Recommendation

William Rose

4/1/22

Title

**Provide public compliance documentation with Illinois State Energy Code for all new construction and major building retrofit**

*Background*

Facilities and Services has been unable to produce documentation demonstrating compliance with Illinois State Energy Code as required by law, for recent buildings. The required documentation consists of

1. an energy model of a building meeting the planning requirements using prescriptive requirements of the Energy Code, in order to determine the Energy Cost Budget (ECB), and
2. an energy model of the building as designed, which shows energy use
   1. equal to or lower than the ECB (to meet State Energy Code requirements), and
   2. at 80% of the ECB to meet U of I Facilities Standards

In order for the model to be verified it should be developed and presented on a commonly-used platform such as TraneTrace or Energy+.

Under State Law, a compliance pathway is provided (600.220 c)) which accepts the seal of an architect or engineer. Third-party, public, verification of compliance cannot be done under compliance pathway c).

*Recommendation*

Under this recommendation F&S modify their Facilities Standards to require, for all new and major retrofit projects, that

1. compliance documentation be provided under 600.220 a) or b) (not c)),
2. energy model documentation be provided on a common platform such as TraneTrace or EnergyPlus, and
3. energy model documentation for campus buildings be made available within the general campus community including faculty and students.

*Cost*

Implementation of this recommendation carries no cost, only a change in Facilities Standards. In principle, following this revised Facilities Standard should impose no additional project costs, as this documentation is required under State Law.

**TITLE 71: PUBLIC BUILDINGS, FACILITIES, AND REAL PROPERTY   
CHAPTER I: CAPITAL DEVELOPMENT BOARD  
SUBCHAPTER d: ENERGY CODES  
PART 600 ILLINOIS ENERGY CONSERVATION CODE   
SECTION 600.200 STANDARDS FOR STATE FUNDED FACILITIES**

**Section 600.200  Standards for State Funded Facilities**

a)         The 2018 IECC, including published errata but excluding published supplements, available from the International Code Council at 500 New Jersey Avenue NW, 6thFloor, Washington DC 20001, phone: 1-888-ICC-SAFE (422-7233), www.iccsafe.org, is hereby incorporated into the Illinois Energy Conservation Code, as described in this Subpart as applicable to State funded facilities, with the modifications outlined in subsection (c).

b)        All incorporations by reference in this Section are of the cited standards as they existed on the date specified.  These incorporations include no later editions or amendments.

c)         Modifications to IECC

Under Section 15 of the EEB Act, when applying the Code to State funded facilities, CDB may modify the incorporated standards to respond to the unique economy, population distribution, geography and climate of Illinois, as long as the objectives of the EEB Act are maintained.  Modifications, additions or omissions to IECC are specified in Appendix A and are rules of the CDB and are not requirements of the IECC.

(Source:  Amended at 43 Ill. Reg. 8707, effective August 5, 2019)

**Section 600.210  Exemptions**

a)         *The following buildings are exempt from the Code:*

1)         *Buildings otherwise exempt from the provisions of a locally adopted building code and buildings that do not contain a conditioned space;*

2)         *Buildings that do not use either electricity or fossil fuel for comfort conditionings;*

3)         *Historic buildings listed on the National Register of Historic Places or the Illinois Register of Historic Places,*and those buildings that are designated by authorized personnel as historically significant;

4)         *Other buildings specified as exempt by the IECC.*

b)         *For purposes of determining whether an exemption authorized under subsection (a)(2) applies, a building will be presumed to be heated by electricity, even in the absence of equipment used for electric comfort heating, whenever the building is provided with electrical service in excess of 100 amps, unless the code enforcement official determines that this electrical service is necessary for purposes other than providing electric comfort heating.* [20 ILCS 3125/20]

(Source:  Amended at 43 Ill. Reg. 8707, effective August 5, 2019)

**Section 600.220  Compliance**

Compliance with the Illinois Energy Conservation Code for State facilities as described by this Subpart B shall be demonstrated by submission of:

a)         the compliance forms published in the ASHRAE 90.1 User's Manual;

b)         Compliance Certificates generated by the U.S. Department of Energy's COMCheck code compliance tool; or

c)         the seal of the Architect/Engineer as required by Section 14 of the Illinois Architecture Practice Act [225 ILCS 305], Section 12 of the Structural Engineering Licensing Act [225 ILCS 340] and Section 14 of the Illinois Professional Engineering Practice Act [225 ILCS 325].

(Source:  Amended at 43 Ill. Reg. 8707, effective August 5, 2019)