Home Energy Professionals Certifications ISO/IEC 17024: 2021 Policies and Procedures Manual

Jal Desai and Chuck Kurnik

National Renewable Energy Laboratory

**NREL is a national laboratory of the U.S. Department of Energy
Office of Energy Efficiency & Renewable Energy
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Technical Report
NREL/TP-7A40-81388
December 2021

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NOTICE

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List of Acronyms

AOP	annual operating plan
DOE	U.S. Department of Energy
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
JTA	job task analysis
NREL	National Renewable Energy Laboratory
WAP	Weatherization Assistance Program
HEP	Home Energy Professional

Preface

Background

The U.S. Department of Energy (DOE) enlisted its National Renewable Energy Laboratory (NREL) to coordinate the development of a framework for new certifications in the weatherization and home performance industry.

The Home Energy Professional (HEP) certifications support DOE's Weatherization Assistance Program (WAP) and the broader residential home performance industry through the credentialing process of defined job task analysis for energy auditors and quality control inspectors. The HEP certifications are not intended to supplant or infringe upon any existing industry-recognized credentials, however, the WAP and the home performance industry have utilized the advanced HEP certifications to promote quality work and standardized job task analysis since 2011.

On an ongoing basis, NREL brings industry practitioners and subject matter experts together to develop, review, and revise the certification schemes in accordance with the International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) 17024 standard, "Conformity assessment – General requirements for bodies operating certification of persons" (ISO/IEC 17024). The ISO/IEC 17024 standard 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, practicum, and recertification requirements) and are based largely on job task analyses (JTAs) developed by NREL in accordance with industry-recognized practices of workforce psychometrics.

NREL issues competitive solicitations to select certifying bodies for delivery of new certifications. The certification schemes are available to interested and qualified certifying bodies via a copyright license agreement. NREL is not directly engaged in the certification of individuals.

Summary of Purpose

This handbook covers the policies and procedures for the process of developing, maintaining, and validating the certification schemes. Each policy and procedure includes the relevant ISO/IEC 17024 section at the beginning.

Objective

As the owner of the certification schemes, NREL facilitates the development, maintenance, and validation of the certification schemes for use by organizations that certify individuals in compliance with the ISO/IEC 17024 standard. These policies and procedures were developed to comply with the general requirement that all organizations involved with developing the schemes or involved with testing must meet the applicable provisions of the standard, including impartiality. The policies and procedures identify NREL's responsibilities, the scheme committee responsibilities, and the certifying bodies regarding the development of the schemes, per section 4.3.1 of ISO/IEC 17024, which states: "The certification body shall document its

structure, policies and procedures to manage impartiality and to ensure that the certification activities are undertaken impartially.”

Definitions

Policies provide a course of action for solving problems and making decisions in pursuit of specific goals. A policy’s main purpose is to ensure consistency and control across operations. However, policies should be flexible enough to deal with occasional exceptions.

Procedures establish a way of completing a task and are derived from and conform to policies but are more tactical, specific, concrete, and detailed than policies. Procedures are management control mechanisms for standardizing operations to ensure consistent processing of tasks. Procedures specify how tasks are to be executed and enumerate the steps and sequence to be followed.

Procedure for Changing Policies

Because policies serve as general guidelines, they should be capable of dealing with occasional exceptions. However, a pattern of exceptions and lack of clear jurisdiction are examples of a need to change a given policy. Such changes to the *Guidelines for Home Energy Professionals Policy and Procedure Handbook for ISO 17024 Compliance* can be made at any time with the approval of the supervising NREL laboratory project manager. The NREL project manager will assemble an internal team to review the manual every 5 years and recommend revisions. The project manager may propose changes at any time.

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1 Responsibilities for Each Required Element of a Certification Scheme

Section 8 of the International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC)17024 standard describes the required elements of a certification scheme. The parties responsible for each requirement are listed here. This list is subject to change. Each policy and procedure in this document include specific roles and responsibilities.

1.1 National Renewable Energy Laboratory (NREL)

NREL is responsible for the following elements of the certification scheme:

- Coordinate the development of the schemes.
- Ensure existing schemes are maintained on an ongoing and systematic basis.
- Oversee the development of the job task analysis (JTA), which provides the elements of certification scope, job and task descriptions, and abilities.
- Maintain documentation to demonstrate that appropriate experts, fairly representing the interests of all parties significantly concerned and with no one interest predominating, are enlisted to develop the JTA and certification scheme.
- As the scheme owner, ensure that appropriate maintenance and documentation activities receive adequate financial support or transfer these responsibilities to an organization with the resources to do so.
- Develop and maintain all documentation related to the certification scheme, including the following records:
 - All activities related to the development of the JTA
 - All activities of the scheme committee related to its responsibilities
 - The copyright license program and agreement and the means by which the scheme is transferred to the certifying body
 - Interpretations of the scheme requiring a committee decision.
- Develop and implement a licensing program for transferring the certification scheme to a qualified certification body.
- Comply with policies and procedures and any guidance provided by the scheme committee regarding a change in the components of the scheme.

1.2 Certification Scheme Committee

The certification scheme committee is responsible for the following elements of the certification scheme:

- Develop the certification scheme that provides the structure for the certification program.
- Review the JTA provided by NREL. Because the JTA was developed via a psychometric analysis and requires broad industry involvement, the scheme committee must have a

strong rationale for any changes to the JTA. The committee either accepts the JTA or proposes changes in wording, deletions, and/or additions.

- As described in Section 8.2 of ISO/IEC 17024, identify the following scheme elements:
 - Scope of the certification, based on the JTA
 - Required competence
 - Abilities and prerequisites
 - Whether a code of conduct is needed and the entity responsible for developing one.
- As described in Section 8.3 of ISO/IEC 17024, determine the following certification process requirements:
 - Criteria for initial certification and recertification
 - Assessment methods for certification and recertification
 - Whether surveillance methods and criteria are needed and the entity responsible for developing them
 - Guidance regarding criteria for suspension or withdrawal of certification
 - Criteria for changing the scope or level of certification.
- Delegate other responsibilities to the certifying body as stated in the certification scheme.

1.3 Certifying Body

The certifying body is responsible for the following elements of the certification scheme:

- License the certification scheme from NREL and comply with all requirements within the license.
- Develop and maintain compliance with ISO/IEC 17024.
- Develop policies and procedures to operate the certification program.
- Interpret the certification scheme for the administration of certification program (interpretation of the elements of the certification scheme must be approved by the scheme committee).
- Develop and implement an impartiality policy, including any direction provided in the scheme.
- Implement a code of conduct as directed by the scheme.
- Implement a surveillance program as directed by the scheme.
- Implement prerequisite requirements and assessment mechanisms as directed by the scheme.
- Develop and implement an appeals process.
- Investigate complaints.

- Develop and implement criteria for suspending and withdrawing certification, including any direction provided in the scheme.
- Establish certification charges and fees.
- Maintain an item bank and test forms for each certification.
- Develop test forms as needed.
- Perform a certification pilot.
- Establish a cut score with item writing committee review and approval.
- Establish and manage the recertification program, ensuring that it complies with the direction provided in the scheme.
- Comply with policies and procedures and any guidance provided by the scheme committee regarding a change in the scope of the level of certification.

2 Procedure for Certification Scheme Committee Pool Development

ISO/IEC 17024 Section (as referenced in ISO/IEC 17024:2012) 8.4, 8.6	Title Procedure for Certification Scheme Committee Pool Development
Effective Date 1/1/2022	
Supersedes May 2014 version	Scheduled Reissue Date 1/1/2027

2.1 Questions

Contact: workforce.guidelines@nrel.gov.

2.2 Purpose

ISO/IEC 17024 Section 8.4 states: “The certification body shall have documents to demonstrate that, in the development and review of the certification scheme, the following are included:

- a) the involvement of appropriate experts;
- b) the use of an appropriate structure that fairly represents the interests of all parties significantly concerned, without any interest predominating...”

ISO/IEC 17024 Section 8.6 states: “When the certifications body is not the scheme owner of a certification scheme it implements, the certification body shall ensure that the requirements contained in this clause (Clause 8) are met.”

2.3 Authorizing Policy

ISO/IEC 17024: Conformity assessment—General requirements for bodies operating certification of persons.

2.4 Applicability

This procedure applies to the creation of a pool of volunteers for selecting members of a scheme committee under ISO/IEC 17024 and the subsequent repopulating of any committees when any committee members depart before or at the end of the 5-year term.

This procedure serves as an internal management and guidance document for the NREL project team tasked by the U.S. Department of Energy (DOE) as described in an annual operating plan (AOP) to develop and maintain a personnel certification program for the weatherization and home performance industry.

2.5 Definitions

Certification scheme committee—The working group charged under ISO/IEC 17024 to determine the certification scheme.

2.6 General Rules

The following general rules apply to certification scheme committee pool development:

1. Create an online application process that allows industry experts to apply to become a scheme committee member.
2. Send an email invitation to industry experts on existing NREL mailing lists developed in the process of creating the Standard Work Specifications and the JTA.
3. Actively recruit applicants from the population of national experts on the home performance industry.
4. Collect applications.
5. Vet applicants by reviewing submitted resumes and recommendations and through internet research; conduct phone interviews with applicants or references as needed to verify knowledge and experience.
6. Apply criteria (see Section 3 of this document) and create a draft roster for each scheme committee.

2.7 Responsibilities

Table 1. Specific Responsibilities for Scheme Committee Pool Development

Role	Responsibilities
NREL, DOE	<ol style="list-style-type: none"> 1. Announce the scheme committee application opportunity. 2. Send emails to contact lists with the application link. 3. Ask contacts to forward the announcement to others in the field. 4. Ask contacts to apply or provide a recommendation for someone they think should apply. 5. Announce the application opportunity and include the link in presentations at national conferences. 6. Network with conference attendees and members of national industry organizations to solicit applicants.
NREL	<ol style="list-style-type: none"> 1. Collect applications and conduct reviews of applicants. 2. Vet applicants by reviewing submitted resumes, checking references, and conducting internet research; conduct phone interviews with applicants or references to verify knowledge and experience. 3. Apply criteria (see Section 3) and create a draft roster for each scheme committee. 4. Make the final selection of candidates and alternates. 5. Apply the procedure as needed to fill scheme committee vacancies.

2.8 Related Policies

Policy Regarding Criteria for Selection of Certification Scheme Committee Members (Section 3).

2.9 Related Procedures

None.

3 Policy Regarding Criteria for Selection of Certification Scheme Committee Members

ISO/IEC 17024 Section (as referenced in ISO/IEC 17024:2012) 8.4, 8.6	Title Policy Regarding Criteria for Selection of Certification Scheme Committee Members
Effective Date 1/1/2022	
Supersedes May 2014 version	Scheduled Reissue Date 1/1/2027

3.1 Questions

Contact: workforce.guidelines@nrel.gov.

3.2 Purpose

ISO/IEC 17024 section 8.4 states: “The certification body shall have documents to demonstrate that, in the development and review of the certification scheme, the following are included:

- a) the involvement of appropriate experts;
- b) the use of an appropriate structure that fairly represents the interests of all parties significantly concerned, without any interest predominating...”

Section 8.6 states: “When the certification body is not the scheme owner of a certification scheme it implements, the certification body shall ensure that the requirements contained in this clause (Clause 8) are met.”

This is the only specific guidance on the criteria for selecting members of the scheme committee.

3.3 Authorizing Policy

ISO/IEC 17024: Conformity assessment—General requirements for bodies operating certification of persons.

3.4 Applicability

This policy is used to select members for a certification scheme committee. It is used to decide on an applicant’s inclusion or exclusion from the committee.

This policy serves as an internal management and guidance document for the NREL project team tasked by DOE as described in an AOP to develop and maintain a personnel certification program for the weatherization and home performance industry.

3.5 Definitions

Certification scheme—Competence and other requirements related to specific occupational or skilled categories of persons.

Certification scheme committee—Under ISO/IEC 17024, the group charged with determining the certification scheme.

3.6 General Rules

The following general rules apply to scheme committee selection.

3.6.1 New Committees

New scheme committee members are selected using the following criteria:

- **Competency within the job category:** Individuals selected should be familiar with the knowledge, skills, and abilities as defined by a JTA for the job category, for which the certification scheme is being developed. Additionally, each member shall offer a unique perspective or level of expertise in the job category as defined by previous, current, or past work experience.
- **Geographic diversity:** Because the certifications are applicable nationwide and employ the Standard Work Specifications, which accounts for regional variations as a main body of knowledge, geographic diversity is an important factor in the makeup of the scheme committee.
- **Organizational diversity:** There should be no more than one representative from one organization on a scheme committee.
- **Industry sector diversity:** There may be multiple representatives from one industry sector, such as from community action agencies (which does much of the work for the WAP), unions, or home performance contractors.

3.6.2 Successive Committees

Following the end of a 5-year term, a new committee is selected. Industry experts that served on previous committees are welcome to reapply.

3.6.3 Committee Vacancies

The Procedure for Scheme Committee Pool Development (Section 2) is used to generate potential candidates for any vacancies on the committee.

3.7 Responsibilities

Table 2. Specific Responsibilities for Committee Selection

Role	Responsibilities
NREL	<ol style="list-style-type: none">1. Apply scheme committee selection criteria in accordance with this policy during the Procedure for Certification Scheme Committee Pool Development (Section 2).2. Following the end of a 5-year term, a new committee is selected. Industry experts that served on previous committees are welcome to reapply.3. For scheme committee vacancies, apply scheme committee selection criteria in accordance with this policy during the Procedure for Certification Scheme Committee Pool Development (Section 2) for seeking new committee members.

3.8 Related Policies

None.

3.9 Related Procedures

Procedure for Certification Scheme Committee Pool Development (Section 2).

4 Policy Regarding Compliance with Certification Scheme Committee Objectivity

ISO/IEC 17024 Section (as referenced in ISO/IEC 17024:2012) 8.4, 8.6	Title Policy Regarding Compliance with Certification Scheme Committee Objectivity
Effective Date 1/1/2022	
Supersedes May 2014 version	Scheduled Reissue Date 1/1/2027

4.1 Questions

Contact: workforce.guidelines@nrel.gov.

4.2 Purpose

ISO 17024 Section 8.4 states: “The certification body shall have documents to demonstrate that, in the development and review of the certification scheme, the following are included:

- a) the involvement of appropriate experts;
- b) the use of an appropriate structure that fairly represents the interests of all parties significantly concerned, without any interest predominating...”

Section 8.6 states: “When the certification body is not the scheme owner of a certification scheme it implements, the certification body shall ensure that the requirements contained in this clause (Clause 8) are met.”

4.3 Authorizing Policy

ISO/IEC 17024: Conformity assessment—General requirements for bodies operating certification of persons.

4.4 Applicability

This policy applies to the management of the scheme committee members to ensure their objectivity under ISO/IEC 17024.

This policy serves as an internal management and guidance document for the NREL project team tasked by DOE as described in an AOP to develop and maintain a personnel certification program for the weatherization and home performance industry.

4.5 Definitions

Certification scheme—Competence and other requirements related to specific occupational or skilled categories of persons.

Certification scheme committee—The group charged under ISO/IEC 17024 with determining the certification scheme.

4.6 General Rules

To maintain the impartiality and objectivity of the certification scheme committees, NREL's policy is as follows:

- Premeeting communication with scheme committee members shall refrain from mentioning any specific outcomes of the meetings other than the formation of a certification scheme.
- Training and education materials supplied to scheme committee members prior to the meeting shall not address specific committee outcomes but shall remain focused on the certification scheme development process.
- No representatives of organizations with a vested interest in the certification—other than those represented by the scheme committee members—shall be permitted to unduly influence the certification scheme committee development meetings.
- NREL representatives shall not be permitted to unduly influence facilitated discussions of the scheme committees; however, they may serve as resources to the scheme committee and may address specific questions when asked.

4.7 Responsibilities

Table 3. Specific Responsibilities for Management of Scheme Committee Members

Role	Responsibilities
NREL	<ol style="list-style-type: none">1. Prepare documents for meetings that are without bias toward any particular certification structure.2. Educate committee members about the general process of forming a certification scheme.3. Educate committee members about the requirements of ISO/IEC 17024.4. Maintain the balance of interests represented on the committee.5. Prevent outside influences on the committee.

4.8 Related Policies

- Policy on Confidentiality and Nondisclosure of Certification Scheme Material (Section 5)
- Policy Governing Certification Scheme Operation (Section 10).

4.9 Related Procedures

- Procedure for Certification Scheme Committee Records Management (Section 6)
- Procedure for Certification Scheme Committee Decision-Making During Facilitated Meetings (Section 8).

5 Policy on Confidentiality and Nondisclosure of Certification Scheme Material

ISO/IEC 17024 Section (as referenced in ISO/IEC 17024:2012) 6.1.6, 6.2.2.3, 6.2.3.2	Title Policy on Confidentiality and Nondisclosure of Certification Scheme Material
Effective Date 1/1/2022	
Supersedes May 2014 version	Scheduled Reissue Date 1/1/2027

5.1 Questions

Contact: workforce.guidelines@nrel.gov.

5.2 Purpose

To maintain the confidentiality of the certification scheme and its components. The following sections from the ISO/IEC 17024 standard are addressed by this policy. Although NREL is the certification scheme owner and not the certifying body, many of the requirements that apply to the certifying body are also assumed to apply to NREL as the scheme owner.

6.1.6 Personnel acting on the certification body's behalf shall keep confidential all information obtained or created during the performance of the body's certification activities, except as required by law or where authorized by the applicant, candidate, or certified person.

6.2.2.3 If an examiner has a potential conflict of interest in the examination of a candidate, the certification body shall undertake measures to ensure that the confidentiality and impartiality of the examination are not compromised. These measures shall be recorded.

6.2.3.2 If other personnel involved in the assessment have a potential conflict of interest in the examination of a candidate, the certification body shall undertake measures to ensure that confidentiality and impartiality of the examination are not compromised. These measures shall be recorded.

5.3 Authorizing Policy

ISO/IEC 17024: Conformity assessment—General requirements for bodies operating certification of persons.

5.4 Applicability

This policy applies to members of the certification scheme committee and NREL staff and subcontractors (e.g., facilitators and scribes) involved in the certification scheme development.

This policy serves as an internal management and guidance document for the NREL project team tasked by DOE as described in an AOP to develop and maintain a personnel certification program for the weatherization and home performance industry.

5.5 Definitions

Certification scheme—Competence and other requirements related to specific occupational or skilled categories of persons.

Certification scheme committee—Under ISO/IEC 17024, the group charged with determining the certification scheme.

5.6 General Rules

This policy applies to all individuals in contact with the information contained in the scheme.

All members of the certification scheme committee, NREL project team, and subcontractors (e.g., facilitators and scribes) supporting the development of certification schemes are required to sign two agreements:

1. An assignment, work made for hire, and confidentiality agreement stating that the individual will not reveal the substance of the committee deliberations or its decisions.
2. A conflict-of-interest agreement stating that the individual does not have real or apparent conflicts between their work as a scheme committee member and their other interests.

5.7 Responsibilities

Table 4. Specific Responsibilities for the Confidentiality and Nondisclosure Policy

Role	Responsibilities
NREL	<ol style="list-style-type: none">1. Collect signed confidentiality agreements from all participants, NREL project team, and subcontractors (e.g., facilitators and scribes).2. Provide copies of both agreements from all participants, NREL project team, and subcontractors to NREL's Office of General Counsel.3. Provide copies of both agreements from all participants, NREL project team, and subcontractors to the certifying body.

5.8 Related Policies

- Policy Regarding Compliance with Certification Scheme Committee Objectivity (Section 4)
- Policy Governing Certification Scheme Operation (Section 10).

5.9 Related Procedures

- Procedure for Certification Scheme Committee Records Management (Section 6)
- Procedure for Certification Scheme Committee Decision-Making During Facilitated Meetings (Section 8).

6 Procedure for Certification Scheme Committee Records Management

ISO/IEC 17024 Section (as referenced in ISO/IEC 17024:2012)	Title Procedures for Certification Scheme Committee Records Management
Effective Date 1/1/2022	
Supersedes May 2014 version	Scheduled Reissue Date 1/1/2027

6.1 Questions

Contact: workforce.guidelines@nrel.gov.

6.2 Purpose

This procedure is being implemented as per Section 7 of the ISO/IEC 17024, records and information requirements. Although NREL is the certification scheme owner and not the certifying body, many of the requirements that apply to the certifying body are also assumed to apply to NREL as the scheme owner.

6.3 Authorizing Policy

ISO/IEC 17024: Conformity assessment—General requirements for bodies operating certification of persons.

6.4 Applicability

NREL records include scientific and technical information and administrative records in a variety of formats that are already managed according to legal and regulatory requirements. This procedure builds on NREL's existing Laboratory Level Procedure PROC 300-7 Records Management (effective date 10-30-2019) to maintain the security of certification scheme committee records in keeping with ISO/IEC 17024.

This procedure serves as an internal management and guidance document for the NREL project team tasked by DOE as described in an AOP to develop and maintain a personnel certification program for the weatherization and home performance industry.

6.5 Definitions

Certification scheme—Competence and other requirements related to specific occupational or skilled categories of persons.

Certification scheme committee—The group charged under ISO/IEC 17024 with determining the certification scheme.

Certifying body—A third-party conformity assessment body operating certification schemes for persons.

6.6 General Rules

The following general rules apply to certification scheme committee records management.

- **Records management program:** The records management program encompasses the creation, use, maintenance, tracking, retrieval, and disposition of scheme committee records. Measures are taken to protect the privacy and confidentiality of records, as appropriate, and to the extent required by existing NREL policies.
- **Records retention schedule:** Scheme committee records will be maintained for a period of 10 years or through a third JTA cycle (each cycle is 5 years), whichever is sooner, unless they are covered by other requirements.
- **Government agency records:** Records produced or acquired in the performance of work supported by management and operating contract funds are considered government property and are subject to approved records retention schedules and practices.
- **Contractor-owned records:** Specific records identified in the NREL prime contract as contractor-owned records are not considered government property. Approved records retention schedules and practices apply equally to these records.
- **Records storage:** All materials developed in conjunction with the scheme committees will be maintained on the restricted access NREL's online document management system, internal team site, or NREL server in a restricted access folder.
- **Records retrieval:** Records requests are approved by a project manager of the record-owning organization.

6.7 Data Sensitivity

1. In keeping with the NREL policy on subcontractor access to NREL computers, the scribes for the scheme committee meetings use security-enabled computers for recording the deliberations of the scheme committees.
2. The deliberations are recorded on secure hard drives at the end of each decision block and backed up on NREL's server.
3. The final reports are transferred to the NREL online document management system's internal team site or NREL server.
4. The materials are transferred to the certifying body according to the Policy Governing Scheme Committee Operation.
5. All records relating to the certification scheme committees are maintained on the NREL's online document management system internal team site or in a secure folder on a shared drive. All persons with access to said folder will sign nondisclosure and confidentiality agreements. The documents (records) stored include the certification schemes, confidentiality agreements, and records of votes by the certification scheme committees.

6.8 Responsibilities

Table 5. Specific Responsibilities for Records Management at NREL Apply to All Records

Role	Responsibilities
NREL	<ol style="list-style-type: none">1. Collect signed confidentiality and nondisclosure agreements from NREL staff and subcontractors (e.g., facilitators and scribes) who will be interacting with the records.2. Ensure records are stored appropriately.3. Create, use, maintain, track, retrieve, and dispose of scheme committee records in accordance with NREL policies and procedures for records management.

6.9 Related Policies

- Policy Regarding Compliance with Certification Scheme Committee Objectivity (Section 4)
- Policy on Confidentiality and Nondisclosure of Certification Scheme Material (Section 5)
- Policy Governing Certification Scheme Operation (Section 9).

6.10 Related Procedures

- Procedure for Certification Scheme Committee Decision-Making During Facilitated Meetings (Section 8).

7 Policy for Certification Scheme Committee Voting

ISO 17024 Section (as referenced in ISO/IEC 17024:2012) 8.4, 8.6	Title Procedure for Certification Scheme Committee Decision-Making
Effective Date 1/1/2022	
Supersedes May 2014 version	Scheduled Reissue Date 1/1/2027

7.1 Questions

Contact: workforce.guidelines@nrel.gov.

7.2 Purpose

ISO/IEC 17024 Section 8.4 states: “The certification body shall have documents to demonstrate that, in the development and review of the certification scheme, the following are included:

- a) the involvement of appropriate experts;
- b) the use of an appropriate structure that fairly represents the interests of all parties significantly concerned, without any interest predominating...”

Section 8.6 states: “When the certifications body is not the scheme owner of a certification scheme it implements, the certification body shall ensure that the requirements contained in this clause (Clause 8) are met.”

The purpose of this policy is to ensure that all members of the scheme committee have an equal voice during discussions and a fair means of voting during meetings and through electronic collaboration.

7.3 Authorizing Policy

ISO/IEC 17024: Conformity assessment—General requirements for bodies operating certification of persons.

7.4 Applicability

After reaching consensus in accordance with the Procedure for Certification Scheme Committee Decision-Making During Facilitated Meetings, this policy is used for voting on certification scheme matters during in-person meetings and through electronic collaboration.

7.5 Definitions

Certification scheme—Competence and other requirements related to specific occupational or skilled categories of persons.

Certification scheme committee—Under ISO/IEC 17024, the group charged with determining the certification scheme.

7.6 General Rules

The following general rules apply to scheme committee voting during in-person meetings and through electronic collaboration (e.g., email or online polling platforms, or online document management systems):

- All votes put to the certification scheme committee are in the form of a “yes or no” question. Members are asked to vote “yes” or “no” on the question. “Yes” votes may be submitted with conditions.
- Each question for vote shall be presented with a clear deadline for decision. Scheme committee members may request additional time if needed.
- When all scheme committee members are physically present in the same location, the majority vote (greater than 50%) is the final decision.
- When all scheme committee members are not physically present in the same location, voting is conducted electronically (e.g., via email or online voting). A quorum is defined as greater than 50% participation of the entire scheme committee in the voting. The majority vote (greater than 50%) of the quorum is the final decision.

7.7 Responsibilities

Table 6. Specific Responsibilities for the Certification Scheme Committee Voting

Role	Responsibilities
NREL, Facilitator, Scribe	<ol style="list-style-type: none">1. Ensure the voting policy is adhered to in all questions put to the certification scheme committee.2. Document all votes of the scheme committee.
Scheme Committee	<ol style="list-style-type: none">1. Adhere to voting policy when deciding a question.

7.8 Related Policies

- Policy Regarding Compliance with Certification Scheme Committee Objectivity (Section 4)
- Policy on Confidentiality and Nondisclosure of Certification Scheme Material (Section 5).

7.9 Related Procedures

- Procedure for Certification Scheme Committee Records Management (Section 6)
- Procedure for Certification Scheme Committee Decision-Making During Facilitated Meetings (Section 8)
- Procedure for Certification Scheme Committee Electronic Collaboration (Section 9).

8 Procedure for Certification Scheme Committee Decision-Making During Facilitated Meetings

ISO/IEC 17024 Section (as referenced in ISO/IEC 17024:2012) 8.4, 8.6	Title Procedure for Certification Scheme Committee Decision-Making During Facilitated Meeting
Effective Date 1/1/2022	
Supersedes May 2014 version	Scheduled Reissue Date 1/1/2027

8.1 Questions

Contact: workforce.guidelines@nrel.gov.

8.2 Purpose

ISO/IEC 17024 Section 8.4 states: “The certification body shall have documents to demonstrate that, in the development and review of the certification scheme, the following are included:

- a) the involvement of appropriate experts;
- b) the use of an appropriate structure that fairly represents the interests of all parties significantly concerned, without any interest predominating...”

Section 8.6 states: “When the certifications body is not the scheme owner of a certification scheme it implements, the certification body shall ensure that the requirements contained in this clause (Clause 8) are met.”

The purpose of this procedure is to ensure that all members of the scheme committee are heard and that no one interest can obstruct the process of developing a consensus.

8.3 Authorizing Policy

ISO/IEC 17024: Conformity assessment—General requirements for bodies operating certification of persons.

8.4 Applicability

This procedure is used to build consensus around elements of the certification scheme during the facilitated meeting to develop an initial scheme or to revise a scheme in accordance with the Policy Governing Certification Scheme Operation (Section 10). A detailed agenda with specific topics, questions, tasks, and time blocks related to each element of a certification scheme is distributed at the scheme committee meeting. A facilitated decision-making process is used to first obtain consensus on each issue for inclusion or exclusion. Following the decision to include or exclude, the committee may decide how to develop each element to the committee’s satisfaction.

8.5 Definitions

Certification scheme—Competence and other requirements related to specific occupational or skilled categories of persons.

Certification scheme committee—Under ISO/IEC 17024, the group charged with determining the certification scheme.

Consensus—For the purpose of these meetings, two-thirds of the committee.

Vote—For the purpose of these meetings, greater than 50% of the committee.

Decision block—A scheduled block of time on the agenda intended to pursue a specific topic and outcome, separated from other blocks by a scheduled break.

Facilitator—The individual who guides the meetings, maintains a neutral perspective by considering the group's needs, and outlines the procedures.

Scribe/timekeeper—The group's impartial witness records the proceedings through notetaking, keeps the group apprised of time, and gives warnings when the time limit is nearing.

8.6 General Rules

The following general rules apply to scheme committee facilitated meetings:

- Participation:
 - One person speaks at a time.
 - Staying on schedule is critical.
 - Everyone's opinion counts and equal
 - Respectful participation is encouraged.
- Managing disruptions:
 - A single person does not have the right to veto or block a consensus.
 - If a person is disrupting the committee or preventing it from functioning properly, or if this person fails to contribute in a meaningful way, he or she may be removed from the meeting by consensus of the committee.
 - A first violation will result in a warning. A second violation will require a silent ballot among committee members to vote on the removal of the member in violation.
 - If the consensus of the committee is that the member should be removed, he or she is not permitted to rejoin the committee until the next scheduled decision block on the agenda.
 - Violations include:
 - Nonconformance to time allotments

- Interrupting other committee members
- Any type of personal attack, inappropriate or condescending comments.
- Order of operations:
 - Stage One: Statement of topic, question, or task prompted by the facilitator:
 - The facilitator will bring the main topic and corresponding issue to the floor.
 - A brief discussion will determine whether it is possible to reach an initial consensus.
 - If consensus is reached, the discussion will move to specifics and details related to the main issue.
 - If consensus is not reached, the committee will continue to discuss the issue in order to reach a decision before moving on to the specific points.
 - Stage Two: Reach consensus on the specifics:
 - Stage Two is for finalizing the details of the issue.
 - Stage Three: Review and finalize:
 - This stage provides an opportunity to review decisions made in the prior stages and is a time to make last-minute changes.
 - Stage Four: Voting:
 - When consensus has been reached and the question, topic, or task has been finalized, it is put to the committee for a final vote in accordance with the Policy for Scheme Committee Voting.

8.7 Responsibilities

Table 7. Specific Responsibilities for Facilitated Scheme Committee Meetings

Role	Responsibilities
Facilitator	<ol style="list-style-type: none"> 1. Manage and guide the discussion. 2. Enforce warnings for violations. 3. Maintain the focus of the big picture to ensure that the meeting stays on task.
Scribe/Timekeeper	<ol style="list-style-type: none"> 1. Record proceedings. 2. Manage time allotments for each section. 3. Inform members when they have 30 seconds remaining, 10 seconds remaining, and when time is up.
Scheme Committee Member	<ol style="list-style-type: none"> 1. Keep focused on the ultimate goal and avoid being sidetracked. 2. Follow the etiquette established in the rules and be respectful to the facilitator, scribe/timekeeper, and fellow committee members.

8.8 Related Policies

- Policy Regarding Compliance with Certification Scheme Committee Objectivity (Section 4)
- Policy on Confidentiality and Nondisclosure of Certification Scheme Material (Section 5)
- Policy for Certification Scheme Committee Voting (Section 7).

8.9 Related Procedures

- Procedure for Certification Scheme Committee Records Management (Section 6)
- Procedure for Certification Scheme Committee Decision-Making During Facilitated Meetings (Section 8)
- Procedure for Certification Scheme Committee Electronic Collaboration (Section 9).

9 Procedure for Certification Scheme Committee Electronic Collaboration

ISO/IEC 17024 Section (as referenced in ISO/IEC 17024:2012) 8.4, 8.6	Title Procedure for Certification Scheme Committee Electronic Collaboration
Effective Date 1/1/2022	
Supersedes May 2014 version	Scheduled Reissue Date 1/1/2027

9.1 Questions

Contact: workforce.guidelines@nrel.gov.

9.2 Purpose

ISO/IEC 17024 Section 8.4 states: “The certification body shall have documents to demonstrate that, in the development and review of the certification scheme, the following are included:

- a) the involvement of appropriate experts;
- b) the use of an appropriate structure that fairly represents the interests of all parties significantly concerned, without any interest predominating...”

Section 8.6 states: “When the certifications body is not the scheme owner of a certification scheme it implements, the certification body shall ensure that the requirements contained in this clause (Clause 8) are met.”

The purpose of this procedure is to ensure that all members of the scheme committee have the opportunity to fully participate in the electronic collaboration process prior to voting.

9.3 Authorizing Policy

ISO/IEC 17024: Conformity assessment—General requirements for bodies operating certification of persons.

9.4 Applicability

This procedure is used to ensure sufficient collaboration and discussion through electronic means (e.g., email, Microsoft Teams) prior to voting. Electronic collaboration and discussion are used for:

- Required voting on an element of the scheme (i.e., it is spelled out in the scheme that the scheme committee’s approval is required)
- Allowing general discussion among the certification scheme committee members, NREL, and the certifying body (with NREL as liaison) (NOTE: Some of these discussions may result in a vote and some may not.).

9.5 Definitions

Certification scheme—Competence and other requirements related to specific occupational or skilled categories of persons.

Certification scheme committee—Under ISO/IEC 17024, the group charged with determining the certification scheme.

9.6 General Rules

The following general rules apply to electronic collaboration:

- Email:
 - When discussion and voting occur via email, the NREL project team and all scheme committee members shall “reply to all” to ensure the discussion and voting are threaded and available to all.
- Electronic collaboration platform:
 - NREL project team or the scheme committee members may introduce a discussion topic to the scheme committee.
- Voting:
 - The NREL project manager may determine (in accordance with the certification scheme, NREL Policies and Procedures, and ISO/IEC 17024) if a vote on the discussion topic is required.
 - Certification scheme committee members may request a vote.
 - The NREL project manager will call the vote as the moderator. This may be done with the initial introduction of the discussion topic (i.e., the discussion is to ensure all scheme committee members make an informed vote) in accordance with the NREL Policy for Scheme Committee Voting.
 - If a general discussion results in a vote, the NREL project manager will notify the scheme committee of the vote in accordance with the NREL Policy for Scheme Committee Voting (Section 7).

9.7 Responsibilities

Table 8. Specific Responsibilities for Facilitated Scheme Committee Meetings

Role	Responsibilities
Scheme Committee	<ol style="list-style-type: none">1. Introduce new topic for discussion.2. Respond to questions submitted for vote electronically.3. Respond to all NREL communications regarding the scheme.
NREL Project Manager, NREL Project Team	<ol style="list-style-type: none">1. Introduce new topic for discussion.2. When consensus is reached, initiate voting when the discussion has concluded or in the event that a committee member requests a vote.

9.8 Related Policies

- Policy Regarding Compliance with Certification Scheme Committee Objectivity (Section 4)
- Policy on Confidentiality and Nondisclosure of Certification Scheme Material (Section 5)
- Policy for Certification Scheme Committee Voting (Section 7).

9.9 Related Procedures

- Procedure for Certification Scheme Committee Records Management (Section 6)
- Procedure for Certification Scheme Committee Decision-Making During Facilitated Meetings (Section 8).

10 Policy Governing Certification Scheme Operation

ISO/IEC 17024 Section (as referenced in ISO/IEC 17024:2012) 8.1–8.6	Title Policy Governing Certification Scheme Operation
Effective Date 1/1/2022	
Supersedes May 2014 version	Scheduled Reissue Date 1/1/2027

10.1 Questions

Contact: workforce.guidelines@nrel.gov.

10.2 Purpose

ISO/IEC 17024 Section 8.1 states: “There shall be a certification scheme for each category of certification.”

ISO/IEC 17024 Sections 8.2–8.4 describe the required elements, process requirements, and required documentation for the scheme.

ISO/IEC 17024 Section 8.5 states: “The certification body shall ensure that the certification scheme is reviewed and validated on an ongoing, systematic basis.”

ISO/IEC 17024 Section 8.6 states: “When the certification body is not the scheme owner of a certification scheme it implements, the certification body shall ensure that the requirements contained in this clause (Clause 8) are met.”

The purpose of this policy is to ensure the ongoing review and validation by the certification scheme committee in the development and maintenance of the certification scheme and in any changes to the requirements for the certifications. This policy also guides transfer of the scheme to the certifying body.

10.3 Authorizing Policy

ISO/IEC 17024: Conformity assessment—General requirements for bodies operating certification of persons.

10.4 Applicability

This policy serves as an internal management and guidance document for the NREL project team tasked by DOE as described in an AOP to develop and maintain a personnel certification program for the weatherization and home performance industry.

10.5 Definitions

Certifying body—A third-party conformity assessment body operating certification schemes for persons.

Certification scheme—Competence and other requirements related to specific occupational or skilled categories of persons.

Certification scheme committee—Under ISO/IEC 17024, the group charged with determining the certification scheme.

Certification scheme development and maintenance—Initial development of a new certification scheme and activities (maintenance) required to finalize the new certification program based on the scheme (e.g., initial licensing of the scheme, interpretation of the scheme, pilot of new certification, documentation required for accreditation).

Certification scheme review and validation—Activities required for the systematic review and validation of an existing certification scheme (i.e., a scheme that has been through development and maintenance as described above).

10.6 General Rules

The following general rules apply to transfer of the certification scheme to the certifying body, the process for initial development and maintenance, and review and validation of a certification scheme.

10.6.1 Certification Scheme Development

The certification scheme shall be developed initially through an in-person, facilitated, and structured meeting process as described in the Procedure for Certification Scheme Committee Decision Making During Facilitated Meetings (Section 8) and the Procedure for Certification Scheme Committee Records Management (Section 6).

10.6.2 Certification Scheme Maintenance

Following the initial scheme development meeting, work may continue to complete the certification scheme. After the certification scheme has been licensed and transferred, the certifying body submits information as required by the scheme, questions about interpretation of the scheme, and/or proposed changes to the scheme for approval by the scheme committee. As the scheme owner, NREL acts as a liaison between the certifying body and the scheme committee. Information required by interpretations of and proposed changes to the certification scheme shall be presented to the certification scheme committee by NREL for discussion and vote. Topics for discussion and vote shall be presented with sufficient background information such that the committee may understand the request and its justification. Maintenance activities involving the scheme committee shall be conducted electronically in accordance with the Procedure for Certification Scheme Committee Electronic Collaboration (Section 9).

10.6.3 Certification Scheme Review and Validation

At a minimum, a certification scheme shall be reviewed and validated by the scheme committee annually. If either of the two conditions described below should be present, the certification scheme would need to be revised.

- Requirements of ISO/IEC17024 or other bodies (e.g., relevant industry standards body or government requirements) relevant to these certifications. If requirements change, the

certification schemes shall be reviewed. This could result in revisions to the scheme sooner than 5 years.

- Revisions to a JTA. If any such revision occurs, the certification scheme must be reviewed to ensure that it still reflects the JTA as the standard of competence. This could result in revisions to the scheme.

The certification scheme shall be reviewed and validated through a facilitated and structured meeting process as described in the Procedure for Certification Scheme Committee Records Management (Section 6).

10.6.4 Transfer of Certification Scheme to Certifying Body

NREL shall enter into a copyright license agreement with the certifying body that delineates the terms and conditions of the use of the certification scheme. This agreement serves as the means of transferring the certification scheme (NREL's intellectual property) to the certifying body.

After entering the licensing agreement, the certification scheme files shall be transferred to the certifying body by a mutually agreed upon and secure method that meets the terms of the Procedure for Certification Scheme Committee Records Management (Section 6) and NREL's Records Management Policy.

10.6.5 Notification of Review and Validation of the Certification Scheme to the Certifying Body

NREL shall notify any certifying body holding an active license to a scheme when the scheme will be reviewed and if any of the conditions described in Section 10.6.3 occur. Notification shall occur via email according to the Notices section of the license. Because review and validation can be a multistage process, more than one notification may be necessary.

At a minimum, notifications shall include:

- Information regarding the condition that prompted the review (e.g., every 5 years; a change to the job scope, description, or task)
- Information about the scheme committee's decision: why, how, when, and where the committee met, meeting minutes, results, and recommendations
- Schedule for certification scheme review and validation.

10.7 Responsibilities

Table 9. Specific Responsibilities for Operation of the Certification Scheme

Role	Responsibilities
NREL	<ol style="list-style-type: none"> 1. Host a facilitated in-person meeting of the certification scheme committee for certification scheme development. 2. Host a facilitated meeting of the certification scheme committee for certification scheme review and validation. 2. Develop and implement a copyright license agreement for transfer of the certification scheme. 3. Ensure the policy for the transfer of the certification scheme to the certifying body is followed during the transfer of the certification scheme. 4. Act as a liaison between the certification scheme committee and the certifying body in scheme maintenance. 5. Ensure and administer proper review and validation of the certification scheme in accordance with this policy. 6. Notify the certifying body of maintenance, review, and validation activities in accordance with this policy.
Certifying Body	<ol style="list-style-type: none"> 1. Participate in the development and implementation of the copyright license agreement and adhere to its requirements. 2. Adhere to the transfer of the certification scheme to the certifying body policy in the transfer of the certification scheme. 3. Adhere to the certification scheme maintenance policy in the development of the certification program. 4. Receive notification of the review and validation of the certification scheme in accordance with this policy.
Scheme Committee Member	<ol style="list-style-type: none"> 1. Attend in-person and virtual meetings as required. 2. Participate in electronic collaboration as required.

10.8 Related Policies

- Policy Regarding Compliance with Certification Scheme Committee Objectivity (Section 4)
- Policy on Confidentiality and Nondisclosure of Certification Scheme Material (Section 5)
- Policy for Certification Scheme Committee Voting (Section 7).

10.9 Related Procedures

- Procedure for Certification Scheme Committee Records Management (Section 6)
- Procedure for Certification Scheme Committee Decision-Making During Facilitated Meetings (Section 8)
- Procedure for Certification Scheme Committee Electronic Collaboration (Section 9).