



R1702/R1710 Codes & Standards

Study Kickoff
for Connecticut Energy Efficiency Board, Eversource,
United Illuminating, and Stakeholders

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R1702/R1710 C&S Kickoff Agenda



- Background
- Workplan & Tasks
- Methodology
- Reporting
- Schedule

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Background



- Studies have shown that non-compliance with the energy code is common and leaves room for improvement
 - MA: 81% to 89% compliance depending on code and code cycle stage
 - 21% savings potential (over baseline) for 2012 IECC non-program homes
 - RI: 80% compliance for 2012 IECC
- Some PAs have implemented training and education programs to claim savings from increasing compliance with the energy code
- This is a way to impact the RNC market which is facing decreasing savings for more traditional above code programs

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Study Goals



1. Assess compliance with the 2009 IECC using homes that were part of the R1602 RNC Baseline Study
2. Calculate what compliance would be under 2012 IECC assuming no change in building practices from 2009 IECC sample
3. Estimate the gross potential savings possible from increased compliance under both codes
4. Compare program and non-program homes, and CT with other states
5. Review other code programs and provide recommendations for the design and implementation of a code enhancement program

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Key Tasks



- Workplan and Kickoff
- No Data Request!
- Analysis & Literature Review
 - MA-REC compliance assessment
 - Code compliance enhancement potential assessment
 - Literature review of other programs
- Reporting

Methodology



- MA-REC compliance methodology
 - Uses REM/Rate models to create compliance scores that are calibrated to energy consumption
- Data
 - Leverage REM/Rate files from R1602 Baseline Study
 - Non-program models (created by NMR)
 - Program models (provided by the Companies)
- Measure-level compliance and savings results
 - Key shell measures (walls, ceilings, foundation walls, floors, windows)
 - Air and duct leakage
 - Lighting

Calculated Study Outputs

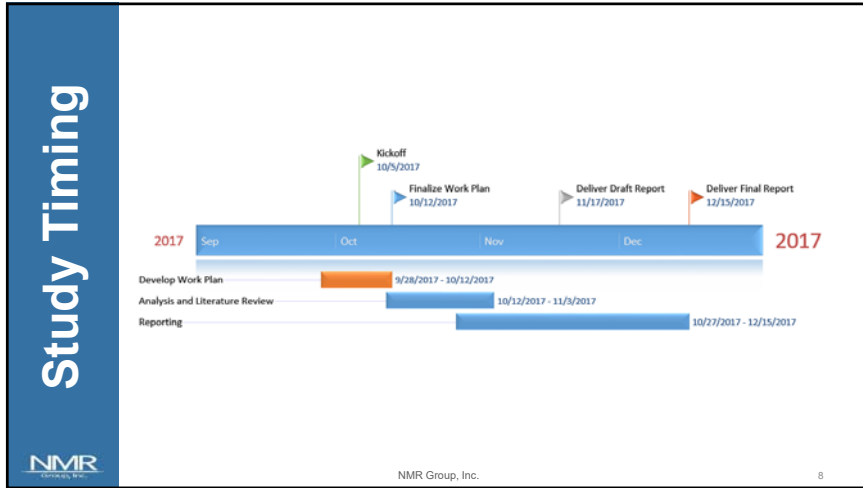


- Measured compliance with 2009 IECC
- Estimated minimum compliance with 2012 IECC
 - This will likely be an understatement of compliance given we are using homes built under 2009 IECC
 - We will adjust the 2012 IECC compliance rate based on measured MA results
- Measured gross technical potential savings with 2009 IECC
- Estimated gross technical potential savings with 2012 IECC
 - This will likely be an overstatement of savings given we are using homes built under 2009 IECC
 - We will adjust 2012 IECC potential based on measured MA results
- Findings will help inform the potential for a code enhancement program

Reporting



- Brief report (~20-30 pages)
- Methodology description
- Analysis
 - Results weighted by program vs. non-program
 - Presented by program vs. non-program
 - Confidence intervals and figures used to display sample variation
- Benchmarking
 - Compare CT to neighboring states for compliance and potential
- Program design considerations
 - Based on literature review and standard industry practice



C&S Study Budget

Task	Total
Task 1: Kickoff	\$2,800
Task 2: Literature Review and Analysis	\$13,000
Task 3: Reporting	\$9,200
Total	\$25,000

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