



# Building Public Utility Energy Efficiency Programs:

## The Arkansas Journey

September 23, 2013

Colette D. Honorable, Chairman  
Arkansas Public Service Commission

# Arkansas Public Service Commission

- ▶ The Commission is a quasi-judicial, quasi-legislative body that can only act within its statutorily-granted powers.
- ▶ Also, it generally must involve interested parties in order to make a record for action.
- ▶ In new areas of policy, these factors tend to yield a thorough statutory debate and incremental steps forward after careful investigation.

# In 1977:



- Apple Computer, Inc. was incorporated.
- The original movie Star Wars came out.
- At the urging of Arkansas Attorney General Bill Clinton, our General Assembly passed the Energy Conservation Endorsement Act of 1977, authorizing the Arkansas Public Service Commission to approve utility programs to conserve energy.

# In 2006:



- Apple developed the first iPhone (announced January 2007).
- After five sequel movies, Star Wars re-released a boxed set of movies on DVD.
- The Arkansas Public Service Commission began to implement the 1977 Energy Conservation Endorsement Act.

# Energy Conservation Endorsement Act (“ECEA”)



- ▶ The ECEA authorizes the Commission to promote renewable energy, energy efficiency and demand response—but only if it is beneficial to utilities and ratepayers alike.
- ▶ To date, the Commission has focused on implementing energy efficiency programs, and has worked to ensure that both ratepayers and utilities benefit.

# Crawling before we walk: “Quick Start” EE Programs

- ▶ We knew we had to crawl before we could walk.
- ▶ With the help of a stakeholder collaborative facilitated by the Regulatory Assistance Project (RAP), the PSC in 2007 adopted EE rules.
- ▶ The PSC also required utilities to implement “Quick Start” EE programs—modeled on successful programs in other jurisdictions—for three years.

# “Crawling”: The Quick Start Period

- ▶ Program implementation during the Quick Start period allowed all of the interested stakeholders to gain experience with:
  - Program-related concepts, implementation, reporting and review
  - Development of the market for qualified contractors through training and program growth;
  - Collaboratively responding to challenges.

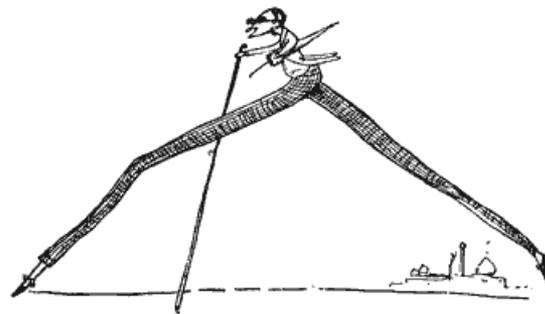


# Workshops to promote understanding

- ▶ During the Quick Start period, the Commission also held numerous workshops to foster conversation and understanding.
- ▶ Workshops addressed topics such as:
  - Presentations by each IOU president on demand side management;
  - EE effects on utility revenues and profits;
  - Targeted programs for agriculture and industry;
  - Interactions with Smart Grid and electric/natural gas vehicles; and
  - Clean energy integration.

# “Walking”: Comprehensive EE programs

- ▶ In 2010, the PSC required electric and natural gas IOUs to submit comprehensive plans to achieve new, rising energy savings goals over the next three years.
- ▶ “Comprehensive” means programs serving every rate class and every major end-use.



# The Commission approved a framework for comprehensive EE:

- ▶ Program cost recovery through a rider, including lost fixed cost recovery.
- ▶ Energy savings targets, as a % of retail kWh or therm sales volume:

	<u>2011</u>	<u>2012</u>	<u>2013</u>
◦ Electric	0.25	0.50	0.75
◦ Gas	0.20	0.30	0.40

- ▶ Performance incentives for utilities, that rise with achievement.
- ▶ Robust EM&V with independent oversight.

# Where the rubber meets the road: Performance

- ▶ 2011: One of four electric IOUs and two of three natural gas IOUs met enough of their targets (over 80% of the target) to earn performance incentives.
- ▶ 2012: The two largest electric utilities and all natural gas utilities exceeded their targets.
- ▶ Total program spending rose from \$25 million in 2011 to just under \$50 million in 2012, and a similar increase is expected for 2013.

# Rubber Meeting Road →



- ▶ Overall, robust evaluation, measurement and verification indicates that the benefit of the 2012 program year is about \$26 million, net of program costs.
- ▶ Looking forward, our largest electric IOU has submitted an IRP that plans to avoid 700 MW of capacity over the next 10 years—basically avoiding a power plant.

# Program satisfaction:



Some unexpected results from EM&V surveys:

- ▶ Customer satisfaction among those who participate is often above 95%—sometimes it is 100%.
- ▶ Even after 6 years, we know that a focus on customer education and engagement is key.

# Other results

- ▶ New types of businesses in the state:
  - New 70–person CLEAResult office contracts with several utilities to run many programs.
  - New weatherization firms and non–profits employing trainees from utility–funded training at technical colleges and through the Arkansas Energy Office.
  - Energy efficiency projects have been incorporated into recruitment of industries and into upgrading of existing industries.

# Steady progress

- ▶ According to ACEEE, which publishes an annual ranking of states for EE, we moved from 45<sup>th</sup> in 2006 to 37<sup>th</sup> in 2012.
- ▶ We may improve our ranking in 2013.

# What about the cost?



- ▶ Cost is an issue we take very seriously. Unlike many other utility expenditures, we review EE program costs and plans every year.
- ▶ Even with EE program costs, Arkansas still has among the lowest electric rates in the US (currently 5<sup>th</sup> from bottom). Our residential bills are close to the national average because of high usage. So, EE is an attempt to control both numbers, over time.
- ▶ We are seeking efficiencies of scale and coordination to get the biggest bang for the buck.

# Knowing Better & Doing Better

- ▶ All of our stakeholders have had to learn to speak “EE” together.
- ▶ We have relied on collaborative rule–development for
  - EM&V, including the creation of a jointly–funded Independent Monitor to verify savings and suggest continuous program improvements.
  - Development of a comprehensive technical reference manual (“TRM”) that is updated annually to keep up with technology and
  - Industrial Self–Direct rules.

# Ongoing collaboration . . .

- ▶ Just this month the Commission tasked our stakeholders with collaborative development of
  - A statewide EE Potential Study.
  - Unification of multiple home weatherization programs across both gas and electric utilities.
  - Finding consensus on the value of non-energy benefits (“NEBs”), including a price on carbon.

# All hands on deck!

- ▶ This has been a lot of work and there is a lot of credit to go around:
- ▶ IOUs: Entergy Arkansas, Inc., SWEPCO, OG&E, Empire District, CenterPoint, Arkansas Oklahoma Gas, SourceGas.
- ▶ General Staff, who often convenes the collaborative.
- ▶ The Attorney General.
- ▶ Intervenors, such as: Audubon, Sierra Club, Arkansas Association of Community Action Agencies, Wal-Mart, Ark. Electric Energy Consumers.
- ▶ Governor Mike Beebe, the Arkansas Department of Workforce Services, the Arkansas Energy Office, the Arkansas Technical College System.
- ▶ Contractors: CLEARresult, ICF, Geovista, Converge, Frontier and Associates. HVAC contractors, engineering firms, and the Clinton Climate Initiative.
- ▶ Advice from Regulatory Assistance Project and US DOE.

# State-based policy development

- ▶ Working through NARUC with colleagues all over the country, I see leadership at the state level.
- ▶ At least 24 states have implemented some kind of Energy Efficiency Resource Standard (EERS), and most provide some level of lost fixed cost recovery for either gas or electric utilities or both.
- ▶ EE and also renewable energy initiatives show that states can embrace an “all of the above” energy policy.

# Picture credits:

- ▶ Wikipedia, for public domain pictures.
- ▶ Walking man at <http://public-domain.zorger.com>.
- ▶ Christopher Ziemnowicz—"rubber hits the road" drag Race picture credit.

# Conclusion



## ▶ Questions?

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