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# American National Standard

***Superior Energy Performance<sup>cm</sup> –  
Requirements for verification bodies for use in  
accreditation or other forms of recognition***

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**Superior Energy Performance<sup>cm</sup> –  
Requirements for verification bodies for  
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Secretariat

**Georgia Tech Energy and Sustainability Services (GTESS)**

Approved January 7, 2013

**American National Standards Institute, Inc.**

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## Foreword

The American National Standards Institute (ANSI) is a private, non-profit organization [501(c)(3)] that administers and coordinates the U.S. voluntary standardization and conformity assessment system. ANSI is the official U.S. representative to the International Organization for Standardization (ISO). ANSI is a U.S. representative to the International Accreditation Forum (IAF), and, via the U.S. National Committee, represents the U.S. to the International Electrotechnical Commission (IEC). ANSI is also the U.S. member of the Pacific Area Standards Congress (PASC) and the Pan American Standards Commission (COPANT).

ANSI approval of a standard verifies the principles of openness and due process have been followed in the approval procedure and a consensus of those directly and materially affected by the standards has been achieved. A Draft National Standard was circulated to the Georgia Tech Energy and Sustainability Services (GTESS) Consensus Board, consisting of a balanced group of materially affected interests and to those responding to the public announcements in *ANSI Standards Action*. Approval of this Standard as an American National Standard requires acceptance by a minimum of 80 percent of the Consensus Board members casting a vote.

ANSI/MSE 50028-2012, *Superior Energy Performance<sup>cm</sup>—Requirements for verification bodies for use in accreditation or other forms of recognition*, was developed by GTESS. No patent rights or requirements for specific equipment or services are included in this Standard. ANSI/MSE 50028-2012 addresses requirements for bodies performing Superior Energy Performance<sup>cm</sup> energy management system audit and certification and energy performance verification.

ANSI/MSE 50028-2012, based on ISO 17021:2011, contains two normative annexes (Annex A and Annex G) that provide requirements which are considered mandatory to this Standard, and five informative annexes (Annex B through Annex F) that provide non-mandatory guidelines. Requirements that are specific to Superior Energy Performance are identified in the box located below the ISO 17021 text. International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

Submit formal requests for interpretations of ANSI/MSE 50028-2012 requirements to GTESS Standards Coordinators, Holly Grell-Lawe ([holly.lawe@innovate.gatech.edu](mailto:holly.lawe@innovate.gatech.edu)) or Deann Desai ([deann.desai@gatech.edu](mailto:deann.desai@gatech.edu)), Georgia Tech Energy and Sustainability Services, Enterprise Innovation Institute, 75 Fifth Street, N. W., Suite 300, Atlanta, GA 30332-0640; Telephone: 770-605-4474; Web: [www.energymagementstandards.org](http://www.energymagementstandards.org). The GTESS Interpretations Committee will review and determine disposition of each request.

ANSI/MSE 50028-2012 has been developed with the assistance of the following cooperating organizations:

3M	Lawrence Berkeley National Laboratory
Sterling Energy Management	Modular Process Control
American Council for an Energy-Efficient Economy	R.W. Beck
ARCADIS U.S., Inc.	Resource Dynamics Corporation
ASHRAE	Siemens Infrastructure and Cities, Building
DEKRA Certification, Inc.	Technologies Division
DNV KEMA Energy & Sustainability	Southern Company Services, Inc.
Dow Chemical TCO	Triple Point Energy, Inc.
Energy Pathfinder Management Consulting, LLC	Texas Industries of the Future, Center for Energy
Energy PRO-USA	and Environmental Resources,
Expo Energy & Environmental, Inc.	the University of Texas at Austin
Ford Motor Company, Purchasing--Lean Supplier	Toyota Motor Engineering and Manufacturing
Optimization	North America, Inc.
Freescale, Inc.	U.S. Environmental Protection Agency
General Services Administration	UL DQS, Inc.
HDR, Inc.	University of Florida, College of Engineering,
Kaeser Compressors, Inc.	ISE Dept.
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## Introduction

Certification of an [energy](#) management system and [verification of its energy performance](#) by a [competent verification body](#) provides assurance that the organization has implemented a system that conforms to ISO 50001 and has attained a [verified level of energy performance improvement in accordance with Superior Energy Performance<sup>cm</sup> \(SEP\) requirements](#).

This Standard specifies requirements for [verification bodies performing energy management system certification and energy performance verification](#). Observance of these requirements is intended to ensure that [verification bodies](#) conduct [energy](#) management system certification and [energy performance verification](#) in a competent, consistent and impartial manner, thereby facilitating the recognition of such bodies and the acceptance of their certifications on a national and international basis. This Standard serves as a foundation for facilitating the recognition of [SEP verification](#) in the interests of international trade.

Certification of an [energy](#) management system and [verification of the energy performance](#) provides independent demonstration that the [energy](#) management system of the organization:

- a) conforms to specified requirements,
- b) is capable of consistently achieving its stated policy and objectives,
- c) [is capable of achieving and sustaining energy performance improvement](#), and
- d) is effectively implemented.

Conformity assessment such as certification of an [energy](#) management system ([EnMS](#)) and [verification of energy performance](#) thereby provides value to the organization, its customers and interested parties.

In this Standard, Clause 4 describes the principles on which credible certification is based. These principles help the reader to understand the essential nature of certification and they are a necessary prelude to Clauses 5 to 10. These principles underpin all the requirements in this Standard, but such principles are not auditable requirements in their own right. Clause 10 describes two alternative ways of supporting and demonstrating the consistent achievement of the requirements in this Standard through the establishment of a management system by the [verification](#) body.

This Standard is intended for use by bodies that audit, and [perform](#) certification of [energy](#) management systems and [verify energy performance in accordance with SEP program requirements](#). Such bodies are referred to as [verification bodies](#). This wording should not be an obstacle to the use of this Standard by bodies with other designations that undertake activities covered by the scope of this document.

Certification activities involve the audit of an organization's management system. The form of attestation of conformity of an organization's management system to a specific management system standard or other normative requirements is normally a certification document or a certificate. [The addition of verification of the energy performance of the system adds a level of complexity to the certification process. The fact that the audit is both a conformity assessment audit and a verification of energy performance is the reason a verification body is required.](#)

The publication of this Standard includes the text of ISO/IEC 17021:2011, including amendments to delete relevant references to ISO 19011, with new text adding specific requirements for third-party certification auditing and the management of competence of personnel involved in certification. [It also addresses the specific needs of energy management and the SEP program in the additional text provided through text boxes. The black text is from ISO 17021, whereas the blue text and text boxes are specific to energy management and SEP.](#)

Specific market needs have already been identified, resulting from a lack of specific and recognized requirements for third-party auditors of management systems, such as quality management systems or environmental management systems. The lack of requirements for auditor competence and the way in which these auditors are managed and deployed has been identified by key interested parties, including industry interested parties, as being a drawback. Auditor competence is addressed for SEP through this Standard and the personnel certification schemes from the Institute of Energy Management Professionals<sup>TM</sup> (IEnMP).



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This Standard provides a set of requirements for management systems auditing at a generic level, aimed at providing a reliable determination of conformity to the applicable requirements for certification, conducted by a competent audit team, with adequate resources and following a consistent process, with the results reported in a consistent manner.

In this Standard, the word "shall" indicates a requirement and the word "should" a recommendation.

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## Superior Energy Performance<sup>cm</sup> (SEP) – Requirements for verification bodies for use in accreditation or other forms of recognition

### 1 Scope

This Standard contains principles and requirements for the competence, consistency and impartiality of the audit and certification of [energy](#) management systems and [SEP](#) and for bodies providing these activities.

Certification of energy management systems (named in this Standard “certification”) is a third-party conformity assessment activity (see ISO/IEC 17000:2004, 5.5). Bodies performing this activity are therefore third-party conformity assessment bodies (named in this Standard “[verification body/bodies](#)” or “[VB](#)”).

NOTE 1 Certification of a management system is sometimes also called “registration”, and [verification](#) bodies are sometimes called “registrars”.

NOTE 2 A [verification](#) body can be non-governmental or governmental (with or without regulatory authority).

NOTE 3 This Standard can be used as a criteria document for accreditation or peer assessment or other audit processes.  
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#### 1 Scope specific to ANSI/MSE 50028 © 2012 GTESS

This Standard applies to [verification](#) bodies seeking to perform [SEP](#) verification services.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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#### 2 Additional Normative References for ANSI/MSE 50028 © 2012 GTESS

[ANSI/MSE 50021, Superior Energy Performance<sup>cm</sup> — Additional Requirements for Energy Management Systems](#)

[Superior Energy Performance<sup>cm</sup> Certification Protocol](#)

Note: This is also called the certification protocol

[Superior Energy Performance<sup>cm</sup> Measurement and Verification Protocol for Industry](#)

Note: This is also called the M&V Protocol

[Superior Energy Performance<sup>cm</sup> Industrial Facility Best Practice Scorecard](#)

Note: This is also called the Scorecard

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply:

#### 3.1 certified client

organization whose management system has been certified

#### 3.2 impartiality

actual and perceived presence of objectivity

NOTE 1 Objectivity means that conflicts of interest do not exist or are resolved so as not to adversely influence subsequent activities of the [verification](#) body.