

MEMORANDUM

TO: Raymond Andrews, Assistant Director for Code Development, NYSDOS Codes Division

FROM: Joseph Hill, RA, Assistant Director for Energy Services, NYSDOS Codes Division

DATE: September 10, 2012

RE: Status of Energy Code Technical Subcommittee review –Commercial provisions of IECC 2012/ASHRAE 90.1-2010

As of September 6th, 2012, The Energy Technical Subcommittee has convened five meetings for study and modification of The International Energy Conservation Code 2012.

In our impending adoption of the most current energy codes, the Energy Technical Subcommittee has uncovered some inconsistencies in the IECC 2012 as well as some differences between and IECC 2012 and ASHRAE 90.1 -2010. This becomes a consideration in that States are required to certify to the US Department of Energy, that the Energy Code adopted meets or exceeds Standard 90.1 -2010. This requirement becomes a critical consideration in the following finding;

The IECC 2012 contains “Additional Efficiency Package Options” which are a requirement of the prescriptive compliance path;

Section **C406 Additional Efficiency Package Options**;

Buildings shall comply with at least one of the following options:

1. Efficient HVAC Performance in accordance with Section C406.2.

Several members of the Subcommittee’s have stated that high rise buildings could not economically utilize high efficiency (condensing) boilers (as an example) required by this code option. The first cost of equipment reduces design flexibility and produces an extended payback period. In the Subcommittee’s opinion, the required ten year payback study would not be met in all cases.

2. Efficient Lighting System in accordance with Section C406.3.

Interior Lighting power densities (LPD) are **less stringent in IECC 2012 than 90.1 -2010**. When one goes to IECC 2012, Section C406 *Additional Efficiency Package Options*, Option #2 “Efficient Lighting System” the LPD standards invoked are then equal to the LPD’s found in 90.1 -2010. This doesn’t really function as an “additional efficiency option” if we are just bringing the lighting standards of IECC 2012 equal to 90.1.

3. On-Site Supply of Renewable Energy in accordance with Section C406.4.

The code required renewable percent of 3% is not an affordable option- LEED for New Buildings has indicated a minimum 1% requirement, and that threshold is seen as unworkable by the industry.

The recommendation of the Energy Technical Subcommittee would be to;

Remove Options #1 and #3, since nether are particularly viable options in New York State

Option #2 “Efficient Lighting System” would become **mandatory** in the ECCCNY-2015, and further, adopting ASHRAE 90.1 -2010 interior lighting power densities, creating parity between the two codes.

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A Second critical point of correction;

IECC 2012, Section 403.4 *Complex HVAC Systems and equipment*, lacks needed requirements for Air Side economizers for *Complex HVAC systems and Equipment*. This is inconsistent with both IECC 2009 and 90.1 2007 /2010. This is an omission which appears to be an error in the code. This omission can be remedied by adding a short paragraph to Section *C403.4.Complex HVAC systems and Equipment*, referencing requirements for air side economizers to Section *C403.3.1. Economizers* (this section exists in the Simple HVAC Systems and Equipment Section of code). The recommend correction would replicate code language found on both the IECC 2009 and ECCCNY-2010.