

### Illinois Codes Compliance Collaborative – Lessons Learned

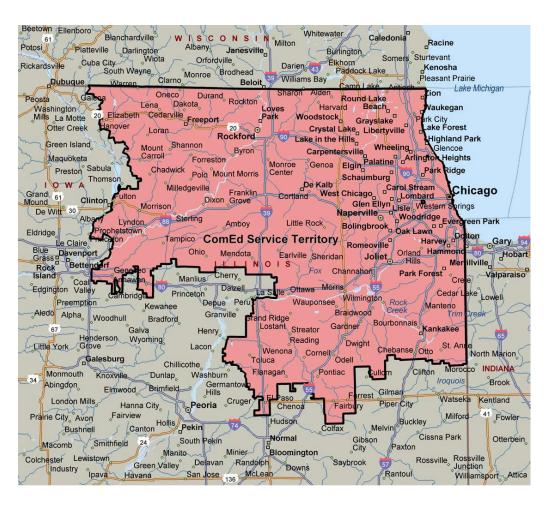
Jim Fay ComEd

ACEEE 2016 National Symposium on Market Transformation

Baltimore, MD March 21, 2016



#### **ComEd Territory Profile**



#### **Quick Facts**

- Service Area: 11,300 square miles
- Customers: 3.8 million electric
- Employees: Nearly 6,000
- Substations: 1,300
- Distribution & Transmission Power Lines: more than 70,000 miles

Energy Efficiency Program Administrators in Illinois: - ComEd, Ameren, Nicor Gas, Illinois DCEO, Peoples Gas & North Shore Gas

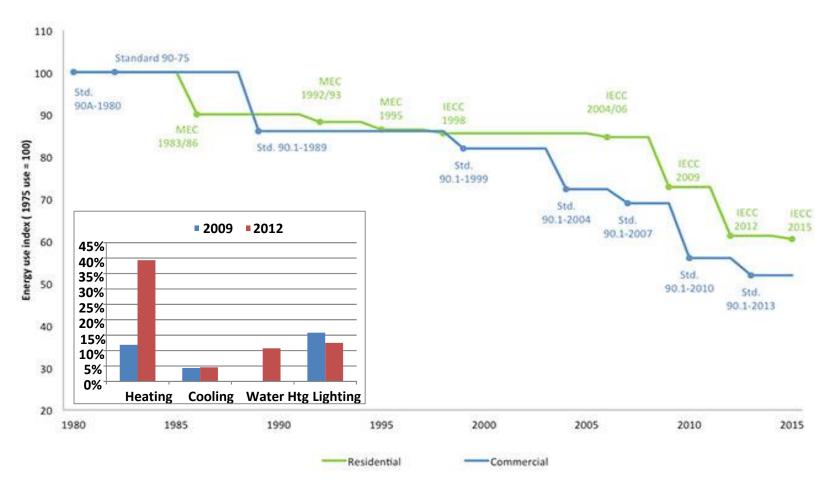


#### **The Illinois Building Codes Situation**

- ✓ Illinois Adopts IECC 12 months after Release
  - 11-member Illinois Energy Code Advisory Council gives stakeholders from different building sectors the opportunity to provide critical insight prior to the adoption of a new code
  - IECC 2015 has been in effect for permit applications since January
- √ 1300 Municipal Jurisdictions with Residential Energy Code
  Adoption Discretion
- √ 3 Big Unknowns:
  - 1. New Home Compliance with Current Code
  - 2. Energy Implications
  - 3. Energy Savings Opportunity



# Largest Energy Impact: 2009 & 2012 Code Changes





#### **What Qualitative Research Tells Us**

#### **Energy Measure Compliance Gaps:**

- Insulation and weather-resistant protection of basement walls and slab foundations
- Installations of ducts in exterior walls
- Whole house and duct air sealing
- Lighting
- "Right sizing" of HVAC systems
- Simplify Process!





### ComEd's Residential New Construction Program – New Homes

- ✓ Joint Program with Nicor Gas
  - Access to technical expertise to identify ways to save energy, lower costs and incorporate energy efficient design strategies.
  - Whole home energy modeling to optimize home design for energy performance
  - Incentives for builders who exceed state and local building codes and adopt common construction practices to promote a whole-home approach
  - Provides incentives to RESNET/HERS certified consultants for completing the HERs rating and enrolling homes into the program
- ✓ At Least 20% Better than Current Code Qualification
- √ 729 New Homes in PY7 (~4% of New SF Homes for Year Ending 5/31/15)
- ✓ Challenge: How do we coordinate "Exceed Code" program initiatives with codes compliance programs?



Jacob Stoll



An Exelon Company

# Current Illinois DCEO Building Energy Codes Compliance Program

- ✓ Stakeholder Codes Training: Over 1500 attendees in 2012-13 Program Year
  - Builders
  - Inspectors
  - HERS Raters
- ✓ Technical Support (Nearly 400 in 2012-13 PY)
- ✓ Additional Information (e.g., List of Blower Door Service Providers)

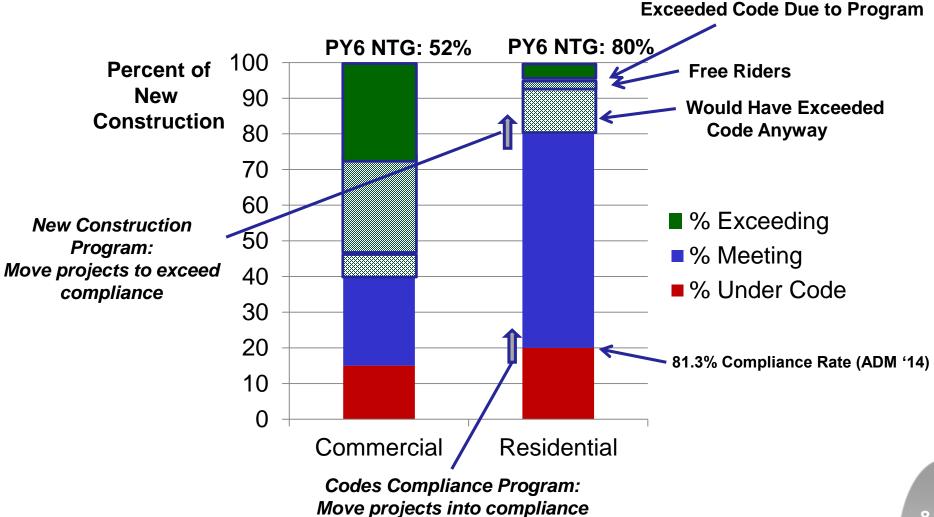








#### **Code Compliance in New Construction**





## Illinois Statewide Enhanced Code Compliance Program

- ✓ Complementary to existing utility "Beyond Code" programs
- ✓ Builds on existing DCEO Codes Compliance platform
- ✓ Addresses additional barriers to code compliance
  - Knowledgeable 3<sup>rd</sup> Party Codes Experts in the Field
  - Expanded Training
  - Fill Supply Chain Gaps (Blower Door Equipment Leasing)
  - Coordination of Programs & Integration (Web Portal)
  - Codes Collaborative
- ✓ As a Research Project:
  - Navigate the market uncertainty to find what works to overcome barriers to compliance
  - Program Objective: Demonstrate Cost-Effective Energy Savings

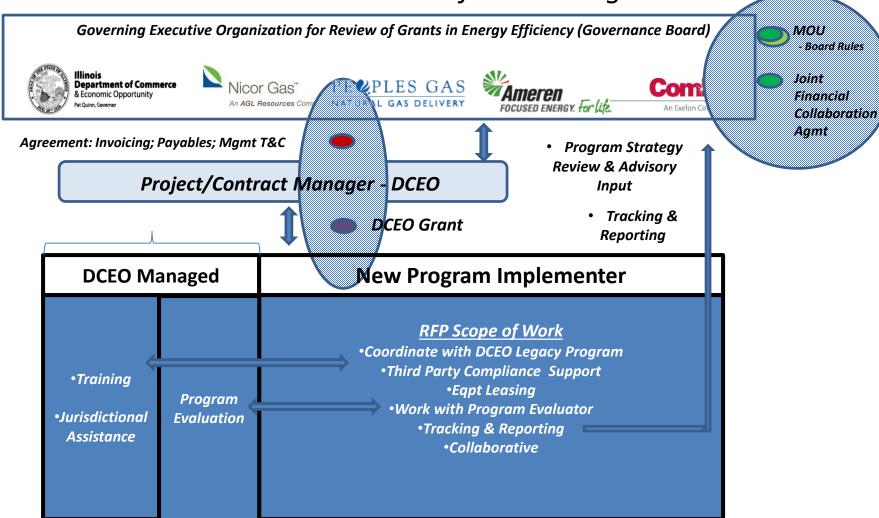


## Illinois Statewide Enhanced Code Compliance Program

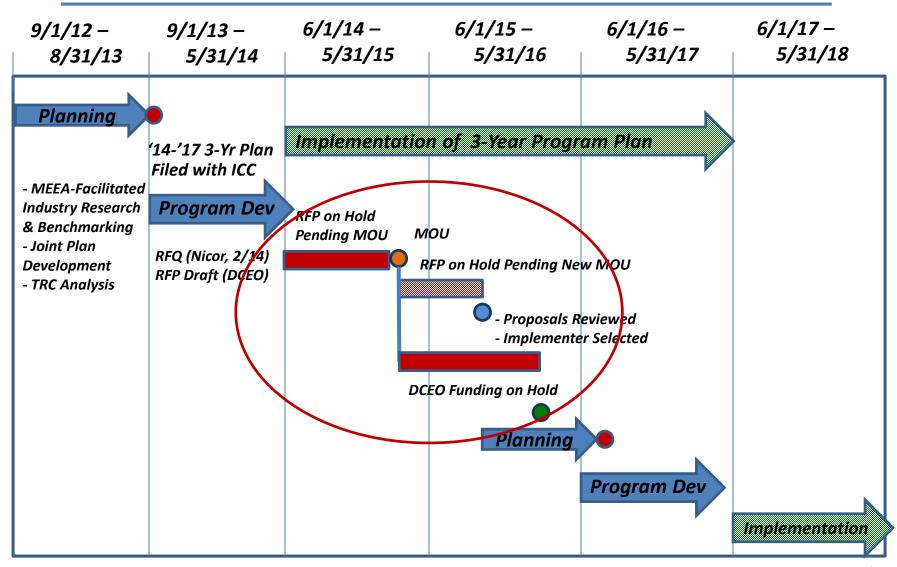
- ✓ What we've done:
  - Develop a Common (Statewide) Budget & Plan (9/12 9/13)
  - 2. Develop joint organizational structure and management rules (9/13-5/14)
  - Select and contract (not yet!) with Implementer (6/14 5/17)

### Governance Board Model (8/14)

Allows Collaborative to Influence Program



#### Enhanced Code Compliance Program Timeline





## Illinois Statewide Enhanced Code Compliance Program

- ✓ Lessons Learned:
  - 5-Administrator management organization and agreements can form the basis for future statewide initiatives
  - Utilities need to have the control and flexibility to expedite programs
- ✓ Where do we go from here?
  - Year 3 (June, 2016) of Current Plan: Research Results?
  - Next 3-Year Plan to be Filed 9/1/16
  - Do other states have better models?



### **Back-Up**



#### **Residential Unit Forecast**

#### Unit

