

# Memorandum

DATE: **March 22, 2024**

WAP Memorandum 126

REPLY TO

ATTN OF: **Derek Schroeder, Training and Technical Assistance Program Manager,  
Weatherization Assistance Program**

SUBJECT: **Home Energy Professional (HEP) Energy Auditor and Quality Control Inspector (QCI)  
Certification Scheme Updates**

TO: **Weatherization Assistance Program Grantees**

INTENDED

AUDIENCE: **Grantee Program Managers, Grantee Technical Managers, Subgrantee Program Directors,  
Subgrantee Technical Managers, Subgrantee Quality Control Inspectors, Subgrantee Energy  
Auditors, Weatherization Training Centers**

## Background:

The U.S. Department of Energy (DOE) implemented the Quality Work Plan (QWP) in 2013 to support and verify quality work in the Weatherization Assistance Program (WAP) and introduced four single-family, full-scope, [Home Energy Professional](#) (HEP) credentials consisting of Energy Auditor (EA), Quality Control Inspector (QCI), Retrofit Installer Technician, and Crew Leader.

Since the inception of the HEP credentials, significant changes to the original structure of the HEP credentialing programs were made to better reflect the needs of the WAP industry and reduce redundancy among job roles where knowledge, skills, and abilities (KSA) areas overlap. The first major change occurred in Fiscal Year 2018, when DOE, at the recommendation of the relevant scheme committee, determined the Retrofit Installer Technician Job Task Analysis (JTA) could be eliminated, and its tasks could be inserted in the Crew Leader JTA. The Retrofit Installer Technician tasks became the basis of the [Retrofit Installer Badges Toolkit](#), which provides a flexible, customizable, and voluntary approach to training and skills recognition for WAP industry professionals.

The second major change was the transition of the full-scope QCI certification to a micro-credential, of which the EA certification is the single prerequisite. The rationale behind this change is that a QCI must possess the KSAs of the EA and a smaller subset of skills is needed for QCIs. Since 2019, EA remains a full-scope certification accredited by the American National Standards Institute (ANSI) National Accreditation Board to International Organization for Standardization and International Electrotechnical Commission (ISO/IEC) 17024<sup>1</sup>.

In 2022, a group of subject matter experts (SMEs) was convened to update and validate the EA and QCI schemes, including the JTAs, through a facilitated process with an experienced psychometrician.

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<sup>1</sup> The ISO/IEC 17024:2012 standard contains the general requirements for bodies operating certification of persons. The standard includes requirements for the development and maintenance of the certification scheme for persons upon which the certification is based: <https://anab.ansi.org/accreds/personnel-certification-programs/>.

This memorandum addresses the 2023 updates to the EA and QCI certification schemes.

### **Certification Scheme Updates:**

Industry best practice is to review and update JTAs and certification schemes approximately every 5 – 7 years. The HEP Energy Auditor and Quality Control JTAs and certification schemes were last updated in 2018 and were due for regular maintenance. In each scheme update cycle, NREL convenes industry practitioners and subject matter experts to develop, review, revise, and maintain the certification schemes in accordance with the ISO/IEC 17024 standard, which was chosen by DOE for the quality and rigor of personnel certifications that the standard offers to the home performance industry. These schemes define the general requirements of each certification (e.g., prerequisites, exam structure, recertification requirements, etc.) and are based on the JTAs in accordance with industry recognized practices of workforce psychometrics.

Below is a list of high-level planned changes to the EA and QCI certification schemes (*effective date TBD*):

- The certification cycle was extended from 3 to 5 years (both EA and QCI).
- Prerequisite requirements for EA were streamlined:
  - Options for required experience in the past 5 years were expanded to be more inclusive; 25 points are needed through any of the following:
    - Performing audits in the building science trade. Maximum of 20 points; 10 points for each 1,000 hours (6 months of full-time work).
    - Home performance field/technical experience (e.g., weatherization, home inspection, and heating, ventilation, and air conditioning (HVAC)). Maximum of 20 points; 10 points for each 1,000 hours (6 months of full-time work).
    - Building trades experience (e.g., framing, roofing, drywall, siding). Maximum of 10 points; 5 points for each 1,000 hours (6 months of full-time work).
    - Training from an industry-specific training center (training whose content aligns with the content of the job task analysis for the certification). Maximum of 10 points; 5 points for every 40 hours.
    - Other certifications are also considered; maximum of 10 points; 5 points per certification.
      - Related industry certifications, such as:
        - Residential Energy Services Network (RESNET)
        - Building Performance Institute, Inc. (BPI)
        - North American Technician Excellence (NATE)
        - Environmental Protection Agency (EPA)
        - American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
        - Association of Energy Engineers (AEE)
  - Prerequisite Energy modeling:
    - Clarification that the 10 energy models must comply with a nationally recognized energy auditing standard for energy audit reports (not specifically ANSI/BPI-1100).
    - Alternative compliance pathways to energy modeling now list the number of energy training modeling hours (8 hours).
    - Alternative compliance pathways to energy modeling now allow desk review or file review of energy models. A minimum of 20 desk reviews or file reviews of energy models are specified.
- Continuing Education Units (CEUs) were streamlined into four major categories: Technical Conference; Synchronous Training; Asynchronous Training; Trainer/Instructor.

- The number of CEUs for EA was raised from 24 over a 3-year period to 30 for completion in the new 5-year cycle.
- The number of CEUs for QCI remains the same at 6.
- CEUs earned for each category were streamlined for clarity rather than having different ratios. Now, 1 hour of qualifying continuing education activity = 1 CEU (Both EA and QCI).
- The gated items were revised. Gated items are defined as tasks that must be completed successfully to pass the field exam.
  - 4 of the 5 existing gated items from the current EA Field Guide will remain part of the certification field exam while “*Candidate tested indoor ambient air and verbally confirmed combustible gases are below 10% of the Lower Explosive Limit (LEL) on each floor level*” is still a testable item but will not be gated.
  - Minor revisions were made to the wording of the remaining gated items. See the table below.

<b>Energy Auditor Field Exam Gated Items</b>
1. Candidate prepared combustible gas and carbon monoxide measurement instruments per manufacturer’s instructions. (Domain 2-task 3)
2. Candidate tested indoor ambient carbon monoxide levels and took appropriate action according to the current standard of reference. (Domain 2-task 3)
3. Candidate tested indoor air levels for carbon monoxide throughout combustion safety testing and took appropriate action according to the current standard of reference. (Domain 2-task 3)
4. Candidate ensured that combustion appliances cannot fire during the blower door testing. (Domain 2-task 1)

- Field exam simulation during a proctored exam is allowed should the qualified certification body choose to offer this option.
- Minor changes to the characteristics of the field-testing environment:
  - Attic ventilation requirement removed.
  - Domestic hot water heater changed to water heating appliance.
  - Added clarification that all appliances and equipment must be functional.
- Clarification on manufactured housing (previously inclusion was implied but not clearly outlined). Manufactured housing is now explicitly included in the Energy Auditor JTA in several locations.
- Rather than having two separate codes of conduct (EA and QCI), a single code of conduct will be used for the Home Energy Professional EA and QCI.

**Next Steps:**

No immediate changes to certification exams or training requirements are prompted by the JTA or certification scheme updates at this time; however, exams will be updated to align with the new JTAs as part of the national rollout of the updated schemes. Stakeholders can expect updated exams from late 2024 to early 2025. View the [Energy Auditor](#) and [Quality Control Inspector](#) JTAs here to learn more about the updated JTAs which serve as the basis for future certification exams.

Please direct questions to [workforce.guidelines@nrel.gov](mailto:workforce.guidelines@nrel.gov). WAP Grantees please cc: your DOE Technical Project Officer on the email.