation. Insulation Installation Sheet: • Upon completion, an Insulation Installation Sheet per Arkansas Building Code will be posted in the attic near the access. The Sheet will note company name, date of install, type and brand of insulation used, number of bags used, previous insulation R-Value, final R-Value, name of installer, and installer signature.	
Wall Insulation	Wall insulation will be installed in enclosed wall cavities by drill and fill methods via outside access in homes with Vinyl siding only. Upon completion there will be no visible evidence of work. • Removing a course of vinyl siding is acceptable to access wall. • Care taken to insulate all cavities, including under windows and below any fire blocking. • Holes will be snugly plugged with tapered wood or plastic plugs. • Any disturbance of vapor or moisture barriers will be remedied prior to siding being reinstalled.	If knob and tube wiring is present, insulation cannot be installed. No visible holes will be left at completion of job. Drilling through exterior cladding is not acceptable. Drilling through interior walls is not acceptable. Vinyl siding may be brittle due to age, sun exposure and temperature. Care should be given when

		removing to avoid irreparable damage.
Advanced Power Strips (APS)	• Care should be taken when installing APS; customer input should be used to determine what components will be plugged into APS. • The customer should be informed fully on the use and benefits of their new APS, and the manual/warranty sheet should be left with the homeowner.	Devices with a hard drive should not be installed in a switched outlet. Such as DVR's, computers, some gaming platforms etc., unless otherwise specified by manufacture's documentation
Low Flow Showerheads	• Installed showerheads must be 1.5 GPM or less. All installed shower heads must be approved by the pathway before use. Must have an active electric water heater	The shower arm should be supported when removing and installing showerheads to prevent cracks, splits in pipes or shower arm. Manufacturer's installation procedures should be followed.
Low Flow Aerators	• Kitchen faucets should have no less than 1.5 GPM aerators installed. • Bathroom faucets may have .5-1.5 GPM aerators installed.	Care should be used to avoid cross threading the aerator. Manufacturer's installation procedures should be followed.
LEDs	• Should only be installed in commonly used areas on high use lamps or fixtures. • Only used to replace incandescent and halogen bulbs. • In rental homes, only the permanently installed fixtures may have bulbs installed. • All removed light bulbs will be discarded offsite by contractor.	May be installed with dimmer if bulb is a dimmable type. CFL's will not be replaced.
Cleanliness	• Great care will be taken to keep the home and yard free from any debris, trash, or materials following completion of work. • Surfaces should be protected from accidental drops, spills, or damage from tools, ladders, chemicals, sealants, etc. • Dust should be swept or vacuumed following work. • Shoe booties and drop cloths are highly encouraged.	Work should not be done in a home where the occupant has shown symptoms or is currently sick. Follow CDC guidelines.

4.7 Submit Project Completion Form/Online Portal/Payment

Upon completion of the project, the contractor enters all project data into the Implementer weatherization online portal, uploading any required documentation, which includes photos, invoices, and the assessment report. The Customer will sign the Terms and Conditions Form prior

to any work being completed. The customer should receive a copy of their signed Terms and Conditions either via paper or electronic copy at the time of the assessment.

In the case where the online portal is not available for an extended period the Implementer will provide contractors with a paper form and instruction on its use. All required project paperwork must be submitted to SWEPCO within 30 days of invoice date for review and verification that the upgrade or service performed meets HWP standards.

The contractor will receive their incentive checks within four to six weeks of the complete paperwork and/or online portal submittal. The Implementer may contact the contractor if there is missing documentation or to verify the incentive calculation. The contractor may also request to be paid directly by direct deposit; a participation form is available upon request.

4.8 Inspections

The HWP has a formal Quality Assurance and Quality Control (QAQC) process outlined fully in Section 6 of this pathway manual. All participating contractors are subject to this process. The Implementer will conduct quality pre-inspections, live “ride-along” inspections, and post-inspections or any combination therein, for five to ten percent of the contractor’s projects. The contractor will be notified via email of the results of QAQC on any of their jobs. If a project does not pass inspection, the contractor will be formally notified of any issues found during the inspection, and the contractor will be provided with a timeframe and possible Corrective Action Form to rectify the issues. A subsequent inspection will be conducted, and if the issues are not corrected, the contractor may be requested to reimburse SWEPCO for all incentives paid for the project.

If a contractor has repeated project inspection failures, they may be subject to suspension or removal from the HWP. For additional information about the QAQC process, please review Section 6 of this pathway manual.

Section 5: Marketing

SWEPCO is committed to increasing customer awareness and demand for energy efficiency pathways and services to help them reduce energy use and save money. The HWP marketing campaign will promote the value of energy efficiency upgrades, comprehensive home energy assessments, associated cost savings, and links between energy usage and the environment. The campaign will also direct customers to the available incentives and Contractor Network.

Campaign tactics and messages will be tailored to maximize customer participation by season, demographics, and attitudinal differences among customers. Key tactics may include:

- Radio
- TV
- Direct mail and email campaigns

- Print
- Online advertising
- Website and social networking sites
- Direct outreach to customers
- Homeowner education materials
- Contractor Network marketing materials

The marketing tactics will raise awareness on the benefits of energy efficiency upgrades and the availability of energy improvements via the HWP Pathway and promote the participating SWEPCO Contractor Network. The marketing plan will provide marketing materials to educate homeowners and maximize market penetration and understanding. All messaging will direct consumers to SWEPCO.com/ARsaves and the HWP 800 number to learn more and to find a Network Contractor. The marketing tactics are part of an integrated marketing plan to create a holistic campaign supporting SWEPCO's energy efficiency pathways.

5.1 Customer Education Materials

The following customer education materials may be distributed by contractors, available for download or request via the website, and will be distributed by the Implementer at trade shows and other direct outreach events.

- SWEPCO Residential Energy Improvement Pathway brochure
- SWEPCO Efficient Products Pathway brochure
- SWEPCO Home Performance brochure
- Health and Safety packets
- HWP Leave Behind
- APS Leave Behind sheet
- Incentive Rate Tables
    - Residential Energy Improvement Pathway
    - Home Weatherization Pathway

5.2 Contractor Marketing Materials

In addition to customer education materials, the Implementer will deploy materials to assist contractors in marketing and sales. The materials may include:

- Customizable advertisement or flyer templates for contractors who want to place their own ads to promote their services under the pathway.
- Post-energy assessment leave-behind materials designed to keep the homeowner interested in signing a contract for measures promoted under the REIP.
- HWP logo for advertising, marketing, and sales materials.
- Yard sign template.
- Other materials as the budget allows.

These materials will be accompanied by branding guidelines so that contractors are aware of any constraints on the use of pathway, SWEPCO or EPA/ Department of Energy- ("DOE"-) related names, logos, and/or signage. Any use of SWEPCO and DOE/EPA marks will be approved by the Implementer prior to any use of them.

Marketing tactics not listed in this section, such as direct phone or "robo-calling", are expressly prohibited for marketing in any SWEPCO pathway.

5.3 Home Performance Marketing

Contractors may access the HWP Marks and marketing by requesting the materials from HWP Implementer staff. Approval by the Implementer is needed with any use of the SWEPCO or HWP logos whether in conjunction with SWEPCO pathways or not. As the Pathway Sponsor, SWEPCO will approve and verify proper use of the SWEPCO or HWP mark. Any use outside of the approval channel is not allowed.

Section 6: Measurement and Verification and Quality Assurance

6.1 Measurement and Verification

The HWP includes Measurement and Verification (M&V) activities by the Implementer. The demand and energy savings of each project will be calculated using the APSC approved and governing Deemed Savings, Installation, and Efficiency Section of the Arkansas Technical Reference Manual (TRM). The Deemed Savings of the TRM represent best estimates of the average impact of a measure on the electric utility's system at the customer's meter when installation standards are met.

The M&V of each project will verify that the installed equipment or service meets the HP eligibility requirements. Projects will be verified by a combination of project documentation review, pre-inspections, on-site (ride-along) inspections, post-inspections, and customer surveys. Third party evaluation will be conducted by a SWEPCO contracted Evaluation, Measurement and Verification (EM&V) Contractor and the Statewide Independent Monitor to verify HWP savings.

6.2 Quality Assurance

This section outlines the quality assurance and control process (QAQC) for the HWP. Quality assurance protects customers by providing a review of the work performed by participating

contractors to ensure that it meets HWP standards. It also serves to validate the work completed by the contractor, which improves customer trust in SWEPCO and its contractors. This section is intended to outline the roles and responsibilities, the workflow, the data collection and analysis, corrective action measures, and the escalation process.

6.2.1 Goals and Objectives

The goals of the QAQC plan are to:

- Confirm network contractors are installing measures according to pathway guidelines;
- Validate the accuracy of information submitted to the pathway; and,
- Maintain high quality contractors within the SWEPCO Contractor Network.

The objectives of the goals listed above are to:

- Provide customers with high quality service contractors;
- Identify inconsistencies and misinterpretations of state and local guidelines; and,
- Establish continuous feedback loop and facilitate corrective actions and improvements.

6.2.2 Roles and Responsibilities

Establishing roles and responsibilities in a QAQC plan maintains organization and accountability. Below is a list of the roles for the HWP:

Table 9: Roles and Responsibilities

Roles	Organization
Pathway Sponsor	SWEPCO
Pathway Implementer	CLEAResult
Service Providers	Approved Network Contractors
Pathway Verification	CLEAResult
Verification Oversight	EM&V Contractor and Statewide Independent Monitor

CLEAResult will lead pathway delivery and provide administration services. The approved contractors will install measures for SWEPCO customers, providing a high level of customer service and quality. The Implementer will verify those measures with additional oversight provided by the EM&V Contractor and Statewide Independent Monitor.

6.2.3 Monitoring and Measuring

The Implementer will review the completed projects in two stages: 1) at project documentation submittal, and 2) with on-site inspection(s) of installed measures. The Implementer may also perform onsite inspections prior to and during contractor installation. The Implementer will evaluate project documentation and conduct on-site inspections using defined quality indicators

and acceptable variances as defined in Step 2 of the quality assurance process. Any inspections resulting in a non-conformance will require a Corrective Action Plan, and repeat contractor nonconformance issues will be dealt with using an escalation process as defined in Section 6.2.5. Any chronic non-conformance issues could result in suspension or removal from the HWP Pathway. A key objective of the QAQC process is to ensure customer satisfaction with the HWP Pathway. See Appendix A for the QAQC Process Pathway.

Step 1: Project Documentation Review

Conducted on 100% of Projects

Before an incentive is paid for any work performed on a project, the Implementer will provide a complete review of all projects and submitted documentation. This data is used to calculate final incentive payments to customers and contractors and to report energy efficiency savings. The review will ensure that all required information is collected including signatures, dates, and project specific data. If information is missing, the contractor will be asked to provide the missing information or re-submit a corrected form. The contractor may also be requested to provide the picture documentation noted in Section 4.4. This review includes:

- Contractor eligibility
- Valid SWEPCO account
- Verify measures installed and/or services performed meet eligibility requirements
- Verify supplemental document(s), e.g., CEA report, pictures, etc.
- Verify kW and kWh savings and incentive calculations

Step 2: On-site Inspections

Minimum of 5% of projects inspected

The Implementer will conduct field inspections, which will consist of an on-site inspection of completed projects and all installed measures. Inspections will be conducted on a minimum of 5% average of the total completed projects by contractor. All completed projects will be subject to inspection and will be selected for inspection based on the HWP Pathway's sampling plan. The type of inspection and sample size may be adjusted based on the APSC's Evaluation, Measurement and Verification (EM&V) protocol.

Sampling Plan

In order to obtain a representative sample of each participating contractor's work, 5% to 10% of total submitted projects by each participating contractor will be inspected. A greater emphasis will be made on contractors new to the HWP Pathway and those with non-conformance issues. A tiered approach to deal with those new and non-conforming contractors has been developed and described below:

- **Tier 1** Implementer in-field mentoring and inspection on the first three projects by a new contractor or new field crew.

- **Tier 2** 10% of projects will be inspected for new contractors for the first 30 projects
- **Tier 3** After first 25 projects have been submitted, 5% of contractor projects will be inspected.

The Implementer will reduce the inspection rate after on-site inspections prove that the contractor is making satisfactory progress to meeting HWP standards. Corrective Actions will move contractors back to the previous tier until conditions are satisfied and given pathway approval.

To support the HWP's pre-inspection and live ride-along QA inspection efforts, the contractor will upon request, provide to the Implementer a schedule of all jobs for at minimum the following two weeks from the request. It is expected that with at least 24 hours' notice from the Implementer, the contractor will supply the requested schedule(s).

Projects will be selected at random in order to obtain a representative sample of each contractor's work. As projects are submitted, a sample generation list will be updated monthly by the Implementer and inspections will be scheduled. Up to 20 percent of projects may be held back from payment until QAQC can be performed and ultimately passed.

Data Collection and Verification

Quality indicators will be monitored during the QAQC process to identify any discrepancies that will adversely impact the final energy savings and cost-effectiveness reported by the Implementer. The data obtained during inspection is dependent on measures installed. All projects will be subject to these quality indicators:

- Verification of Project Completion Form data
    - Variance of 5% allotted for square footage and 10% for test-out data
        - Duct sealing under 80 cfm will be held to a 20% acceptable variation.
    - All other data requires 100% match

Any indicator submitted by the contractor that falls outside of the acceptable variance when compared to the QAQC data will result in a non-conformance. Additional data collected during inspection includes:

- Photographs of equipment plates
- Photographs of measures installed
- Confirmation of test-out data
- Customer Satisfaction Survey

The Implementer will compile the information gathered in the on-site inspection and documentation review in an inspection matrix as well as organized storage of pictures and other supporting documentation.

Step 3: Customer Feedback

Receiving direct feedback from customers is an essential part the QAQC process. Customer feedback can help determine customer satisfaction, pathway compliance, and identify high and low performing contractors. Customer surveys will be included in all on-site project inspections. Customer surveys may be sent to all other projects by a postcard or online questionnaire. Customers will also be able to provide feedback through the HWP 800 telephone number. Negative feedback may result in corrective action.

Step 4: Addressing Non-conformances and Failures

A non-conformance occurs whenever the acceptable variance for a Quality Indicator is not met or the installation does not measure up to the state and local building standards. The following qualify as non-conformance:

- Installed measures that do not meet industry best practices and standards
- Incorrect incentive amounts based on inspection findings
- Customer or measure eligibility issues
- Negative customer feedback

Non-critical Issues

Issues that do not adversely impact the kW and kWh savings and incentive calculations, but that are not accurately recorded and reported, such as equipment model numbers, will be recorded in an Issue Log. If a contractor has repetitive non-critical issues reported on Issue Log, it will be deemed as a systemic issue and will be addressed with a Corrective Action Form.

6.2.4 Corrective Action

The corrective action process will be initiated by the Implementer when a repetitive non-conformance or inspection failure is discovered. Corrective action is a formal process that ensures problems are investigated, root causes are identified, corrective actions are implemented, and results are tracked and documented. The goal of the corrective action process is to identify the root cause of a nonconformance or failure, correct the issue, and minimize the probability of it being repeated in the future.

The following are the corrective action activities the Implementer will enforce when a non-conformance or failure is discovered. See Appendix B for the Corrective Action Work Flow.

1. The Implementer will identify non-conformance.
2. Based on the severity of the nonconformance, the issue will be communicated to the contractor and logged on an internal Issue Log.
3. For repeat issues or “gross” non-conformances, a Corrective Action will be developed for the contractor. The Corrective Action will identify the issue(s) as well as potential cause(s).
4. Depending on the severity of the non-conformance, the Implementer may immediately remove the contractor from the HWP or place the contractor on temporary suspension for a length of time to be communicated at the time of suspension.

5. The contractor will identify cause(s) of the issue(s) and develop a Corrective Action Plan to communicate the planned changes that will take place in order to return to compliance with pathway requirements.
6. Once the Corrective Action Plan is complete, the Implementer will sign acceptance. The plan may include increased on-site inspections or other measures that may be put in place to ensure compliance.
7. If the contractor does not achieve compliance with HWP requirements, the contractor will be formally removed from the HWP for up to one year and will need to re- apply in order to participate in the future. Any remaining allotment will be forfeited.

6.2.5 Escalation Plan

In order to provide assurance that participating contractors enrolled in the HWP Pathway are providing a quality service to SWEPCO's customers, an escalation process has been developed to manage any concerns that arise. The process is in place in order to promote transparency and equality among all participants.

The escalation process is intended to resolve repeat or "gross" non-conformances identified during the project documentation review and onsite inspections. The process also documents actions taken to correct the non-conformance. Contractors who have three Corrective Actions taken within the course of a year, defined by the calendar year, will be placed under suspension until the completion of the escalation process and a final status decision has been made.

6.2.6 Communication Plan

Ongoing communication is very important to the success of SWEPCO's Residential Pathway's QAQC process. Communication is used to:

- Increase understanding of the Residential Pathway's QAQC goals and objectives;
- Obtain suggestions on improving the design of the QAQC process;
- Gain commitment to the success of the QAQC process; and,
- Provide feedback on how to improve the Residential Pathway.

Table 10: QAQC Communication Plan

Stakeholder	What Information Do They Need?	Frequency	Medium
SWEPCO	Number of homes verified by Energy Advisor	Monthly	Project Sampling Tracking Form
	Results of data analysis and comparisons		Plan Analysis Summary
	Non-conformance and failures		Field Inspection Summary
	Corrective actions taken		Issue Log / Corrective Action Log Corrective Action Forms

Stakeholder	What Information Do They Need?	Frequency	Medium
	Customer feedback	Quarterly	Customer Survey Response Summary
CLEAResult	Monthly completed projects list	Monthly	Project Sampling Tracking Form
	Quality indicators		Field Inspection Report
	Escalation process		Field Inspection Summary
	Inspection results		Corrective Action Forms
	Customer feedback		Customer Survey Response Summary
Network Contractors	QAQC goals and objectives	Annually	Pathway Manual
	Quality indicators		
	Escalation process		
	Notification of non-conformance and failures	Per Project Basis	Issue Log Corrective Action Forms
	Contractor Monthly Allotment	Prior to each Month	Breakdown by Email
	Incentive Run Details	Twice Monthly	Emailed Incentive Run Report
	Contractor SCORE	Quarterly	Quarterly Check-in Meeting
	Progression of pathway, contractor's performance and informational updates	Quarterly	Quarterly Report Meeting

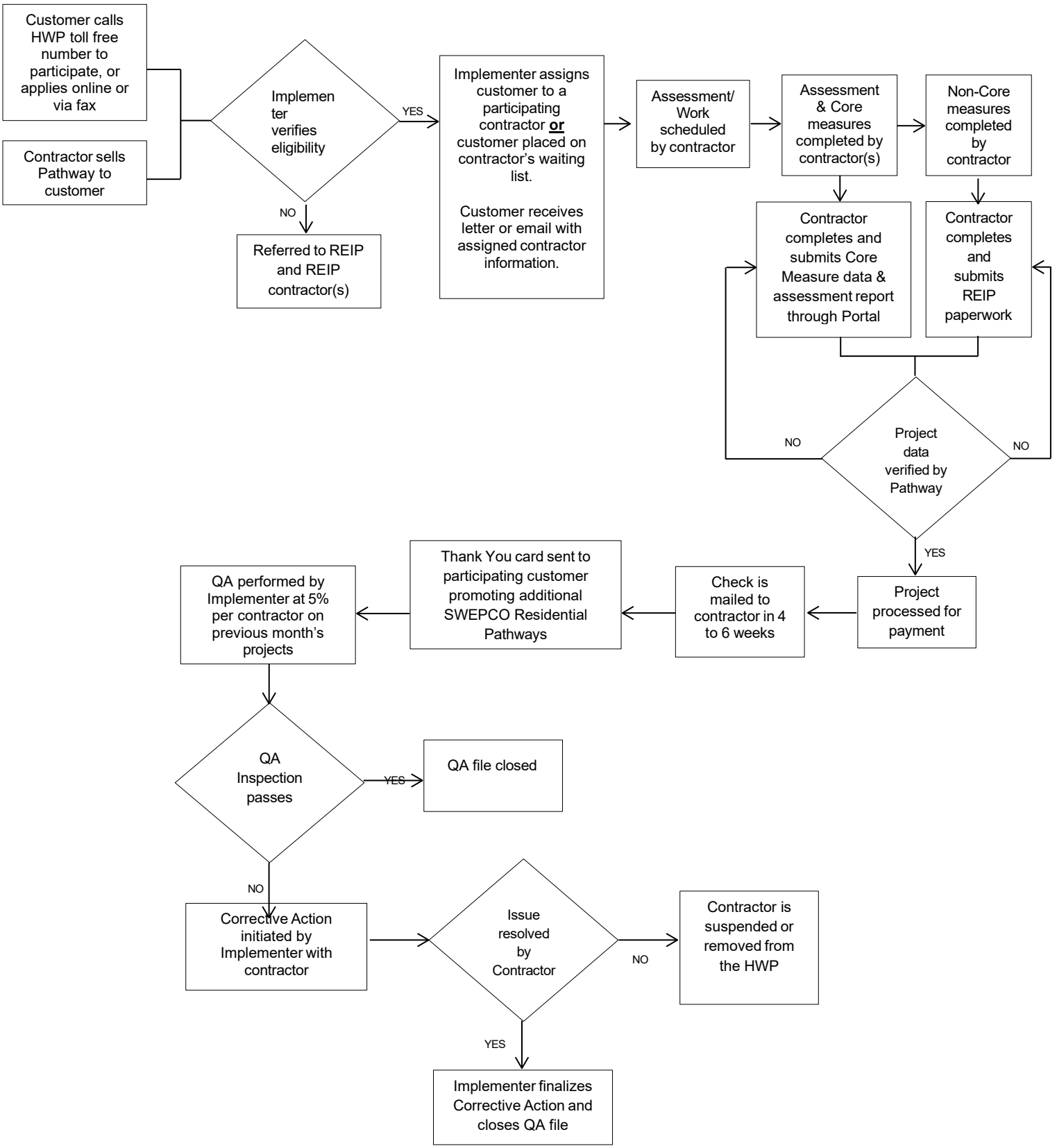
6.3 Contractor SCORE Process

All contractor efforts will be continually scored throughout the year. This process will provide the contractor with a current and running evaluation of their performance in the following areas:

- Overall Customer satisfaction
- Quality of work – QA/QC results
- Quality of paperwork/data
- Savings achieved overall and per house basis
- Quality of communication
- Level of Joint Utility participation
- Corrective actions

Contractors will receive direct feedback from the Implementer regarding their SCORE throughout the year on a quarterly basis. Contractor scores will be factored in any allotment adjustments as well as subsequent RFQ processes.

Appendix A: Home Performance Participation Process



Appendix B: Corrective Action Process Flowchart