Potential Changes in the 2018 IECC

Results of the 2018 IECC Code Development Hearings

Residential Provisions
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Goals

2006->2009.....Increased Efficiency

2009->2012..............Increased Efficiency

TEST IT!

2012->2015...............Fix it

(Increase Efficiency a little)

Get in the ERI (HERS Rating)

Get in the Solar Ready Appendix

2015->2018...............Defend it

Improve it...Expand scope?
Potential Changes...

Key Areas of Proposed Amendments

• Scope
• Referenced Standards
• Climate Zones
• Building Envelope
• Systems
• ERI compliance backstops and
• the role of Solar

Creative Power Sharing
Potential Changes... **Next Steps**

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**Next Steps**

- Final voting – AHJ’s
- Getting your message across
- Get the IECC Adopted
- Resolution 49
- Preventing Rollbacks
- Educating Consumers
- Education, Education, Education

CAH - Committee Action Hearing  PCH - Public Comment Hearing  OGCV - Online Governmental Concensis Voting

11/3/2016  SRP - Southwest Energy Codes Conference
Potential Changes... **SCOPE**

**Key Areas of Proposed Amendments**

- **Scope Questions**
  - Express Opinions on CDPAccess
- **Should the code include:**
  - Water/Energy Nexus items?
  - Water conservation items?
  - RE114-Showhead Flow Rates to 1.5 g (v2.2)
  - RE115-Lavatory Flow Rates 1.8 or 2.0 (CE170,175)
- **Should it include Multi-family Housing in its own chapter? CE272**
- **RE81 – Air Barrier Checklists – How detailed?**
- **RE70 – D – Insulation requirements moved into air barrier/insulation table**
- **ADM26 – “Repair” vs “replacement”**

**Next Steps....**

- **Expressing opinions - CDPaccess**
- **IECC vs IPC Debate – ultimate decision is the with the ICC Board of Directors. Issues with correlation between the different codes may result.**
- **Multi-Family Housing Occupancy R-2 vs Commercial or Residential based on number of stories**
- **The Code vs A Best Practices Manual – do we need to codify checklists? Are they more appropriately placed in the interpretive manual, which could be adopted by a jurisdiction if they wanted more detail codified.**
- **RE114 -> AS and RE115-> AS**
- **CE175-> AS**
**Potential Changes... Referenced Standards**

**Key Areas of Proposed Amendments**

- Referenced Standards
- RE15-Sampling and Zone Building Tightness Testing
- RE17- **ICC 400 Standard for Log Cabin Homes**
- ADM94-updates ASCE 7-10 to **ASCE 7-16**, and **ANSI A117.1 2015** version
- RE82, RE166: **ANSI/RESNET/ICC 301-2014-Calculating** and Labeling using ERI
- CE147 – Adds Thermal Distribution Efficiency (TDE) and **NSF Protocol P374**

**Next Steps**

- RE15 etc – Talk to Robby!
- RE17 should Log Cabins be treated different? Is ICC 400 ok?
- ADM94 – info important to Engineers and Architects – opens the door to other conversations
- RESNET and ICC – and the ERI – can there be another provider of an ERI and does the ICC 301 or 380 prevent it?
- CE147 provides ability to measure, test and compare the TDE to a known R-Value: Recommend Approval
Potential Changes... **Climate Zones**

**Key Areas of Proposed Amendments**

- Climate Zones
- RE25 – Adds Climate Zone 0
- Adds the CZ 0 to CZ 1 so that IECC can correspond with ASHRAE Standard 169-2013 based upon most current weather data.
- CE23 attempted to add a definition of CZ0 by referencing the ASHRAE 169. This would affect the HDD and CDD and create conflict between the codes.
- CE21 attempted to remove climate map and county tables out of the IECC and just use a reference to ASHRAE 169
- RE-Hawaii Tropical Climate Zone (0 or 1)

**Next Steps**

- Yes Martha, the world is getting hotter...
- While appealing to reference a map and table maintained by ASHRAE, the nature of ASHRAE’s continual maintenance procedures would cause conflicts.
- If critical in a particular area one could use the HDD and CDD and submit an appeal to the AHJ.
Potential Changes... Building Envelope

Key Areas of Proposed Amendments

• Building Envelope
• RE18 improve floor insulation CZ-2,4
• RE15 sampling and zoning for air leakage testing in Multi Family
• RE19 lowers fenestration U-Factors in CZ3,4 - Floor motion for AS apvd
• RE22 R-5 insulation for heated slabs
• RE30 Permits R-18(vR20) w/24”oc
• RE134 High Efficiency equip. traded for less efficient windows and doors

Next Steps

• RE18->AS
• RE15->Practical goal, but not necessary with proper training of staff regarding air sealing
• RE19->AS....or RE36->AS
• RE22->AMPC1 (edge stops at bottom of slab insulation)
• RE30->D
• RE134->D see RE135

11/3/2016 SRP - Southwest Energy Codes Conference
Potential Changes... **Systems**

**Key Areas of Proposed Amendments**

- **Systems**
- RE179 – Builder Flex Points – PC removed BFP from ERI compliance path – Did not pass so only workable or enforceable option is D
- RE10-Whole house ventilation must be tested & written report provided
- RE12 new compliance options but allows full equipment tradeoffs
- RE56, RE58, RE60 – These look at air leakage testing option, sampling, increase of air leakage rates to 6 ACH50 in CZ 1-2...etc.
- RE70 – Insulated Sprinkler Pipe penetrations
- RE108-replace duct test w/leakage to outside

**Next Steps**

- RE179->AMPC would be best but not available so D
- RE10->AS
- RE12->D
- RE 56,58,60 – Still thinking
- RE70 – AFS issues but...
- RE108->D –important for comfort
- Education, Education, Education

11/3/2016 SRP - Southwest Energy Codes Conference
Potential Changes... ERI compliance backstops

Key Areas of Proposed Amendments

- ERI backstops and the role of Solar
- RE173, RE177 – What level of efficiency is required before allowing renewable energy to count towards compliance?
- RE164-clarifies ERI shall not include on-site power production in ERI calculation
- RE165-Stepped percentages of Solar allowed?
- RE135-minimal performance path backstops for software to show compliance
- RE7, RE9-definitions for “renewable energy” and “on-site power production”
- RE130-includes lighting in performance path allowing for trade offs of lighting for other measures with longer service lives

Next Steps

RE137-AS - Analysis over 30 year useful life of building for performance path
- RE173-D...RE177 is better
- RE164-AS
- RE165-?->AMPC or D
- RE134->AMPC2 or D
- RE135- AMPC or AS
- RE7,9 -> withdrawn
- RE130->D
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Watch out for the sharks....

Find Common Ground

Don’t Bloody the Water

Focus on the End Game

Get out the Vote!