

Public Comment Collaboration on EC182 – November 13, 2009

The purpose of this document is to recap the status of EC182 submitted by the DOE with the intent that commercial buildings be provided with some level of renewable energy sources. The original submittal and reason statement are provided, a suggested starting point for a public comment and then questions for consideration in preparing a public comment.

Current 2009 IECC

There are currently no provisions in the IECC that would be changed by the proposed change.

Original Code Change Proposal as Published in the Monograph

EC182–09/10

202 (New), 502.4, 502.8 (New)

Proponent: Ronald Majette, representing US Department of Energy

1. Add new definition as follows:

SITE. A contiguous area of land that is under the ownership or control of one entity.

2. Add new text as shown:

502.4 Building Integrated Renewable Energy System (Prescriptive). Each building shall be equipped with a renewable energy system, which has the capacity to provide 5 percent of the total energy use of the building on an annual basis. The renewable energy system shall be permitted to be located anywhere on the building site and must be capable of being used during daylight hours to provide power for the systems covered in Section 505.7 before being used elsewhere in the building, stored on site and/or transferred back to the grid.

505.7 Hallway and Loading Dock Lighting (Prescriptive). All hallway and loading dock lighting shall be provided with dedicated electrical circuits powered by a renewable energy system.

Exceptions:

1. Loading dock areas for law enforcement, fire, ambulance, and other emergency service vehicles
2. Loading docks and hallways that are not intended for daytime use
3. Where approved by the code official due to building site conditions or lack of building surface areas to support the necessary renewable energy system

3. Revise as follows:

505.7 505.8 Electrical energy consumption. (Mandatory). In buildings having individual dwelling units, provisions shall be made to determine the electrical energy consumed by each tenant by separately metering individual dwelling units.

Reason: The availability of renewable energy resources to provide electric power is well known and technology exists today to provide cost effective solutions to replace power generated from non-renewables with power from renewables. This proposal requires such use where the building site or building surfaces will accommodate such installations.

Cost Impact: The code change proposal will increase the cost of construction.

Results of First Hearing

Disapproval 10 – 1 and no floor challenge

Additional Information

Comments were provided at the first hearing that it was not appropriate or relevant to mandate where the renewable energy was to be used. Comments also raised the issue of possibly singling out one type of renewable system such as PV, undue hardship if areas needed to support or locate the renewable system were not available and the magnitude of the requirement at 5% of total energy use. Based on comments at the first public hearing it is reasonable to eliminate any restriction in the code as to what purposes the renewable energy should address. It is also reasonable to consider reduction of the amount of energy to be supplied by renewable sources and being very general as to what form the renewable energy should take. In addition it is recognized that such a requirement could be a burden for “small” commercial buildings so a minimum building size has been suggested for discussion purposes.

Suggested Public Comment

Revise the proposed code change as follows:

~~1. Add new definition as follows:~~

~~**SITE.** A contiguous area of land that is under the ownership or control of one entity.~~

~~2. Add new text as shown:~~

~~**502.4 501.3 Building Integrated Renewable Energy Systems (Prescriptive).** Each building over 25,000 sq. ft. in floor area shall be equipped with a renewable energy system, which has the capacity to provide 5 at least one (1) percent of the total estimated annual energy use of the building on an annual basis. The renewable energy system shall be permitted to be located anywhere on the building site and must be capable of being used during daylight hours to provide power for the systems covered in Section 505.7 before being used elsewhere in the building, stored on site and/or transferred back to the grid.~~

~~**Exception:** When the building site does not provide solar access or the building exterior surfaces sufficient area on which to locate the renewable energy system.~~

~~**505.7 Hallway and Loading Dock Lighting (Prescriptive).** All hallway and loading dock lighting shall be provided with dedicated electrical circuits powered by a renewable energy system.~~

~~Exceptions:~~

- ~~1. Loading dock areas for law enforcement, fire, ambulance, and other emergency service vehicles~~
- ~~2. Loading docks and hallways that are not intended for daytime use~~

~~3. Where approved by the code official due to building site conditions or lack of building surface areas to support the necessary renewable energy system~~

Public Comment Development

During the IECC hearings comments were made as previously presented. There are three readily apparent actions that can be taken regarding.

1. Do not file a public comment thereby allowing the 2009 IECC to remain unchanged and not requiring any use of renewable energy sources.
2. File a public comment to have the code change adopted as submitted.
3. File a public comment to have the code change adopted as modified pursuant to a public comment.

Interested and affected parties are encouraged to provide comments on the above public comment which is proposed as a starting point development of a public comment that could address this issue in the code.