## **GG311-14** Table 302.1, 1007.3, 1007.3.3, 1007.3.3.1, 1007.3.3.2, 1007.3.3.3

**Proponent:** Brenda Thompson, Chair, SEHPCAC, representing ICC Sustainability Energy and High Performance Code Action Committee (SEHPCAC)

### **Revise as follows:**

**1007.3** Post certificate of occupancy **zEPI** <u>annual net energy use</u>, energy demand, and  $CO_2e$ emissions reporting. Where the jurisdiction indicates in Table 302.1 that ongoing post certificate of occupancy <del>zEPI</del> <u>annual net energy use</u>, energy demand and  $CO_2e$  emissions reporting is required, and where the jurisdiction has indicated in Table 302.1 that enhanced energy performance in accordance with Section 302.1 or  $CO_2e$  emissions in accordance with Section 602.2 are is required, <del>zEPI</del> <u>annual net</u> <u>energy use</u>, energy demand, and  $CO_2e$  emissions reporting shall be provided in accordance with this section.

### Delete and substitute as follows:

**1007.3.3 Reporting.** Reports in accordance with Sections 1007.3.3.1 through 1007.3.3.3 shall be generated.

**1007.3.3 Reporting.** The construction documents shall include procedures for the building owner to enter the building annual net energy consumption data from Section 603 into an *approved* tracking program to track building performance. For building parameters including, but not limited to number of occupants, hours of operation and number of computers, use actual average values.

The tracking program output, including annual energy use and CO<sub>2</sub>e emissions, shall be reported by the building owner or the building owner's authorized agent to the [INSERT NAME OF APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY RESPONSIBLE FOR COLLLECTING REPORTED INFORMATION].

Where there are multiple buildings on a building site, each building shall have its energy and  $CO_2e$ emissions reported separately. Where there are energy uses associated with the building's site other than the buildings on the site, the site energy and  $CO_2e$  emissions reports shall be reported separately. The report shall be based upon the energy use of the previous year and shall be reported on, or before. March 1<sup>st</sup> of the following year.

#### Delete without substitution:

**1007.3.3.1 Annual net energy use.** The zEPI associated with the operation of the building and the buildings on the site, as determined in accordance with Section 602.1, shall be reported by the building owner or the owner's registered agent to the [INSERT NAME OF APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY RESPONSIBLE FOR COLLECTING REPORTED INFORMATION]. Where there are multiple buildings on a building site, each building shall have its zEPI reported separately.

Where there are energy uses associated with the building site other than the buildings on the site, the zEPI for the building site shall be reported separately.

Energy use for the previous year shall cover the complete calendar year and be reported

**1007.3.3.2 Peak monthly energy demand reporting.** The peak demand of all energy forms serving each building and the building site shall be reported by the building owner or the owner's registered agent to the [INSERT NAME OF APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY RESPONSIBLE FOR COLLECTING REPORTED INFORMATION].

Where there are multiple buildings on a building site, each building shall have its energy demand reported separately. Where there are energy uses associated with the building site other than the buildings on the site, the energy demand for the building site shall be reported separately. Monthly energy demand data for the previous year shall cover the complete calendar year and be reported on, or before, March 1st of the following year.

**1007.3.3.3 Annual CO**<sub>2</sub>**e emissions reporting.** The annual emissions associated with the operation of the building and its systems, as determined in accordance with Section 602.2, shall be reported by the building owner or the owner's registered agent to the [INSERT NAME OF APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY RESPONSIBLE FOR COLLECTING REPORTED INFORMATION]. Where there are multiple buildings on a building site, each building shall have its annual emissions reported separately. Where there are energy uses associated with the building site other than the buildings on the site, the annual CO2e emissions for the building site shall be reported separately. Emissions reported for the previous year shall cover the complete calendar year and be reported on, or before, March 1st of the following year.

# TABLE 302.1 REQUIREMENTS DETERMINED BY THE JURISDICTION

Chapter 10. Existing Buildings			
1007.3	Post Certificate of Occupancy <del>zEPI</del> <u>annual net energy use</u> , energy demand, and CO <sub>2</sub> e Emissions Reduction	Yes	No

(Portions of table not shown remain unchanged)

**Reason:** The current energy reporting method does not provide a method for reporting building energy use. Current reporting requires annual energy consumption in the zEPI format. But the current code language is unclear on how to do the measurement and reporting. The current zEPI figure is a ratio of two energy models. Each model is a design-phase estimate of the building energy use: the baseline, code-minimum building vs the design building. Chapter 10 does not include a methodology to input the actual energy use of the building (electricity, gas and other fuels) into the zEPI calculation. As written, Section 1007.3.3.1 would have the same result every year: the figure would be the design phase zEPI, not a zEPI that reports the current year energy use.

The SEHPCAC has proposed clarification and simplification of annual energy use reporting. This proposal requires that whenever a jurisdiction adopts the post-occupancy reporting portion of the IgCC, reporting of annual energy use and emissions shall be via the reporting program selected by the local jurisdiction. To require post-occupancy energy use reporting, most jurisdictions have needed to pass local regulations/ordinances in order to gain the authority to require reporting. Most of the jurisdictions that passed ordinances (New York City, Chicago, Boston, Seattle, San Francisco, and others) selected the US EPA's Energy Star Portfolio Manager program. The USGBC's LEED program and ASHRAE 189.1 also require the use of Portfolio Manager for post-occupancy energy use, as well as CO2e reporting.

Portfolio Manager is expected to be the most required reporting method. However, some jurisdictions have locally-developed energy reporting programs (Austin, TX). So this proposal defaults to the locally-selected reporting program. Given the complex regulatory issues surrounding energy use reporting, most locations that currently require post-occupancy reporting have had to adopt regulation beyond their building codes.

Therefore, since a jurisdiction will adopt a reporting program when they adopt any energy reporting regulation (outside of building codes), defaulting to the local reporting requirement selected by the jurisdiction should be included in the IgCC. There is no need for the IgCC to create a reporting methodology within this code that might conflict with locally adopted reporting ordinances. The cities and states that currently rely on Portfolio Manager would be less likely to consider the IgCC for adoption without this flexibility to select their own reporting method.

Section 1007.3.3 has been further simplified to combine 1007.3.3.1 through 10007.3.3.3 into a single paragraph. This deletes redundancy of reporting requirements.

Cost Impact: Will not increase the cost of construction. This proposal will reduce the cost of construction.

GG311-14 : 1007.3.3.1-THOMPSON745