# FLORIDA BUILDING COMMISSION

# 2010 FLORIDA ENERGY CODE WORKGROUP

March 5, 2009—Meeting II

Radisson Resort Port—8701 Astronaut Blvd.—Cape Canaveral, Florida 32920—321.868.6574

# Meeting Objectives

- ✓ To Approve Regular Procedural Topics (Agenda and Summary Report)
- ✓ To Hear a Report on Cost Effectiveness Test Options and Recommendations
- ✓ To Identify Issues and Options Regarding Development of Cost Effectiveness Test
- ✓ To Discuss and Evaluate Level of Acceptability of Proposed Options
- ✓ To Consider Public Comment
- ✓ To Identify Needed Next Steps and Agenda Items for Next Meeting

All Agenda Times—Including Public Comment and Adjournment—Are Subject to Change

# Meeting Agenda

9:00 Welcome and Opening

Agenda Review and Approval

February 3, 2009 Facilitator's Summary Report Approval

Cost Effectiveness Test Report and Recommendations Review

Identification of Issues Requiring Evaluation Regarding Cost Effectiveness Test

Discussion, Identification and Evaluation in Turn of Options Regarding Development of Cost Effectiveness Test Recommendations

General Public Comment

Review of Workgroup Delivery and Meeting Schedule

Next Steps: Agenda Items, Needed Information, Assignments, Date/Location Adjourn

# Contact Information and Project Webpage

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# 2010 Florida Energy Code Workgroup

Steve Bassett, Rusty Carrol, Bob Cochell, Phillip Fairey, Dale Greiner, Jeff Gross, Jeff Householder, Larry Maxwell, Donny Pittman, Paul Savage, Drew Smith, Jeff Stone, and Rob Vickers.

Meeting Dates: February 3, 2009, March 5, 2009, March 27, 2009, April 30, 2009, May 28, 2009

# **OVERVIEW AND PROJECT SCOPE**

Governor Crist directed the Commission to increase building energy efficiency requirements by 15% in his July 2007 Executive Order 127. In addition, the 2008 Legislature through passage of The Energy Act of 2008 created a suite of energy related assignments for the Building Commission. The Energy Code provisions were a major focus of the Commission during 2008, and the Commission increased the thermal efficiency requirements for the Florida Energy Code by 15% and integrated the enhanced requirements into the 2007 Florida Building Code. The Commission reviewed energy related code amendments adopted in the 2007 Florida Building Code Update to determine their cumulative level of increased efficiency, and adopted additional amendments required to achieve Governor Crist's directive of 15% increased efficiency. During 2008 the Energy Code was amended by administrative rule and then the revised Energy Code was adopted into the 2007 Florida Building Code during the 2008 "glitch" cycle concurrently with the March 1, 2009 effective date for the 2007 Florida Building Code. Working with stakeholders using consensus-building workgroups, the Commission was able to achieve the 15% increase in efficiency in buildings and implement code amendments that are efficient, consistent, understandable and enforceable for the full spectrum of Energy Code users.

The Commission's Energy Code Workgroup will develop recommendations regarding energy conservation measures for increasing efficiency requirements in the 2010 FBC by 20% as required by law.

# Study Energy Conservation Measures and Develop a Plan for 20% Increased Efficiency Requirement for 2010 FBC

Section 109, HB 7153 establishes a schedule for increases in building energy efficiency requirements. This task expands the study of energy conservation measures for residential buildings to investigation of efficiency options for commercial buildings and the development of a plan to implement the requirements of the new law. Section 553.9061 "Scheduled increases in thermal efficiency standards." was created to establish percent increases in efficiency to be implemented in the 2010, 2013, 2016 and 2019 Code.

With the adoption of the Glitch Amendments to the 2007 Edition of the Florida Building Code and the revisions to Rule 9B-13 Thermal Efficiency Standards, the Commission implemented a strategy for increasing the energy efficiency provisions of the Code by 15%. The Commission's Energy Code Workgroup and Energy TAC are working with stakeholder to evaluate options for achieving an additional 5% increase for the 2010 Edition of the Code, and for achieving the progressive increases in efficiency required for subsequent editions of the code.

# Develop Rule for Energy Code Cost Effectiveness Test

Section 109, HB 7153 directs the Commission develop a rule for determining cost effectiveness of energy conservation measures to be considered for inclusion in the Florida Energy Code. The rule must be completed and applied to the update of the energy provisions of the for the 2010 Florida Building Code.

"(3) The Florida Building Commission shall, prior to implementing the goals established in subsection (1), adopt by rule and implement a cost-effectiveness test for proposed increases in energy efficiency. The cost-effectiveness test shall measure cost-effectiveness and shall ensure that energy efficiency increases result in a positive net financial impact."

The Commission will be working with stakeholders during 2009 to develop cost effectiveness test criteria to be applied to justification for increased residential building energy efficiency requirements. The Commission will conclude rule making in time for the adopted rule to be effective prior to the 2010 Code adoption process.

Identify Specific Building Options to Achieve the Energy Efficiency Improvements The Energy Act of 2008 (HB 7135) directs the Commission to include, as a minimum, certain

technologies for achieving enhanced building efficiency targets established by the Act in the Florida Energy Code. The Building Code Act of 2008 (HB 697) directs the Commission to facilitate and promote the use of certain renewable energy technologies.

The Commission's Energy Code Workgroup will work with stakeholders beginning in early 2009 on a comprehensive evaluation of options for achieving energy efficiency initiatives for the Florida Building Code including: mandated increases in energy efficiencies for subsequent editions of the Code, criteria for cost effectiveness test for increases in energy efficiency, studying energy conservation measures for replacement of air conditioning equipment, investigating humidity and moisture control problems for hot and humid climates, and evaluating rainwater collection and reuse and waste water recycling techniques.

# Develop Design Criteria for Energy Efficient Pool Systems

The Energy act of 2008 (HB 7135) directs adoption of pool pump efficiencies in the 2010 Code. During discussions with the Florida Spa and Pool Association regarding energy efficiency requirements for pool pumps members suggested improved efficiency could be achieved through criteria for pool hydronic system design. This initiative would be conducted in coordination with the national industry and other state's initiatives currently underway.

# Investigate Humidity Control Problems for Hot and Humid Climates

At the recommendation of the Energy TAC, the Commission convened a Regional AC Efficiency Workgroup since the USDOE now has authority to develop and adopt regional AC efficiency standards. The Workgroup was charged with developing recommendations on whether the Commission and DCA should recommend to the United States Department of Energy (USDOE) regional AC efficiency standards for the hot and humid climate, and if determined a regional standard is a good strategy, then to develop recommendations for the technical requirements. The Workgroup investigated the feasibility of a hot-and-humid climate regional efficiency rating for air-conditioner and heat-pump systems, and recommended that the Commission should develop recommendations regarding AC equipments' role in controlling humidity and moisture in buildings.

Following the first meeting, the scope of the Workgroup was changed to develop recommendations regarding AC equipments' role in controlling humidity and moisture in buildings in a hot and humid climate. The Workgroup is tasked with considering a range of issues and options regarding the manufacturing, design and installation of AC equipment in controlling moisture and preventing mold and mildew in the hot and humid Florida climate.

In addition, air conditioning contractors raised the concern that building energy efficiency optimization, commodity grade air conditioning systems and mechanical systems construction practices are combining to cause indoor humidity control problems.

Study Energy Conservation Measures for Replacement of Air Conditioning Equipment

This task is a recommendation of the Commission's Energy TAC resulting from consideration of Energy Code amendment proposals regarding replacement air-conditioning systems at the October 2008 meeting.

# ENERGY CODE TASKS FROM COMMISSION WORKPLAN

The 2008 Legislature established several directions for development of the Florida Energy Code provisions of the 2010 Florida Building Code. The broadest direction is the requirement for 20% increase in efficiency and the other tasks fall under it. Three additional not legislated energy code related tasks are on the work plan also. All tasks must be coordinated for determination of the requirements for the 2010 Code. Consequently, they are organized under the broad task.

# Primary Task -

35. Study Energy Conservation Measures and Develop a Plan for 20% Increased Efficiency Requirement for 2010 FBC (HB 697 and HB 7135)

Origination:

The 2008 Legislature directed the Commission to enact specific increase in building energy efficiency requirements in HB 697 (Building Code) and HB 7135 (Energy). This task initiates the study and development of a schedule of increasing requirements, the first of which are to be enacted in the 2010 FBC whose development begins in 2009.

# Sub-Tasks -

Schedule for Sub-Task 27:	12/9/08			
Appoint Work Group				
Work Group/TAC meetings to develop recommendation				
	3/27/09			
Rule Development Workshop				
Rule Adoption Hearing				
Rule Effective	6/09 7/09			
	,			
Status: Pending				
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% Complete				

Origination:

The Commission was directed by the 2008 Florida Legislature in HB 697 and HB 7135 to develop a cost effectiveness test criteria by rule to be applied to justification for increased residential building energy efficiency requirements.

#### 42. Identify Specific Building Options to Achieve the Energy Efficiency Improvements (list identified in HB 697 and HB 7135)

Origination:

Energy act of 2008 (HB 7135) directs the Commission to include, as a minimum, certain technologies for achieving enhanced building efficiency targets established by the Act in the Florida Energy Code. The Building Code act of 2008 (HB 697) directs the Commission to facilitate and promote the use of certain renewable energy technologies.

#### 29. **Develop Criteria for Energy Efficient Pool Systems**

Origination:

Energy act of 2008 (HB 7135) directs adoption of pool pump efficiencies in the 2010 FBC. During discussions with the Florida Spa and Pool Association regarding energy efficiency requirements for pool pumps members suggested improved efficiency could be achieved through criteria for pool hydronic system design.

#### Study Energy Conservation Measures for Replacement of Air Conditioning 39. Equipment

Origination: Recommendation of the Energy TAC resulting from consideration of Energy Code amendment proposals regarding replacement air-conditioning systems at the October 2008 meeting. Approved by the Commission October 15,2008.

#### 26. Investigate Humidity Control Problems for Hot and Humid Climates

Origination: The original workgroup recommended not pursuing special ratings for AC equipment used in hot and humid climates and recommended addressing the concerns with matching equipment moisture removal capabilities to building latent and sensible heat loads through the Florida Energy Code. Potential moisture control problems will be a part of the consideration for how to achieve improved building energy efficiencies directed by law.

Schedule for Sub-Tasks 42, 29, 39 and 26.

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Work Group/TAC considers options and develops consensus plan	3/27/09
	4/30/09
	5/28//09
	8/09
Recommendations to Commission	10/09
Proposals submitted for 2010 FBC Update	12/09
Status for Sub-Tasks 27, 42, 29, 39 and 26: Pending	
% Complete	

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# ISSUES AND OPTIONS IDENTIFICATION WORKSHEET

### ISSUES IDENTIFICATION

Think about the information presented by staff regarding development of the 2010 Florida Energy Code. What issues need to be addressed in order to develop the 2010 Florida Energy Code.

Please use the following space to jot down your thoughts.

# Prioritization Ranking Exercise

Members may be asked to rank the issues for discussion order purposes.

# Ranking Scale:

- 5 Highest Level of Priority; Urgent
- 4 High Priority
- 3 Moderate Level of Priority
- 2 Low Level of Priority
- 1 Lowest Possible Priority; Group Should not Pursue

# **OPTIONS IDENTIFICATION EXERCISE**

Please use the space below to write down possible options to address the key issues identified earlier regarding development of the 2010 Florida Energy Code.

Please use the following space to jot down your thoughts.

During the meeting, members will be asked to develop and rank options, and following discussions and refinements, may be asked to do a second ranking of the options as refined. The following scale will be utilized for the ranking exercises:

Acceptability	4 = acceptable,	3 = acceptable, I	2 = not acceptable, I	1 = not
Ranking	I agree	agree with <b>minor</b>	don't agree unless <b>major</b>	acceptable
Scale		reservations	reservations addressed	<del>-</del>

Note: Be prepared to offer specific refinements or changes to address your reservations.

# FACILITATION, MEETING AND PROCESS DESIGN BY JEFF A. BLAIR



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"The purpose of the Consortium is to serve as a neutral resource to assist citizens and public and private interests in Florida to seek cost-effective solutions to public disputes and problems through the use of alternative dispute resolution and consensus building." --F.S. Public Postsecondary Education §1004.59

The FCRC Consensus Center, formerly the Florida Conflict Resolution Consortium, created by the Florida Legislature in 1988 and based at Florida State University in Tallahassee and University of Central Florida in Orlando, provides dispute resolution and consensus building service, education, training and research to build a broader understanding of the value of collaborative approaches and create a cadre of citizens, leaders, professionals and students skilled in using collaborative consensus building and conflict resolution processes.

Our mission is to bring Floridians together to learn to transform unproductive conflict into costeffective, sustainable solutions. The Consortium serves as a catalyst to create supportive policies and to help educate statewide on the appropriate use of mediation, facilitation and other collaborative problem-solving approaches to resolve a wide range of public policy issues.

The Consortium offers neutral technical assistance to a wide range of professionals, agency staff and private citizens and organizations engaged in public problems throughout Florida. We help to design and implement efforts for intergovernmental collaboration, community and public problemsolving, and land-use and environmental dispute resolution. We also provide referral services connecting stakeholders and potential users with trained dispute resolution professionals.



# PUBLIC COMMENT FORM

The Florida Building Commission and the 2010 Florida Energy Code Workgroup encourage written comments—All written comments will be included in the meeting summary report. Name: Organization: Meeting Date: Please make your comment(s) as specific as possible, and offer suggestions to address your concerns. Please limit comment(s) to topics within the scope of the Workgroup, and refrain from any personal attacks or derogatory language. The facilitator may, at his discretion, limit public comment to a maximum of three-minutes (3) per person, depending on the number of individuals wishing to speak. COMMENT:

report.

Please give completed form(s) to the Facilitator for inclusion in the meeting summary