

# Stimulating Energy Efficiency in Kentucky

The logo features the text "Stimulating Energy Efficiency in Kentucky" in blue. To the right of the text is a stylized graphic consisting of a blue swoosh that curves around a central orange starburst shape with a yellow center.

*Collaborative Stakeholder Meeting #3:  
Developing a Kentucky Action Plan for Energy Efficiency*

**Convened by the Energy and Environment Cabinet's  
Department for Energy Development and Independence**

---

---

Minutes  
July 31, 2012

---

---

**I. Welcome & Introductions**

*Len Peters, Secretary, Energy and Environment Cabinet*

- energy efficiency is the best way to manage future energy needs
- State energy office has taken lead in area of energy efficiency in k-12 schools (about 170 Energy Star schools, both new and retrofit, up significantly in recent years)
- this series of meetings is intended to find ways to keep energy costs low for all income sectors, and to offset future energy demand; also to find ways to get out of recession and keep energy costs manageable; to create jobs with new energy initiatives
- Kentucky has a unique energy profile, net energy producer for past 50 years, which is still true today; relies on coal for electricity
- 18,000 coal mining jobs and many additional indirect jobs
- 1 out of 20 people in Kentucky works in the manufacturing sector (220k employees)
- Need to be responsible with resources to continue strong manufacturing presence
- 3 things to accomplish today
  - Review/assess action items
  - Identify key individuals/orgs to turn actions into reality
  - Determine areas where more resources needed
- SEEK project goal is to accomplish 1% reduction in energy use per year

## II. Energy Efficiency: Where Have We Been and Where are We Going?

*Linda Breathitt, Commissioner, Public Service Commission*

- During earlier tenure at PSC, DSM program began, and several programs still active today
- 2007, United States Congress passed Energy Independence and Security Act, which included 2 new PURPA standards related to energy efficiency:
  - Rate design standard, required utilities to develop and implement rates that would promote energy efficiency investments
    - Authority granted by DSM statute and ability to address rate structure/design allowed Kentucky PSC to address throughput incentive, as long as rates are just and reasonable
  - IRP standard (Integrated Resource Planning)
    - Each Jurisdiction required to integrate energy efficiency resources and adopt policies to make cost-effective energy efficiency a priority resource (equal priority with other resource options)
    - Kentucky PSC passed state-specific KY IRP standard (807 KAR 5:058)
- Kentucky IRP standard treats energy efficiency with equal priority as new generation and other resource options
- Examples of impact of new IRP standard:
  - Duke expects demand reduction to increase from 37 MW in 2011 to 53 MW in 2017
  - East Kentucky Power expects demand reduction for winter peak from DSM to increase from 236MW in 2012 to 367MW in 2017
  - KU/LG&E, expects resource level of energy efficiency to grow from 38MW in 2011 to 61MW in 2017; Grow from a contribution to a demand reduction of 182MW in 2010 to demand reduction of 539MW in 2017
- PSC has said energy efficiency is opportunity to provide energy at lowest cost
- KY has historically had low-cost power from coal; helped to build manufacturing base
  - This has also allowed economic environment where energy efficiency programs not as desirable.
  - However, with rising rates in future, energy efficiency will be driver of continued low-cost energy
- PSC also quasi-judicial agency, must follow statutes and regulations
  - Supports conservation, demand response, DSM programs, administrative efficiency
- PSC pushed bill to amend DSM statute in response to Gov. Beshear's energy plan that would have required all utilities in jurisdiction to file DSM plans
  - Bill did not pass, therefore PSC has no authority to mandate utilities to run DSM programs
  - However, each utility has filed tariffs and taken initiatives in energy efficiency arena - available on PSC website

- PSC in 2012 will open admin case to address smart grid issues
  - Purpose is to address all aspects of smart grid system - cost recovery issues, hardware, software, reliability improvement, time-of-use rates (dynamic pricing), etc.
  - Smart grid has many issues (cost issues, data security issues, etc) but there is potential for utilities and customers to increase energy efficiency levels
- PSC has approved new programs for Duke
  - Appliance rebates
  - Home energy audits
  - Weatherization
  - Low-income programs
- PSC approved renewal of DSM programs for Kentucky Power, including education programs to show customers need for greater energy efficiency with rising costs and strain of peak demand issues
- As costs rise and environmental regulations tighten, energy efficiency will be a more viable option
- PSC recognizes importance of greater deployment of energy efficiency initiatives due to reliance on low-cost coal power
- PSC understands that reliance on coal-fired generation will face increased pressure from stricter environmental regulations
- PSC staff reduced from 135 to 93, still lots of work to be done

### III. Orientation to Today's Discussions

*Sara Smith, Principal, Smith Management Group (SMG)*

- Reiterated code of conduct
- Stressed importance of open communication and dialogue between stakeholders
  - Many options for connecting today, including speaking during plenary session, making notes on posters in the hallway, networking during breaks
  - Can contact DEDI or MEEA by email any time
  - Encouraged all participants to sign up for workgroups to discuss issues of interest to them

### IV. Recap of Collaborative Meetings 1&2

*Samantha Williams, Policy Manager, Midwest Energy Efficiency Alliance*

- Lots of energy efficiency work done in Kentucky past 20 – 30 years
  - Tracks nationwide focus

- Energy Efficiency milestones in Kentucky
  - DSM Statute, 1994 – allows utilities to propose, and PSC to review, DSM programs aimed at reducing their customers’ energy use through efficiency and load management
  - House Bills 1 and 2 in 2007 and 2008 – created tax breaks for efficiency investments in residential and commercial property; credits for taxpayers who build and/or sell Energy Star homes in Kentucky
  - Section 50, House Bill 1 – directed PSC to consider how energy efficiency programs are implemented in Kentucky
  - Governor Beshear’s 7 point strategy to ensure Kentucky’s energy security and maintain low-cost, reliable energy into the future
    - energy efficiency is first and foremost strategy to accomplish this objective
    - Goal to offset 18% of projected 2025 energy demand via energy efficiency
  
- Stakeholder Process
  - February 2011, DEDI contracted with MEEA to run a stakeholder process and identify program and policy options to achieve Kentucky’s energy efficiency goals
  - DOE also contracted with ACEEE to conduct research and provide technical assistance in support of the project
  - Collaborative process involving many diverse perspectives – must bridge interests and make recommendations that are most economically and politically viable for Kentucky
  - Comprehensive approach – both jurisdictional and non-jurisdictional utilities
  - Pragmatic approach – focus on items that have greatest potential to be financed and implemented
  
- One-on-one meetings, February to October 2011 – evaluated efficacy of current energy efficiency efforts and identified opportunities and barriers for realizing energy efficiency potential in Kentucky; focused on following entities:
  - Utilities; Manufacturers; Commercial energy consumers; trade organizations; housing associations and advocates; local agricultural reps; advocacy groups, including CAA, environmental organizations, consumer advocates; AG office; Public Service Commission; Legislators
  - Compiled list of preliminary findings of key opportunities and barriers to energy efficiency in Kentucky, as communicated by our stakeholders
  
- Collaborative Series, December 2011 – July 2012 (3 meetings)
  - Meeting 1 - December 2011
    - Reviewed key findings from stakeholders
    - Breakout sessions on three issues: Industrial, DSM statute, Residential
    - Reps of Toyota and Chair of Arkansas PSC gave remarks
  - Interim workgroups between meetings 1 and 2
    - Regulatory process improvement
    - Industrial
    - Commercial efficiency issues
    - Residential low income energy efficiency

- Meeting 2 – March 2012
  - Discussed how other states are addressing similar opportunities facing Kentucky
  - Generated list of realistic proposed actions to incorporate into Action Plan
  - Speakers included representatives from: Kentucky Public Service Commission; Kentucky Office of the Attorney General; Kentucky Association of Manufacturers
  - Breakout groups – Transparency; Industrial; Commercial; Residential/low-income
- Interim Session 2 – between meetings 2 and 3
  - Reviewed findings and prioritized action items
  - Focused on transparency working group
- Meeting 3 – Today, July 2012
  - Focus on demonstrating how current initiative is furthering existing efforts and being shaped through stakeholder input
- ACEEE putting together macro-economic analysis – realistic estimate of energy savings that can be realized from Action Plan – due out late winter
- DEDI will keep participants informed of additional opportunities to provide feedback and comments as project progresses

#### V. *The Action Plan: A Discussion*

*Sara Smith, SMG*

- Stakeholder feedback reflected in Action Items
- Must transition Action Items to Action Plan - identify key players, tasks; develop workable timeline
- **Action Items**
  - *Utility Peer Exchange*
    - Some of KY's utilities are currently participating in a peer exchange in Missouri
    - All utilities invited, sometimes City of Springfield, energy dept., PSC
    - They talk about process, regulations, results, innovative programs, areas with room for improvement
    - *Participant Comment* - There is already a quarterly working group that could be expanded
    - *Participant Question* – What is the difference between KY's current quarterly energy efficiency working group and Missouri peer exchange?
      - Having a full 1.5 days makes big difference in Missouri vs. KY energy efficiency working group; able to develop working relationships
  - *Voluntary Data Reporting*
    - *Participant Comment* – Concern over how some of the utilities will reconcile their current reporting obligations to PSC with the voluntary reporting to DEDI

- MEEA and DEDI will work this out with the reporting utilities in the coming months
- *Education*
  - With industrial, coordination between heavy and small/medium users
  - Make commercial and residential customers aware of existing programs
- *Utility Rate Design*
  - Has not been discussed in collaborative series, potential for working group to address
- *Municipal Utilities*
  - Desire to develop common approach for municipal utilities to take advantage of energy efficiency initiatives
  - DEDI will provide support, advice, info to municipal utilities
  - Peer exchange - share experiences and allow for faster implementation
- **Residential**
  - *Improve housing stock*
    - Expand and enhance KY Home Performance
      - KY Housing has proven model
      - Was in Governor's preliminary plan
      - Kentucky Housing - has worked on over 1,000 units
      - *Participant Comment* - Energy efficiency should be included with economic viability plans, along with tax breaks, conservation
      - Economic development cabinet should stress energy efficiency opportunities
  - *Potential Residential legislative items*
    - Expanding residential efficiency initiatives in 2008 HB 2 for home builders, landlords, homeowners
      - *Participant Comment*
        - Need to focus on incenting the lender, not just the buyer
        - Certain bills need to be amended to broaden incentive offerings to all homebuilders
        - For example, HB1 and HB2 incentives only available to corporations, excluding LLCs
        - Suggestion of tax holiday for energy efficiency products and upgrades
        - Suggestion of incenting people to get rid of inefficient manufactured homes (akin to Cash for Clunkers)
    - Energy efficient manufactured homes requirement and/or pilot
      - Many stakeholders have expressed interest in incenting replacement of inefficient manufactured homes
      - Several comments about restrictive costs for purchasing energy efficiency manufactured homes, lack of income elasticity for low income community

- *Participant Comment* - There is plan underway for a manufactured home replacement pilot, and there is interest in getting it off the ground
    - *Facilitator Response* - One appeal of manufactured home replacement pilot is to collect data on viability of financing energy efficiency manufactured homes
  - *Actions Requiring Funding*
    - Weatherization best bang for buck
      - *Participant Comment* - For some utilities, weatherization not necessarily cost-effective by itself
      - *Participant Comment* - Other participants disagreed, commenting that weatherization has been shown cost-effective by California test, especially lower cost measures such as duct sealing
      - Big issue is getting participation of residential customer, even if cost-effective on paper
    - Uniform housing code enforcement
      - New program for HVAC inspection across the state, but there are limits, particularly in rural areas
    - On-bill financing
      - Biggest barrier is cost-effectiveness
      - *Participant Comment* - There is an on-bill pilot with MACED (How\$mart KY)
      - *Participant Comment* – On-Bill should be expanded
      - *Participant Comment* – Rural Utilities Service proposed rule-making for on-bill loans to rural utilities and is out for comment; could provide path for on-bill in KY without legislation
- **Commercial Items**
  - *Potential Legislative Items*
    - Amend existing tax incentive structure for commercial users, linked to energy efficiency upgrades and performance
      - Comment: Tie tax incentives to efficiency rating programs (energy star, ashrae, etc)
    - Extend HB 2 (2008 Session) efficiency bond mechanism to commercial entities.
    - Create incentive mechanism for landlords of commercial rental property to provide energy efficiency services, invest in energy efficiency building upgrades (Green Lease model)
  - *Actions Requiring Funding*
    - Establish revolving loan fund, with zero to low interest, linked to energy efficiency upgrades
    - Improve Kentucky’s commercial building stock

- General Comments
  - *Participant Comment* - One problem is educating decision-makers for commercial building upgrades
  - *Participant Comment* - Incentives for avoided cost of generation often not substantial enough to drive investment in energy efficiency
  - For multi-state commercial entities, tend to go for biggest bang for the buck, therefore they make energy efficiency investments in states with higher electric rates (i.e., not KY)
  - *Participant Comment* – Concerned about applicability of commercial incentives to co-op commercial entities (many in electric co-op service territory)
    - Would like to know how many of these are in KY and what can be done for them
    - Thinks this information is likely best gleaned at state level, and then we could include it in a workgroup
- ***Industrial***
  - *Short Term Action Items*
    - Establish voluntary reporting mechanism to collect data from industries on energy efficiency upgrades and successes, potentially housed at independent organization.
    - *Participant Comment* - Interest in determining % of energy use by large industrial users
    - *Participant Comment* – GDP could be valid measure of determining how industrials are doing with energy efficiency
  - *Potential Legislative Items*
    - Increase financial incentives for industrial energy users, i.e. amending existing tax incentive structure, linked to energy efficiency upgrades and performance
  - *Actions Requiring Funding*
    - Establish revolving loan fund with zero to low interest linked to energy efficiency upgrades
    - Explore energy efficiency program financing for small to medium industrial customers (e.g. < 5 MW)
    - Convene advisory group to review options governing industrial customer opt-out from DSM program and make recommendations
- ***Recommendations at the Federal Level***
  - Explore how FEMA funds provided for home rebuilding or replacement in the wake of natural disasters could require new structures to be built better than code (e.g. ENERGY STAR).
  - Seek LIHEAP reform to give states more flexibility in how to direct a greater percentage of funds to weatherization; link future weatherization funding prioritization to highest energy usage and potential energy savings through energy efficiency investments

- *Participant Comment* - Suggest workgroup dealing solely with natural gas issues

## VI. *Kentucky's Energy Efficiency Goals: And How Do We Know When We Get There?*

*Lee Colten, Assistant Director, Division of Efficiency and Conservation, DEDI*

- Requirement of grant – DOE set goal of achieving annual electricity savings of 1% through energy efficiency
  - Statewide goal, not utility-specific
  - Aspirational goal, not mandate
- Cumulative goal of 18% energy savings by 2025 set out in Governor's 2008 plan (7 point strategy)
  - DEDI's schedule has 11% cumulative reduction from electricity, and will be combined with transportation and natural gas to reach the 18%
- Method for measuring goal
  - Baseline – expressed as avg of energy consumption from previous 3-year period (normalized for weather)
  - First measured year will be 2013
  - Other option being evaluated: Modeled approach – accounts for population, economics, weather, price, income, etc
- Measuring goal, with respect to industrial load
  - There are ongoing discussions with DOE concerning the inclusion of the industrial load in the baseline measurement when calculating progress toward the project (and Governor's) goals
  - Assumption currently is that industrial load is included; participants will be updated when/if that changes
- Standard Data Reporting Purpose
  - Measure progress toward Governor's energy efficiency goals; provide talking points for Governor and state officials
  - Demonstrate at state level, and nationally, the success of Kentucky's programs, one of leaders in Southeast region
  - Demonstrate and document the positive performance of the utilities with respect to wise use of ratepayers funds and benefits they provide to Kentucky and their customers
  - Sharing of best practices, performance and support reasonable, fact-based planning toward future goals
  - Provide for collaborative reporting structure
- Standard Data Reporting
  - Reporting is voluntary
  - DEDI will be repository of data
  - DEDI will analyze and report summaries of data

- Information to be reported:
  - Basic utility information
  - Annual utility data:
    - Energy type (natural gas or electricity)
    - Energy sold – residential, commercial, and industrial (in mcf or MWh)
    - Number of customers – by sectors
    - DSM program costs – by sector
    - Utility peak season, i.e. winter or summer
  - Programs
    - Name, description, sector, time frame, budget, projected savings, TRC value, Program approval date
  - Program metrics/performance
    - Gross incremental annual energy savings
    - Winter and/or summer demand savings
    - Program participation (and type) – e.g. number households participating, number CFL’s installed, number load control devices, etc
    - Reporting time frame – can accommodate staggered calendars
  - Utilities that have agreed to report so far:
    - AEP
    - LG&E / KU
    - Duke Energy
    - EKPC – aggregate of all distribution co-ops
  - PSC role – will have access to data, as well as any summary reports
- *Participant Question*- Does savings goal take into account increase/decrease in population, output, etc?
  - *Facilitator Response* - May need to segment sectors to measure savings differently (e.g. for industrial, cost per output; residential, cost per capita)
- *Remarks from David Huff, on behalf of IOU Tech Working Group*:
  - Concerns with how data will be used
  - IOU’s would prefer the data be aggregated, and if someone wanted utility-specific data, they could come to the IOU with a request
  - Not yet an answer on how to resolve issue of different reporting periods for different utilities
  - *Sec. Peters Comment*: not a big issue in the long term - e.g. when looking for data over ten year period
  - Issues with EM&V: using deemed savings, accounting for adoption rate (e.g. how many people actually install the CFL’s they receive)
- *Remarks from Scott Drake, on behalf of EKPC Tech Working Group*:
  - 22 cooperatives in state, about half attended meeting on transparency
  - Concerns about aggregating info
  - Benefits of energy efficiency to G&T utilities

- Not using DSM funds, so difficult to determine program-specific costs, e.g. energy audits done by co-op staff on internal payroll
- East Kentucky will report aggregate for all 16 co-ops, but broken down by programs

## **VII. *Review of Progress and Next Steps***

*Moderated by Sara Smith, SMG*

- This is final meeting of collaborative stakeholder series, but process far from over
  - Opportunities to provide comments, participate in workgroups
- Action plan will take into consideration comments from today; draft will be available this fall
  - Additional comments should be submitted by end of August 2012
- Themes from meetings series:
  - Energy efficiency is not new in KY, even if it hasn't been recognized nationally
  - Action plan represents continuing effort
  - Focus on implementing actions, rather than simply formulating report
- Distribution list for follow-up materials
  - All attendees should be on the distribution list
  - Attendees encouraged to submit via email any additional stakeholders that should be included on distribution list
- Reminder to sign up for working groups
  - Opportunity for written comments provided in attendee packets – should be submitted by end of August 2012
  - Online survey will be sent to participants soon