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August 2, 2016

ERI Proposal

As requested, this proposal is submitted for consideration at the next meeting of the Energy Rating Index Work Group, scheduled for August 17, 2016 in Ft Lauderdale.

With respect to the three key topical issues assigned to the Workgroup by the Florida Building Commission (page 4 of the Agenda Packet) pursuant to Section 34 of HB 535, this proposal is as follows:

1. Whether onsite renewable power generation should be an option to achieve compliance when using the ERI path (counted toward the ERI score adopted into the Code).

A “straw poll” of the Work Group voted unanimously to consider the *concept* of including renewables as an option.

2. The amount of time onsite renewable power generation can be used as an option for achieving compliance when using the ERI path.

A “straw poll” of the Work Group voted unanimously to allow consider the *concept* of including renewables as an option

3. The amount of onsite renewable power generation that can be credited toward the ERI score.

In general, at this time it is difficult to determine the amount of onsite renewable power generation that can be credited to the ERI score in either the 5th or 6th Edition of the FBC, Energy due to relevant events that will occur after the assigned October 1, 2016 deadline, both of which also affect the cost effectiveness of this concept.

Proposal:

With these general comments in mind, this question should be bifurcated to separately address the 5th Edition of the Florida Energy Code and the 6th Edition of the Florida Energy Code.

5th Edition of the Florida Energy Code:

Renewable energy should not be considered as a compliance option for the 5th Edition for the following reasons:

1. The 5th Edition is based on the 2012 IECC, which did not include ERI as a compliance path. However, HB 535 directed the Commission to add the ERI path contained in the 2015 IECC. It must be noted that renewable energy inclusion is *not* addressed in the 2015 IECC for the ERI path.
2. The ICC Code Hearings will not be held until October 19-25, 2016 and the final outcome will be available after the conclusion of online voting, estimated for late November - early December 2016.
3. The 5th Edition is currently in effect throughout the State and has been submitted to the US Department of Energy for their review and certification. If this change is made, will the 5th Edition need to be analyzed

and re-certified?

4. Cost effectiveness has not been provided and may not be available until after the Amendment #1 Amendment initiative vote on November 8, 2016.

6th Edition of the Code

A decision on the amount of renewable energy in the 6th Edition should be deferred until Spring 2017, which does mesh with the expected posting on April 21, 2017 for the Integrated Draft 6th Edition. Additionally, at the FBC meeting on August 18, 2015, the Commission unanimously adopted a decision to “**Hold Glitch Correction Phase after the Effective Date of the 6th Edition (2017) FBC, if needed - Rulemaking via Integrated Code**”.

1. The 6th Edition development process is still underway and there is time to fulfill the code modification criteria.
2. The outcome of the IECC, Residential will be known and since the Florida Energy Code is based on the most recent version of the IECC, a better decision will be made
3. The outcome of Amendment #4 will be known, allowing a robust cost analysis of this compliance option.

Reasoning Statement for this proposal on the 5th and 6th Editions:

1. **The ICC Public Comment Hearings will occur October 19-25, 2016 in Kansas City, after the October 1, 2016 deadline.**

The IECC Residential Committee reviewed many proposals on this how renewables fit or don't fit into the IECC alone. While Public Comments were due on July 22, 2016, they will not be published until September 9, 2016. At that time, the Work Group will be able to see, and review, proposed solutions to this question.

Why is this important? The FBC has relied upon the robust technical debates and decisions by technical and code experts at the national ICC Hearings and this reliance is reflected in Florida Statute F.S. (7)(a):

F.S. 553.73 (7)(a) The commission, by rule adopted pursuant to ss. 120.536(1) and 120.54, shall update the Florida Building Code every 3 years. When updating the Florida Building Code, the commission shall select the most current version of the International Building Code, the International Fuel Gas Code, the International Mechanical Code, the International Plumbing Code, and the International Residential Code, all of which are adopted by the International Code Council, and the National Electrical Code, which is adopted by the National Fire Protection Association, to form the foundation codes of the updated Florida Building Code, if the version has been adopted by the applicable model code entity. **The commission shall select the most current version of the International Energy Conservation Code (IECC) as a foundation code;** however, the IECC shall be modified by the commission to maintain the efficiencies of the Florida Energy Efficiency Code for Building Construction adopted and amended pursuant to s. 553.901. (Emphasis added)

2. **The results of the proposed Florida Constitutional Amendment #1 Florida Right to Solar Energy Choice Initiative will not be known until November 8, 2016, after the October 1, 2016 deadline. The outcome of this vote has the potential to impact the cost implications of adding solar energy generation to their homes.** Details on the amendment are found here:
[https://ballotpedia.org/Florida_Right_to_Solar_Energy_Choice_Initiative,_Amendment_1_\(2016\)](https://ballotpedia.org/Florida_Right_to_Solar_Energy_Choice_Initiative,_Amendment_1_(2016)):

“Initiative design

The two main components of this initiative are as follows:

- The initiative would grant Florida residents the right to produce their own solar energy if they so choose.

- The initiative would allow state and local governments to prevent people who do not choose to produce solar energy from being required to subsidize the production of solar energy.

Main arguments

Supporters argue that the first component of Amendment 1 would encourage the expansion of solar power by providing an explicit constitutional right to solar energy production, and that the second component would allow consumers to be treated fairly by preventing them from being forced to subsidize solar energy. Nearly 75 percent of campaign contributions in support of Amendment 1 were provided by electric companies.

Opponents argue that the second component of this initiative, which authorizes the government to ensure that people who decline to produce solar energy do not have to subsidize solar energy production costs, could be used to limit solar energy production and strengthen the power of utility companies. Specifically, opponents expressed concern that lawmakers might be induced to prohibit the practice of net metering, which requires utilities to purchase surplus electricity generated from solar-powered homes. Opponents also argue that the right of Florida residents to solar energy production is already protected by various regulations and agreements, making the first component of this amendment unnecessary. Some critics claim that Amendment 1 proponents included the provision protecting the right to solar energy production to make Amendment 1 look like a pro-solar measure even though it could reduce the use of solar power.

Why is this important? The outcome of the ballot will set direction for the cost effective deployment of onsite renewable energy generation, that also has cost effective implications.

3. Cost effectiveness. Cost effectiveness of the Florida Energy Code is addressed in 2 sections of Florida Statute. To date, there has been no discussion or review of cost effectiveness of onsite renewable energy in the context of the Florida Energy Code.

553.901 Purpose of thermal efficiency code.—The Department of Business and Professional Regulation shall prepare a thermal efficiency code to provide for a statewide uniform standard for energy efficiency in the thermal design and operation of all buildings statewide, consistent with energy conservation goals, and to best provide for public safety, health, and general welfare. The Florida Building Commission shall adopt the Florida Building Code—Energy Conservation, and shall modify, revise, update, and maintain the code to implement the provisions of this thermal efficiency code and amendments thereto, in accordance with the procedures of chapter 120. **The department shall, at least triennially, determine the most cost-effective energy-saving equipment and techniques available and report its determinations to the commission, which shall update the code to incorporate such equipment and techniques.** The proposed changes shall be made available for public review and comment no later than 6 months before code implementation. **The term “cost-effective,” as used in this part, means cost-effective to the consumer.** (emphasis added).

And in general, FS 553.73, which addresses the adoption of technical amendments, such as the recognition of renewables as part of the ERI compliance path, requires cost effective determination:

553.73 (9)(a) The commission may approve technical amendments to the Florida Building Code once each year for statewide or regional application upon a finding that the amendment:

1. Is needed in order to accommodate the specific needs of this state.
2. Has a reasonable and substantial connection with the health, safety, and welfare of the general public.
3. Strengthens or improves the Florida Building Code, or in the case of innovation or new technology, will provide equivalent or better products or methods or systems of construction.
4. Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.
5. Does not degrade the effectiveness of the Florida Building Code.

The Florida Building Commission may approve technical amendments to the code once each year to incorporate

into the Florida Building Code its own interpretations of the code which are embodied in its opinions, final orders, declaratory statements, and interpretations of hearing officer panels under s. 553.775(3)(c), but only to the extent that the incorporation of interpretations is needed to modify the foundation codes to accommodate the specific needs of this state. Amendments approved under this paragraph shall be adopted by rule after the amendments have been subjected to subsection (3).

(b) A proposed amendment must include a fiscal impact statement that documents the costs and benefits of the proposed amendment. Criteria for the fiscal impact statement shall be established by rule by the commission and shall include the impact to local government relative to enforcement, the impact to property and building owners, and the impact to industry, relative to the cost of compliance. The amendment must demonstrate by evidence or data that the state's geographical jurisdiction exhibits a need to strengthen the foundation code beyond the needs or regional variations addressed by the foundation code and why the proposed amendment applies to this state.

(c) The commission may not approve any proposed amendment that does not accurately and completely address all requirements for amendment which are set forth in this section. The commission shall require all proposed amendments and information submitted with proposed amendments to be reviewed by commission staff prior to consideration by any technical advisory committee. These reviews shall be for sufficiency only and are not intended to be qualitative in nature. Staff members shall reject any proposed amendment that fails to include a fiscal impact statement. Proposed amendments rejected by members of the staff may not be considered by the commission or any technical advisory committee.

Why is this important? Cost effectiveness has not yet been discussed or provided, yet is a required part of any Commission changes to the Florida Energy Code. There are many factors that must be considered:

1. Should federal/state tax incentives be part of the cost? These incentives are not reliable from year to year.
2. In the case of the outright purchase of a permanently installed solar energy system, will the homeowner be able to rely upon the ability to sell back excess electricity to the electric utility (net metering) ? Will there be additional "grid fees" charged to a home owner? The answer to this may come from the outcome of the November 8, 2016 ballot on Amendment #1. Several states, Arizona and Nevada, are struggling with these issues.
3. In the case of the lease model for solar panels, who will retain the federal tax credit? How is the monthly payment determined from homeowner to leasing company? When the home is sold, and the new homeowners declines to assume the lease, is the original homeowner responsible for payout of the lease.