

Superior Energy Performance[®] (SEP[®]) Certification Protocol

DRAFT

Version: This is a draft of a proposed update made available for informal public comment. This document has not been finalized for use in pursuing SEP certification

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29 1 Introduction

30 Superior Energy Performance® (SEP®) is a certification program that recognizes excellence in energy
31 management systems (EnMS) by verification of a facility's implementation of the ISO 50001 EnMS and
32 continual energy performance improvement. Organizations that achieve SEP certification receive a
33 certificate from a third-party SEP Verification Body indicating the level of SEP achieved and recognition
34 from the U.S. Department of Energy (DOE) including the verified energy performance improvement value.
35 SEP certification can be achieved at the **SEP VERIFIED** or **SEP PERFORMER** levels.

36 1.1 The Superior Energy Performance Certification Protocol

37 The *SEP Certification Protocol* sets forth the requirements for achieving SEP certification at either the *SEP*
38 *VERIFIED* or *SEP PERFORMER* levels as well as the processes and timeframes for applying and
39 certifying to the SEP program.

40 1.2 SEP Certification Levels and Overview of Requirements

41 To be eligible to be certified at the *SEP VERIFIED* level, two major requirements must be achieved:

- 42 1. **Third party certification to ISO 50001 and ANSI/MSE 50021**
- 43 2. **Third party verification of energy performance improvement**

44 To be eligible to be certified at the *SEP PERFORMER* level, the following requirement must be achieved in
45 addition to those listed for the *SEP VERIFIED* level:

- 46 3. **Third party verification of best practices in energy management, external programs, and
47 advanced or underutilized energy technologies through the Superior Energy Performance
48 (SEP) Scorecard.**

49 Third-party conformity assessment to SEP is certified by an accredited SEP Verification Body. A list of
50 accredited SEP Verification Bodies can be found on the SEP website.¹

51 2 Scope and Boundaries

52 Based upon the ANSI/MSE 50021:2018 definition of "facility," an organization shall establish the
53 boundaries of one or more facilities for participation in the SEP program. The scope and boundaries of
54 the organization's *ISO 50001* energy management system (EnMS) shall encompass the scope and
55 boundaries of the facilities(s) for which SEP certification is being sought.

¹ ANSI/MSE 50028 *Superior Energy Performance® - Requirements for verification bodies for use in accreditation or other forms of recognition* defines the requirements for SEP Verification Bodies.

56 SEP uses the same technical areas as *ISO 50001*. All technical areas are eligible for *SEP VERIFIED* or
57 *SEP PERFORMER*.

58 3 Terminology

59 Definitions of terminology used in this document can be found in ANSI/MSE 50021.

60 Note: SEP Certification terms of *SEP VERIFIED* and *SEP PERFORMER* are placeholder names to be
61 finalized by SEP Administrator.

62 4 SEP Recognition Levels

63 The SEP program has two levels of recognition, *SEP VERIFIED* and *SEP PERFORMER*, that can be
64 achieved. To be eligible to be certified at the *SEP VERIFIED* level, two requirements must be achieved:

- 65 1. **Third party certification to ISO 50001 and ANSI/MSE 50021** – An accredited SEP Verification
66 Body external to the organization using a SEP Lead Auditor must certify that the organization met
67 the requirements of *ISO 50001 Energy management systems - Requirements with guidance for use*
68 (*ISO 50001*) and *ANSI/MSE 50021 Superior Energy Performance® - Additional Requirements for*
69 *Energy Management Systems (ANSI/MSE 50021)*.
- 70 2. **Third party verification of energy performance improvement** – An accredited SEP Verification
71 Body external to the organization using a SEP Performance Verifier must verify that positive energy
72 performance improvement (greater than 0.0% over the achievement period, rounded to the nearest
73 tenth of a percent) has been achieved per the *SEP Measurement and Verification Protocol*.

74 To be eligible to be certified to the *SEP PERFORMER* level, three requirements must be achieved:

- 75 1. **Third party certification to ISO 50001 and ANSI/MSE 50021** – An accredited SEP Verification
76 Body external to the organization using a SEP Lead Auditor must certify that the organization met
77 the requirements of *ISO 50001 Energy management systems - Requirements with guidance for use*
78 (*ISO 50001*) and *ANSI/MSE 50021 Superior Energy Performance® - Additional Requirements for*
79 *Energy Management Systems (ANSI/MSE 50021)*.
- 80 2. **Third party verification of energy performance improvement** – An accredited SEP Verification
81 Body external to the organization using a SEP Performance Verifier must verify that positive energy
82 performance improvement (greater than 0.0% over the achievement period, rounded to the nearest
83 tenth of a percent) has been achieved per the *SEP Measurement and Verification Protocol*.
- 84 3. **Third party verification of best practices in energy management, external programs, and**
85 **advanced or underutilized energy technologies** – An accredited SEP Verification Body external
86 to the organization using a SEP Lead Auditor must verify that best practices in energy
87 management, external programs, and advanced or underutilized energy technologies have been
88 implemented as evidenced by the organization's achievement of 40 points, minimum, in the SEP
89 Scorecard (see section 6.3).

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90 An organization may apply for a scope extension to update from *SEP VERIFIED* to *SEP PERFORMER* at
91 any time while their *SEP VERIFIED* certification is valid.

92 5 Standards, Normative References, and Forms

93 The SEP program makes use of standards, normative references, and required and voluntary forms
94 involved in pursuing certification. An additional standard and form specific to the SEP Verification Body are
95 also provided.

96 5.1 Standards

97 Facilities seeking SEP Certification must conform to the following standards:

- 98 1. **ISO 50001**, which is an international standard that provides a flexible framework for implementing
99 an EnMS. SEP requires that participating facilities meet the requirements of the *ISO 50001*
100 demonstrating the establishment of the systems and processes needed to continually improve both
101 energy performance and the performance of the EnMS. The most recent version of *ISO 50001*
102 published prior to the date the facility submits an *SEP Enrollment Form* must be used. If a new
103 version of *ISO 50001* is published after submission of an *SEP Enrollment Form*, the organization
104 may elect to use the newer version of *ISO 50001* or the version of *ISO 50001* published at the time
105 of *SEP Enrollment Form* submission.
- 106 2. **ANSI/MSE 50021**, which defines the EnMS requirements of the SEP program beyond those of *ISO*
107 *50001*.

108 5.2 Normative References

109 Facilities seeking SEP Certification must follow the additional requirements in the normative references for
110 *ANSI/MSE 50021*.² The normative references are:

- 111 1. The ***SEP Certification Protocol*** (this document), which describes the requirements related to
112 energy performance improvements and timeframes, along with the processes for applying for and
113 becoming certified to the SEP program.
- 114 2. The ***SEP Measurement and Verification Protocol (SEP M&V Protocol)***, which sets forth the
115 verifiable methodology for determining and demonstrating achievement of the energy performance
116 improvement level claimed by an organization for a defined facility. The determination and
117 demonstration of energy performance improvement is based upon the comparison of top-down and
118 bottom-up approaches to calculate energy performance improvement.

² Normative references can be downloaded free of charge from the SEP website.

In addition to the above normative references, facilities seeking SEP certification at the *SEP PERFORMER* level must follow the additional requirements in:

3. The **SEP Scorecard**, which defines the credits and associated points for implementing actions, processes, or procedures beyond the requirements for *ISO 50001* and *ANSI/MSE 50021* which are required for recognition at the *SEP PERFORMER* level. This *SEP Certification Protocol* states the number of points required for recognition at the *SEP PERFORMER* level.

5.3 Forms and Data Submission

5.3.1 Required Forms

Organizations wishing to participate in the SEP program must submit completed *SEP Enrollment* and *SEP Application Forms* to the SEP Administrator.^{3,4}

1. The **SEP Enrollment Form** gathers basic facility and contact information for a facility or organization with multiple facilities that intends to seek SEP certification. The SEP Administrator uses this information to provide support to enrolled facilities. Enrolled facilities can also make the SEP Administrator aware of any special circumstances that relate to the facility's SEP implementation.
2. The **SEP Application Form** confirms the facility and contact information of the SEP Enrollment Form and gathers additional information regarding energy consumption adjustment models, the contact information for the SEP Verification Body the applicant has selected, and other pertinent information to the certification of a facility. A facility or organization that has submitted an SEP Application Form is referred to as a SEP Applicant.
3. The **Register of Implemented Actions** (*the Register*) helps a facility organize and track its implemented energy performance improvement actions. *The Register* is required as part of the bottom-up comparison detailed in the *SEP M&V Protocol* and is submitted to the SEP Verification Body as part of the SEP audit. A SEP applicant is not required to submit *The Register* to the SEP Administrator, but may do so voluntarily.

5.3.2 Voluntary Forms and Data Submission

1. The **Cost-Benefit Form** may be voluntarily submitted by the SEP certified facility to the SEP Administrator. This spreadsheet-based form collects information on the level of investment in implementing the energy management system (effort and costs) for SEP, and a breakdown of energy performance improvement actions at the facility level. The SEP Administrator compiles data

³ The SEP Enrollment and SEP Application Forms can be downloaded free of charge from the SEP website.

⁴ These forms collect energy information in British Thermal Units (BTU). Organizations that use international units may be required to convert them to BTU when filling out these forms.

150 from submitted forms to understand the benefits of the SEP program and identify opportunities for
 151 providing program improvements. Facilities seeking the *SEP PERFORMER* level of certification
 152 receive points within the *SEP Scorecard* for submitting the Cost-Benefit Form.

- 153 2. The **Top-down regression model and associated energy data**, as well as, the **Register of**
 154 **Implemented Actions**, may be voluntarily submitted to the SEP Administrator. The SEP
 155 Administrator uses these data to research and subsequently simplify M&V approaches for the SEP
 156 program. Facilities seeking the *SEP PERFORMER* level of certification receive points within the
 157 *SEP Scorecard* for submitting the Top-down regression model and associated data, as well as, the
 158 Register of Implemented Actions.

159 5.4 Standards for SEP Verification Bodies

160 SEP Verification Bodies follow the requirements in each of the following standards:

- 161 • *ANSI/MSE 50028 Superior Energy Performance[®] - Requirements for verification bodies for use in*
 162 *accreditation or other forms of recognition*
- 163 • *ISO/IEC 17021-1 – Conformity assessment for bodies providing audit and certification of*
 164 *management systems*
- 165 • *ISO 50003 – Requirements for bodies providing audit and certification of energy management*
 166 *systems*

167 *ANSI/MSE 50028* builds on the requirements of *ISO/IEC 17021-1* and *ISO 50003*. Meeting the
 168 requirements of these standards ensures that SEP Verification Bodies use competent personnel to conduct
 169 EnMS certification and energy performance verification audits in a consistent and impartial manner.

170 5.5 SEP Energy Performance Improvement Report

171 After the SEP Verification Body confers SEP certification for a specific level on a facility, the SEP
 172 Verification Body submits an SEP Energy Performance Improvement Report to the SEP Administrator. The
 173 SEP Energy Performance Improvement Report summarizes information regarding the level of energy
 174 performance improvement, how it was achieved, and how energy consumption adjustment models were
 175 applied from the *SEP M&V Protocol*. This form collects energy information in units of BTUs. SEP
 176 Verification Bodies may be required to convert international units to BTU before the Energy Performance
 177 Improvement Report is submitted to the SEP Administrator.

178 6 SEP Audit and Certification Process

179 6.1 General Process for SEP Auditing and Certification

180 The following outlines the process for achieving SEP certification.

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- 181 1. The process of seeking SEP certification begins with the **SEP Enrollment Form**. Submission of the
182 *SEP Enrollment Form* can be made at any time prior to submitting the *SEP Application Form*.

183 It is recommended the *SEP Enrollment Form* be submitted when an organization has made the
184 decision to pursue SEP certification. No fees are required and no commitment is assumed or
185 obligated when submitting the *SEP Enrollment Form*. The SEP Administrator will acknowledge
186 when the *SEP Enrollment Form* has been reviewed and is accepted.

- 187 2. The organization must choose and contract with an accredited SEP Verification Body to conduct the
188 SEP verification audit. Alternatively, the applicant may choose a SEP Verification Body that has
189 applied for, but not yet completed their accreditation process. If the applicant chooses an Applicant
190 Verification Body, an accreditation body assessment witness team may be present during the SEP
191 certification audit. SEP certifications by Applicant Verification Bodies are only valid upon the
192 Verification Body achieving accreditation.

- 193 3. An **SEP Application Form** must be submitted to the SEP Administrator when the facility(ies) has
194 completed EnMS implementation, the energy performance improvement achievement period has
195 concluded, all other relevant SEP program requirements have been met, and the facility is prepared
196 for the verification audit.

197 The SEP Administrator uses this information to understand the basic approaches the facility has
198 used and whether the applicant is requesting pre-approvals for any alternative approaches to SEP
199 certification. No fees are required when submitting the SEP Application Form. The organization
200 (now referred to as an SEP Applicant) will be notified when the SEP Administrator approves and
201 SEP Application Form. The SEP Administrator will provide the application package to the SEP
202 Verification Body selected by the applicant.

203 Organizations are highly encouraged to submit the SEP Application five to six months before the
204 audit is intended to take place, especially if pre-approvals from the SEP Administrator are
205 requested. This recommended time frame applies to organizations pursuing initial SEP
206 certification or recertification.

207 Timely submission of the SEP Application Form can help to avoid a lapse in SEP certification. For
208 recertification, if the SEP Application Form is submitted in a shorter time frame, the SEP Verification
209 Body may lack the time to schedule and complete the recertification audit before the expiration of
210 the SEP certification. If SEP certification expires, a new stage 1 and stage 2 audit will be required.

211 If the SEP Applicant uses an alternative approach to modeling or data gathering/assessment as
212 specified in the *SEP M&V Protocol* the applicant must submit the request for approval with the SEP
213 Application Form, and receive approval by the SEP Administrator. The SEP Administrator will
214 provide the relevant evaluation criteria to both the organization and the SEP Verification Body.

215 An organization that applies for the *SEP VERIFIED* level of recognition is required to update its
216 SEP Application Form if it later decides to upgrade to the *SEP PERFORMER* level.

- 217 4. Upon receipt of the application package from the SEP Administrator, the SEP Verification Body will
218 send a SEP Lead Auditor and SEP Performance Verifier to conduct an audit to confirm conformity
219 to the requirements of the SEP program. See section 6.2 for multi-site SEP certification.

220 SEP certification can occur under three different circumstances⁵:

- 221 A. **Initial certification to both ISO 50001 and SEP:** For initial certification to both *ISO 50001*
222 and SEP, the SEP Verification Body will conduct an SEP conformity audit using appropriate
223 personnel for both a stage 1 and stage 2 audit. A stage 1 review is conducted to confirm
224 whether the facility is prepared for the stage 2 audit.
- 225 B. **Recertification after 3 years:** For recertification, a stage 1 audit shall be required if:
226 i. there are major changes to energy-using facilities, equipment, systems or processes;
227 ii. the client changes the chosen SEP level from *SEP VERIFIED* to *SEP PERFORMER*;
228 iii. the client modifies the SEP Energy Performance Indicator (SEnPI) model such that
229 SEP Administrator approval is required.
- 230 C. **Scope extension from ISO 50001 to SEP:** A scope extension from *ISO 50001* is typically
231 conducted during the three-year recertification audit for *ISO 50001*. A stage 1 review is
232 required.

- 233 5. Upon satisfactory completion of the SEP conformity assessment, the SEP Verification Body will
234 issue appropriate certificates to the organization. The SEP certification with level designation is
235 awarded for an interval of three years. Organizations choosing to recertify must submit an SEP
236 Application Form and update its performance and management system information to document
237 that SEP criteria are met.
- 238 6. The SEP Verification Body then provides the SEP Energy Performance Improvement Report along
239 with other relevant information to the SEP Administrator. The SEP Administrator then works with
240 U.S. DOE to provide the organization with appropriate recognition per the level of SEP certification
241 achieved. This recognition may include various physical documentation of success and publication
242 of the results of the certification decision and energy performance improvement on the SEP
243 website.

244 6.2 Certification Requirements Across Multiple Sites

245 Organizations may elect to gain cost efficiencies in ISO 50001 and SEP implementation and certification
246 through the coordination of multiple sites through two approaches:

- 247 1. Multi-sites within close geographic proximity: Two or more sites with a common ISO 50001 EnMS.

⁵ For information detailing the stage 1 and stage 2 audits, see Annex D.

- 248 2. Multi-sites under one central office: Per ISO 50003, Annex C, multiple sites may be managed under
249 one central office.

250 6.2.1 Single Certification for Non-contiguous, Multi-Sites within Close Geographic Proximity

251 Organizations may elect to have multiple sites that are non-contiguous, but within close geographic
252 proximity, to be under a common ISO 50001 and SEP EnMS. These sites can be considered under a
253 single SEP certification if they meet the requirements within ANSI/MSE 50021:2018, Annex A.1.1.

254 6.2.2 Certification of Multi-Sites Under One Central Office

255 Organizations may elect to have multiple facilities certified at the same time through a defined process of
256 sampling facility conformance to both *ISO 50001* and SEP requirements. If the sampled facilities are
257 found to meet the requirements for SEP certification at the *SEP VERIFIED* and/or *SEP PERFORMER*
258 levels, DOE will provide the organization with individual SEP recognition certificates for each facility
259 certified.

260 The organization must ensure that all of the facilities for which they are seeking certification fall within the
261 scope and boundaries of the *ISO 50001* multi-site EnMS. The *ISO 50001* multi-site EnMS shall be sampled
262 based on the requirements of *ISO 50003*. *ISO 50003* defines the requirements for an organization with
263 multiple facilities, including the details on sharing common EnMS functions at the central office.
264 Verification of SEP requirements shall follow the sampling procedure in *ISO 50003*. Additional SEP
265 requirements for multi-site sampling are:

- 266 • At least one member of the multi-site organization's central office shall hold a valid SEP
267 Performance Verifier certification.
- 268 • The internal audit process shall demonstrate energy performance improvement and, if applicable,
269 SEP Scorecard verification has been conducted, and that the organization has retained
270 documented information for each facility covered by the multi-site *ISO 50001* EnMS certificate.
- 271 • Every facility included in the multi-facility application shall have at least one staff member who
272 actively participates in the internal energy performance improvement and, if applicable, SEP
273 Scorecard verification process for that facility.

274 If the facilities under the multi-site EnMS include a mixture of those seeking certification at the *SEP*
275 *VERIFIED* and *SEP PERFORMER* certification levels, the sample shall include a proportional amount of
276 sites seeking each level. Functions held by the central office will be audited once, and the results will be
277 applied to all sites seeking SEP certification at either the *SEP VERIFIED* and *SEP PERFORMER* level.

278 6.3 Key Requirements and Timelines

279 The following table provides information regarding key requirements and timelines relevant to SEP
280 certification.

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Initial Certification		Recertification
For certification to the <i>SEP VERIFIED</i> level		
Energy Performance Improvement Percentage	Greater than 0.0% (rounded to the nearest tenth of a percent)	Greater than 0.0% (rounded to the nearest tenth of a percent)
Achievement Period	1 – 3 years	3 years
For certification to the <i>SEP PERFORMER</i> level (in addition to <i>SEP VERIFIED</i> level requirements above)		
<i>SEP Scorecard</i> Points	40	40

7 Suspension or Revocation of SEP Certification

Accredited SEP Verification Bodies have documented procedures for suspension and revocation of SEP certifications. Conditions under which certificates are suspended include when a surveillance audit finds that substantial structural breakdowns in *ISO 50001* or SEP requirements have occurred at a facility or the organization has failed to implement elements of its EnMS, and there is no credible commitment to take appropriate corrective action. The corrective action must be completed and accepted within the maximum interval for a suspended certificate, which is six months. The suspended certificate can be re-established following verification of an acceptable corrective action.

The SEP Verification Body will revoke certificates when the facility encounters substantial issues in which structural *ISO 50001* or SEP requirements have not been met, and it is apparent that conformance cannot be reestablished in a reasonable time frame. If an organization loses its *ISO 50001* certification, it also loses its SEP certification.

The SEP Verification Body shall communicate information on certificates that have been suspended or revoked to the SEP Administrator.

8 Confidentiality

The U.S. DOE, as the SEP Administrator, maintains the confidentiality of proprietary energy and production related data as proprietary that is submitted to the SEP program by SEP certified facilities, to the fullest extent of U.S. federal law. Data included within the SEP Enrollment and SEP Application Forms, SEP Energy Performance Improvement Report, SEP Voluntary Cost Benefit Form, and any other forms or data shared with the U.S. DOE will not be released publicly. The U.S. DOE will publicly report the following information about each SEP certified facility:

1. Facility name
2. Facility location (city, state)
3. SEP Certification level (*SEP VERIFIED* or *SEP PERFORMER*)
 - a. Facilities that achieve SEP certification at the *SEP PERFORMER* level can elect whether to make the total *SEP Scorecard* points achieved publically available, or not.

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- 307 4. Verified achievement period energy performance improvement
- 308 a. The SEP certified facility can elect if energy performance improvement is reported, or not. If
- 309 the energy performance improvement is reported, the facility has the option to report as an
- 310 absolute value of energy savings (BTU), a percentage value as compared to the energy
- 311 baseline (SEnPI), or both.
- 312 5. Verified achievement period length
- 313 6. Certification date (month/year)

314 U.S. DOE will, from time-to-time, publicly share aggregate, program-wide metrics, such as the number of
315 SEP certified facilities, and annual and cumulative SEP program energy savings without revealing data or
316 analysis that could lead to the identification of specific facilities.

317 U.S. DOE may use data to study the effectiveness and impact of the SEP program. Results from such
318 analysis will be made public only if participating organization anonymity can be ensured. Participating
319 organization may be asked if they wish to voluntarily participate in the formation of case studies and other
320 activities regarding the SEP program.

321 All data provided to U.S. DOE is subject to the Freedom of Information Act (FOIA), however, U.S. DOE will
322 notify the SEP certified facility if a FOIA request has been submitted for which their data might be
323 responsive. U.S. DOE will consult with the SEP certified facility and ensure the facility has an opportunity to
324 inform U.S. DOE what data they view is proprietary. U.S. DOE will review the SEP certified facility's
325 suggestions and will not release to the public any data U.S. DOE deems proprietary.

326 Individual SEP Verification Bodies have established and implemented procedures for ensuring
327 confidentiality. These procedures address both the SEP Verification Body as well as the individual
328 auditor/verifier. Subcontracted or outsourced activities are subject to the same requirements.

9 Use of Superior Energy Performance Logo and Materials

The U.S. DOE is the current SEP Administrator and maintains the Superior Energy Performance[®] program and certification mark, which bears the SEP[®] logo. U.S. DOE will define and provide SEP certified facilities with guidelines on appropriate use of the certification mark.

Public reference to SEP certification and use of the related logos must be in accordance with SEP Administrator guidelines for publicizing certification as well as those of the individual SEP Verification Body. Specific references to SEP certification must clearly indicate the part of the organization that has been certified and must not infer that other parts of the organization, or products produced, are also certified.

Use of the certification mark outside of the guidelines must be reviewed and approved by U.S. DOE prior to use.

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Annex A – Certified Professionals (Informative)

A.1 Required Members of the SEP Audit Team

An **SEP Lead Auditor (SEP LA)**⁶ 1) leads and manages an SEP audit team effectively to ensure the audit objectives are met, 2) assesses the conformance of the energy management system to SEP requirements, and 3) using *ANSI/MSE 50028* the SEP Lead Auditor will plan and conduct the SEP audits and report the organization's implementation of *ISO 50001* and *ANSI/MSE 50021* and associated normative documents. SEP Lead Auditors are Energy Professionals International (EPI) *ISO 50001* Lead Auditors (see below) with additional required training on the SEP program.

A **Certified SEP Performance Verifier (SEP PV)**⁶ 1) reviews and evaluates calculations supporting a client's use of the *SEP M&V Protocol* and *SEP Scorecard*, 2) verifies the input data on which the client's energy performance improvement and *SEP Scorecard* points are based, 3) evaluates the client's energy performance claims, and 4) works with the audit team to communicate and justify the audit findings related to energy improvement calculations. A prerequisite for SEP PV certification is to obtain the Certified Practitioner in Energy Management Systems (see below).

A.2 Supporting Professional Certifications for SEP

The following are supporting professional certifications for SEP implementation and auditing:

Certified EPI ISO 50001 Lead Auditor⁶ has the competency to 1) plan, lead and manage an *ISO 50001* audit team effectively to ensure the audit objectives are met, 2) conduct the *ISO 50001* audit in conformance with *ISO 50003* requirements, 3) assess conformance to *ISO 50001*, which includes confirming continual improvement of energy performance and any additional organizational requirements, 4) document and report audit findings based upon objective evidence, 5) effectively manage the relationship with the client and the auditee; and 6) communicate, justify, and take responsibility for the audit results both verbally and in a written report to the client.

Certified Practitioners in Energy Management Systems (CP EnMS)⁶ support facilities in assessing energy efficiency opportunities and implementing an EnMS that conforms to *ISO 50001*. Those with the CP EnMS credential typically include facility personnel, consulting professionals, or service providers with the appropriate competence and technical experience in energy systems. The CP EnMS credential identifies professionals competent to prepare facilities for SEP certification. An SEP Applicant may apply for SEP certification without engaging a CP EnMS. However, using a competent individual adds a level of assurance for the facility that the standards and protocols will be properly applied.

⁶ Available through the Institute for Energy Management Professionals®.

Annex B – Scenarios for ISO 50001 Scope Extension under Accredited and Non-Accredited Bodies for SEP (Informative)

A SEP Applicant that obtains *ISO 50001* certification from a non-SEP certification body may seek a scope extension from *ISO 50001* to SEP. The facility will request the transition from the SEP Administrator and complete the steps outlined in either Scenarios 1, 2 or 3.

The Certification Body (Scenarios 1 or 3) or the Applicant Verification Body (Scenario 2) needs to be accredited by a signatory to the *ISO 14001* multilateral agreement (MLA), *ISO 50001* MLA when available.

Scenario 1: The organization decides to remain with their current Certification Body, which is seeking to become an accredited SEP Verification Body. The Certification Body must apply to the Accreditation Body to become an accredited SEP Verification Body.

1. The applicant SEP Verification Body conducts a stage 1 audit in accordance with *ANSI/MSE 50028*.
2. The applicant SEP Verification Body conducts an audit of the existing the *ISO 50001* EnMS against the SEP requirements as set forth in *ANSI/MSE 50021* at either the next scheduled surveillance or recertification audit. This audit will include the Performance Verification using the *SEP M&V Protocol*. Note: The SEP audit could be the site of the accreditation body witness audit for accrediting the applicant SEP Verification Body.
3. The SEP certification is released when the Certification Body has become fully accredited as a SEP Verification Body.
4. The dates for the *ISO 50001* certificate are not impacted by this scope extension, therefore, the expiration dates may not align.
5. If the next scheduled audit is a surveillance audit, the SEP Applicant will have a choice to:
 - a. Maintain different certification dates for *ISO 50001* and SEP certification; or

Undergo a full *ISO 50001* audit to align the ongoing recertification dates

Scenario 2: The *ISO 50001* certification was awarded by a Certification Body that is *not* a candidate for SEP Verification Body accreditation, and the *ISO 50001* certification is transfer to an accredited SEP Verification Body. Under this scenario:

1. The organization transfers its existing *ISO 50001* certification to an accredited SEP Verification Body following the defined Accreditation Body process for the transfer of management system certifications.
2. The SEP Verification Body conducts stage 1 audit in accordance with *ANSI/MSE 50028*.
3. The SEP Verification Body conducts an audit of the existing *ISO 50001* EnMS against the SEP requirements as set forth in *ANSI/MSE 50021* at either a next scheduled surveillance or recertification audit. This audit will include the Performance Verification using the *SEP M&V Protocol*.
4. Following successful completion of steps 2 and 3 above, a SEP certificate may be issued.
5. The SEP audit (step 3) will be conducted at the next scheduled audit or as a special audit at the request of the client. If the next scheduled audit is a surveillance audit, the SEP Applicant will have a choice to:
 - a. Maintain different certification dates for *ISO 50001* and SEP certification; or
 - b. Have a full *ISO 50001* audit to align the ongoing recertification dates.

The additional time to be added to the next scheduled audit for the SEP audit is defined in *ANSI/MSE 50028*.

Scenario 3: The ISO 50001 certification was awarded by a Certification Body that *is not* a candidate for SEP Verification Body accreditation, the ISO 50001 certification remains at this Certification Body, and the SEP certification is certified by a separate SEP Verification Body. Under this scenario:

1. The organization keeps its existing *ISO 50001* certification at the Certification Body.
2. The SEP Verification Body conducts stage 1 audit in accordance with *ANSI/MSE 50028*.
3. The SEP Verification Body conducts an audit of the existing *ISO 50001* EnMS against the SEP requirements as set forth in *ANSI/MSE 50021* at any time while their ISO 50001 certification is valid. This audit will include the Performance Verification using the *SEP M&V Protocol*.
4. Following successful completion of steps 2 and 3 above, a SEP certificate may be issued.
5. The next ISO 50001 and SEP audits will be conducted at the next scheduled audit for each. The SEP Applicant can maintain different certification dates for *ISO 50001* and SEP certification.
6. The additional time to be added to the next scheduled audit for the SEP audit is defined in *ANSI/MSE 50028*.

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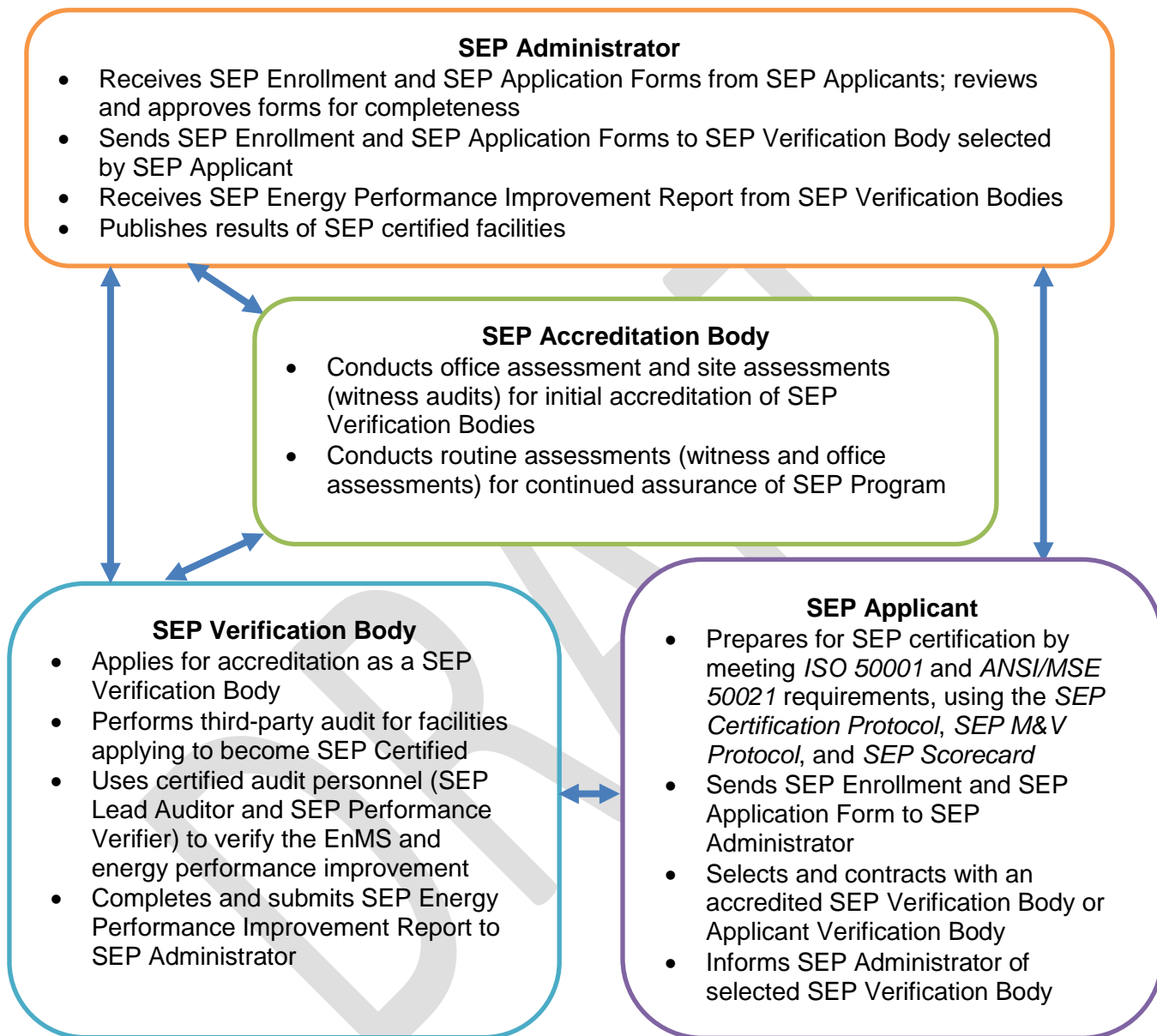
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Annex C – Relationship Between Various SEP Parties (Informative)



See Annex A for more information on certified professionals.

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Annex D – Stage 1 and Stage 2 Audits (Informative)

The following excerpt from ANSI/MSE 50028 details the stage 1 and stage 2 audits as part of the SEP conformity audit process:

Stage 1

Any necessary SEP Administrator approvals shall be received prior to the Stage 1 audit.

The VB shall define and document the process for initial audits resulting in SEP certification.

Stage 1 shall be performed to:

- a) review the client's status regarding the SEnPI model and Bottom up Comparison for a Stage 2 audit;
- b) review the client's status regarding the primary requirements ANSI/MSE 50021;
- c) review the client's status regarding the *Scorecard* Credits, if applicable;
- d) collect necessary information regarding the scope of the energy management system, processes and significant energy uses;
- e) review the clients status regarding SEP Administrator approvals, as applicable;
- f) evaluate whether internal audits and management reviews include SEP requirements.

Outputs from the above Stage1 SEP requirements would include:

- confirmation of the specific energy performance level, Scorecard credits, as applicable, and energy performance improvement percentage that is being claimed;
- confirmation of the modeling method and review of any SEP Administrator pre-approval(s);
- confirmation of the *Registry* for the bottom up comparison;
- review of a facility site plan or layout or graphical or narrative description of the facility.

There are two outcomes possible from Stage 1:

- ready, and
- not ready.

If the outcome from Stage 1 is that the client is "not ready" for the Stage 2 audit, the client shall submit the required information to attain a "ready" conclusion. There shall be documented evidence of when the "ready" conclusion is achieved. Upon achieving a "ready" conclusion from the Stage 1 audit, the client and the VB shall make arrangements for the Stage 2 audit.

The Stage 1 audit may be performed on-site or remotely.

422 Stage 2 audit

423 The verification body shall assess the SEnPI performance improvement in conformity with the requirements
424 of the *M&V Protocol*, taking into account:

- 425 — definition of the energy management system scope and boundaries,
- 426 — designated baseline year and achievement period,
- 427 — energy performance improvement,
- 428 — scorecard credits, and
- 429 — “Bottom-Up Comparison” and the related “Registry” of projects.

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432 The SEnPI performance improvement verification steps and the activity required of the SEP PV are:

- 433 • Verify that energy and related data and other variables used in the analysis are appropriate and
434 representative. Data used in the analysis shall be from calibrated sources (e.g. calibrated meters,
435 websites with calibrated data).
- 436 • Energy models – verify that the energy models were developed in conformity to the requirements of
437 the M&V Protocol and that:
 - 438 a) variables used in the models can reasonably be expected to be significant drivers of the
439 energy use being modeled,
 - 440 b) variables not used in the models which could reasonably expect to be significant drivers
441 of energy use have been examined for inclusion in the models,
 - 442 c) equation coefficients used in the model meet the validity test specified in the M&V
443 Protocol, and
 - 444 d) coefficients used in the models are reasonable.
- 445 • Conditions – verify that the conditions of the facility and its operations existing in the reporting year
446 are consistent with those that existed in the baseline year. If not consistent, verify that changes to
447 the energy performance models have been made that properly and adequately account for any
448 changes in conditions that are found to invalidate the historic baseline model.
- 449 • SEnPI baseline – verify that the selected baseline year satisfies the requirements of the *M&V*
450 *Protocol*.
- 451 • SEnPI – verify that the SEP energy performance indicators for the baseline and reporting years are
452 properly calculated using verifiable data in accordance with the *M&V Protocol* and are accurate
453 representations of energy performance for the defined scope of the EnMS.
- 454 • Verify that the energy performance improvement has been calculated in accordance with the *M&V*
455 *Protocol*.
- 456 • “Bottom Up Comparison” of Projects and Other Energy Performance Improvements in accordance
457 with the *M&V Protocol* to validate that the energy performance improvement achievement level has
458 been met by examining evidence of improvement through facility, equipment, system process and
459 maintenance and operation upgrades.
- 460 • Complete the facility *SEP Energy performance improvement report* and submit it to the VB.

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463 VB ensures the *SEP Energy performance improvement report* is complete and communicates with the
464 SEP Administrator.
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