ENERGY STAR Homes: Observations from the Field

Oncor Electric Delivery & Rocky Mountain Power

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ICF International
2007: What a year it turned out to be!
Texas: Oncor Electric Delivery

• Largest service territory in Texas (7.5 million people)
  – DFW
  – North Austin/Williamson County
  – Temple/Killeen
  – Midland/Odessa
  – Waco
  – Tyler
  – Wichita Falls
  – Sherman/Denison

• Economy
  – Overall, well diversified & growing
  – Very resistant to national economic downturn
    (http://dallasfed.org/research/swe/2008/swe0801b.cfm)

• Political
  – HB 3693 increased IOU, Municipal & Co-Op DSM requirements (KW & KWh metrics)
  – Governor Perry passionate about wind generation
Program Data: 2002-2007

Homebuilder Participation and ENERGY STAR Homes Submitted in North, Central, East & West Texas

Program Year

<table>
<thead>
<tr>
<th>Year</th>
<th>ES Homes</th>
<th>Builders</th>
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<tbody>
<tr>
<td>2002</td>
<td>6,499</td>
<td>27</td>
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<tr>
<td>2003</td>
<td>13,533</td>
<td>43</td>
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<tr>
<td>2004</td>
<td>14,087</td>
<td>54</td>
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<td>2005</td>
<td>13,016</td>
<td>68</td>
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<tr>
<td>2006</td>
<td>13,151</td>
<td>75</td>
</tr>
<tr>
<td>2007</td>
<td>6,510</td>
<td>76</td>
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</table>
So what happened in 2007?
Some “acceptable” reasons

• Housing downturn
So what happened in 2007?
Some “acceptable” reasons

• Expanded ENERGY STAR requirements
  – 22 Builders that had participated in 2006 program dropped out of 2007 program
    • Pulte (DFW)
    • DR Horton (DFW & CTX)
    • History Maker Homes (DFW)
    • Grand Homes (DFW)
    • Centex (Austin/CTX)
    • Lennar Family (DFW/CTX)
So what happened in 2007? Some “unacceptable” reasons

• Miscommunication between builders & raters (data integrity)
  – Assumptions were made on both sides
  – Parkinson’s Law
  – Raters stretched thin; depended too heavily on HVAC companies
  – 1,800 homes “stuck” in database
  – Only 500 homes rollover into 2008 program
  – Translated ~ $300K loss for builders & $15k loss for raters

• Misaligned goals
  – Oncor, Homebuilder, ICF → All same goal
  – Rater paid regardless of builder receiving incentive
  – Oncor data requirements
2008: Improvements (more cowbell!)

• Recruitment
  – Major email/fax campaign (~3,000 targeted emails, ~500 targeted faxes)
  – Leverage “green” momentum
  – Leverage energy $$ tradeoff (i.e. auto vs. home)
  – 245 builders applied for 2008

• Data Collection/Submission
  – ICF first “filter”
  – “Waterfall” approach to rater information
  – “Force” rater to better participate in QA/QC & realign rater goals

• Award process
  – Lessened the “science” and increased the “art” → More field experience
  – Currently 179 builders participating
  – Kicked out 2 raters; Enhanced requirements (Oncor approved); 30 participating raters.
  – Player vs. Poser: Thin out builders after March 31st milestone (previous milestone May 31st)

• ALP
  – 1100 requests: 640 awarded
  – Received recognition at 2008 ENERGY STAR Lighting Partner Meeting in Phoenix
Utah: Rocky Mountain Power

• Largest IOU/service territory in Utah (1.8 million people)
  – Salt Lake City
  – Provo/Orem
  – Ogden/Layton

• Economy
  – Overall, well diversified & growing
  – Fairly immune to national economic downturn

• Political
  – Governor Huntsman very supportive of EE efforts
Program Data: 2005-2007

Homebuilder Participation and ENERGY STAR Homes Submitted in the Wasatch Front
2007: Growing Pains

- **QA/QC**
  - 2006 process was strictly visual
  - 2007, based on Texas experience, enhanced process with BD/DB field testing
  - Fully tested 20+ homes
  - TBC additionally performed
  - Quickly identified problems

- **Corrective Action**
  - Suspended Rater until problems addressed
  - Met with rater, discussed issues, solutions
  - Rater embraced new processes, back on track.

- **2008 program**
  - Continue full testing. Tomorrow @ 8:00, Daybreak Community
  - Explore enhanced duct requirements (Total Leakage requirement)
So what does all of this mean: Designing Program Incentives

• MUST promote goals/motivational alignment!
  – Strengthen weakest link (raters)
  – Tie QAQC process to incentive/program participation (both builder/rater)
  – All marketing must be perceived as “value” to work as incentive
  – “You get what you measure”

• Layer/Tier levels → Reward higher performing builders
  – One level (new programs)
  – Fixed levels (growing programs)
  – Sliding scale (mature programs)

• Add ALP incentives
  – Seamless add on
So what does all of this mean: Recruiting Builders in Soft Market

- MUST be continual & creative process (not static)!
  - Utilities increased goals vs., Shrinking KW/KWh (improving codes)
  - Utilities increased goals vs. Free rider ship (local green building mandates)
  - Continual data mining (overlooked builders)

- Leverage “Green” marketing/events
  - Other ENERGY STAR events/messaging
  - Synergistic Events (i.e. Power Forward)
  - Horton Hears a Who

- Leverage Corporate messaging
  - KB Home (12/19/2007 press release)

- Become active w/ local HBA’s
  - Speaking/sponsorship opportunities
  - Become EE expert/resource for group
Questions?

I NEED MORE COWBELL !!!