



ENERGY SYSTEMS LABORATORY

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Mr. Robert Wood
Director, Economic Development and Analysis
Texas Comptroller of Public Accounts
P.O. Box 13528
Austin, TX 78711-3528

August 29, 2012

RE: ESL's Final Recommendation Based on Review of Comments on the 2012 IRC (Chapter 11) and the 2012 IECC

Dear Mr. Wood:

In accordance with the Health and Safety Code Section 388.003, as amended, the Energy Systems Laboratory (Laboratory) has reviewed all comments received by SECO during March 30-April 30, 2012, and has completed the technical analysis regarding the comparison of the stringency and environmental impact of Chapter 11, 2012 International Residential Code (IRC) and the 2012 International Energy Conservation Code (IECC) versus the current Texas Building Energy Performance Standards (TBEPS), based on Chapter 11 of the 2009 IRC and the 2009 IECC.

The Laboratory's Final Recommendations:

Single-Family Residential Construction

The Laboratory recommends that the Texas State Energy Conservation Office (SECO) adopt the Chapter 11 of the 2012 IRC, as published, as the state-mandated energy code for all residential construction, one- and two-family residences of three stories or less above grade. The new code would update the Texas Building Energy Performance Standards (TBEPS), based on Chapter 11 of the 2009 IRC.

Commercial and Residential Construction

The Laboratory recommends that the Texas State Energy Conservation Office (SECO) adopt the 2012 IECC, as published, for commercial, industrial and residential buildings over three stories. The code applies to R2, R3 and R4 residential buildings and excludes one- and two-family residences of three stories or less above grade. The 2012 IECC would update the Texas Building Energy Performance Standards (TBEPS), based on the 2009 IECC.

Summary of Comments Received:

The Laboratory has considered all 1,526 comments collected by SECO from both the individuals and the large constituencies during the March 30-April 30, 2012 comment period. Only 3 comments are in opposition, while 1,523 comments are in favor of the adoption of the 2012 code.

One of the comments in support of the adoption of the 2012 code suggests an amendment that adds language to the 2012 IECC from the 2012 IRC to provide consistency and clarity. This suggested amendment is as stringent as the 2009 code.

There are three comments opposing the adoption of the 2012 code:

The first comment in opposition to the adoption of the 2012 code expresses the concerns for increased construction costs while making the homes too air-tight. The analysis of this comment falls outside the Laboratory's legislative responsibilities, which is to determine the stringency of the energy efficiency provisions in the codes and the impact on air quality.

The second comment in opposition to the adoption of the 2012 code is a joint letter from five councils and associations. The letter addresses concerns with the economic impact and structural limitations of the codes. Again, this comment falls outside the Laboratory's legislative responsibilities to determine the stringency of the energy efficiency provisions in the codes and the impact on air quality. Several studies on the economic impact of the 2012 code have been published by the U.S. Department of Energy (DOE) and the Alliance to Save Energy's Building Codes Assistance Project (BCAP).

The third comment in opposition to the adoption of the 2012 code, representing a large constituency, suggests seven amendments to the 2012 code. The Laboratory analyzed the stringency of each suggested amendment by comparing a 2012 code-compliant base-case house (with the suggested amendment) to a Texas Building Energy Performance Standards (TBEPS) code-compliant base-case house. Six of the suggested amendments were found to be as stringent as the TBEPS, and one suggested amendment was not analyzed because it can only be considered on a case-by-case basis.

Please see the attachments for a synopsis of all comments, the stringency analysis of the suggested amendments, and the complete list of comments and commenters.

Additional Recommendations:

The Laboratory highly recommends SECO to begin educating, training, and providing technical assistance for designers, builders, subcontractors and enforcement officials to enable statewide compliance immediately upon adoption.

Please feel free to contact us should you have any questions, or need further assistance with the implementation of the codes.

Sincerely,



Bahman Yazdani, P.E.
Associate Director



Jeff Haberl, P.E., Ph.D., FASHRAE
Associate Director

cc: Dub Taylor, SECO
Eddy Trevino, SECO
Alison Nathan, SECO
David Claridge, ESL

List of Attachments:

- A. Synopsis of All Comments Received by SECO
- B. Stringency Analysis of Suggested Amendments
- C. Complete List of Comments and Roster of Commenters
- D. Summary of the Laboratory's Stringency Comparison Analysis: TBEPS (based on Chapter 11, 2009 IRC & 2009 IECC) Vs. 2012 Codes
- E. List of References