

Illinois Energy Efficiency Legislation

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Illinois Legislative Overview



- Legislation requires IL utilities to implement cost-effective energy efficiency measures beginning June 1st, 2008
 - Cost-effective is defined as measures that pass a Total Resource Cost test that measures the NPV of benefits vs. cost over the life of the measure
 - Benefits include avoided capital costs and avoided environmental costs (carbon or other reasonably expected costs)
 - Benefits do not include gas
- Provides for current cost recovery outside of a rate case via a tracker that is reconciled annually
- Initial annual goals are achievable but ramp up rate is aggressive and without precedent – size of ComEd program will be second only to the CA utilities by year four
 - Goals are adjusted downward if projected costs exceed an increasing spending cap
 - Financial penalties for failure to achieve goals are modest, but if utilities do not achieve year three goal, the program management and implementation authority is transferred to the power authority
- ComEd must file its initial three year energy efficiency plan with the ICC by November 15th, 2007
 - \$100,000 penalty per day for delay in filing

Environmental Policy Summary



Program	Planning Year Targets	Spending Caps	Customer Base	Measurement
Renewables	2% for 2008 4% for 2009 +1% each year until reaches 10% in 2015 +1.5% each year until reaches 25% in 2025	.5% of previous years total bill Increases by .5% each year for three years Thereafter capped at 2.015% of previous years total bill	Eligible Customers (residential and small business under 100kw)	Percentage applied to prior planning years actual energy supplied to eligible customers
Demand Response	.1% each year	.5% of previous years total bill Increases by .5% each	Eligible Customers (residential and small business under 100kw)	Percentage applied to previous years actual peak for eligible customers
Energy Efficiency	.2% for 2008 .4% for 2009 .6% for 2010 .8% for 2011 1% for 2012 1.4% for 2013 1.8% for 2014 2% for 2015	year for three years Thereafter capped at 2.015% of previous years total bill	All Delivery Customers	Percentage applied to expected energy delivered

Note –Spending caps assume that rates do not fall due to lower supply prices. If prices fall the cap is the greater of the previous year or the year ended 5/31/2007.



Comparison of Illinois Projected Portfolio Magnitude with Other Large Programs Nationally

State/Utility	Annual Spend [\$Million]	State Ranking	Annual Savings [GWh]	\$/kWh	How Long?	Administered by	Comments, data year
California*	470	1	1697	0.28	Since late 1970's	Utilities	EEGA, 2006 consolidated data
PG&E*	316		752	0.42			EEGA, 2006, spend includes gas
SCE	120		834	0.14			EEGA, 2006
SDGE*	34		111	0.31			EEGA, 2006, spend includes gas
Illinois (Yr 4 - 2011)	258	2	1033	0.25	Year 4	Utilities (75%) and DCEO (25%)	
New York**	173	3	410	0.42	Since 1998	Third-Party (NYSERDA)	NYSERDA report, 2006
Massachusetts	104	4	312	0.33	Since 1984	Utilities	CT Evaluation, 2003 data
Texas	80	5	370	0.22	Since 2002	Utilities	ACEEE, Frontier Assoc., 2003-04 data, gross #'s
Connecticut	76	6	271	0.28	Since mid-1980's	Utilities, w/oversight from Energy Conservation Management Board	

*PG&E and SDGE Spend includes gas conservation programs

**New York program includes distributed generation, significant R&D and some gas programs



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Potential Impact With and Without Spending Cap (Statewide Impact) Illustrative Example



ComEd Energy Efficiency Plan Framework ComEd

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Objective: A portfolio that satisfies legislative requirements and ComEd objectives at lowest risk-adjusted cost

ComEd Objectives -

- Lay solid foundation for energy efficiency programs going forward
- Take into account the views / opinions of local stakeholders and national energy efficiency leaders in the planning process
- Develop a diverse portfolio of programs that minimizes portfolio risk while offering numerous energy efficiency opportunities across all customer groups
- Build a portfolio that attempts to offer programs across customer classes in a way that approaches the customer class cost recovery allocation (I.e., fairness & equitable)
- Conduct planning, implementation & evaluation processes that are transparent to all stakeholders
- Create enhanced value for customers
- Lay the groundwork for demand-side innovation

ComEd Energy Efficiency Goals



For the first three years, the MWh target increases from 0.2% in 2008, 0.4% in 2009 to 0.6% in 2010.

- Correspondingly, the maximum expenditures are capped at a percentage of the previous year's estimated total bill, from 0.5% in 2008, 1.0% in 2009 to 1.5% in 2010.
- The table below shows ComEd's three year numbers related to the cap and the

goals

		2008		2009		2010	
Spending Limit Projections (\$ millions)	\$	36.8	\$	85.4	\$	135.3	
MWH Goals		188,729		393,691		584,077	
Avg. Spending Limit to Obtain MWH Goal (\$/MWH)	\$	194.99	\$	216.92	\$	231.65	
Projected Energy Delivered (MWH)		4,364,626	9	5,922,777	g	7,346,119	
Estimated Charge to Recover Spending Limit (\$ / kWh)	\$	0.00039	\$	0.00089	\$	0.00139	

* - The year is defined as June – May (not the calendar year)

The first year will be a challenge as MWHs will need to be obtained at a low cost to meet the annual target, while still building the necessary infrastructure to deliver the annual targets in future years.

ComEd Demand Response (DR) Goals



In terms of Demand Response, the legislation requires the offering of Demand Response programs representing 0.1% of

"eligible customers" prior year's peak demand for 10 years

- The current plan is to meet the demand response goal by expanding the Nature First Program.
- The table below shows one approach to meet ComEd's current three year projection related to the Demand Response goal
- The DR goals decreases over time due to competitive declaration, which results in switching within the eligible customer class

	Demand Response Goal (MW)	No. of New Participants
2008	11.7	8700
2009	11.1	7700
2010	10.5	6900

Planning Process



- EE Measures Analysis
 - Develop measure database using California's Database for Energy Efficiency Resources (DEER)
 - Weather-sensitive measures requires DOE-2 building simulation analysis
 - Non-weather-sensitive measures
 - IL legislation does not allow for inclusion of gas savings for any measures
 - Screen Individual Measures within various customer classes and/or building types for Cost-Effectiveness
- Programs Analysis
 - Measure bundling for cost-effective programs
 - Assemble Program Data (e.g., administration costs, marketing costs, penetration rates, net-to-gross ratio)
 - Screen Programs for Cost-Effectiveness
- Portfolio Design
 - Develop program launch schedule over three year plan
 - Develop contingency plans and scenario / risk analysis

Overview of Stakeholder Meetings



- Began designing Stakeholder Input Process in Summer 2007
- First Stakeholder Meeting August 28
 - Obtain initial feedback on Program Development Process
 - Environmental Advocates, ICC Staff, AG's Office
 - Issues Discussed: Ability to use Gas in TRC Test and kwh savings, Measurement and Evaluation, Definitions
- National Experts Meeting September 13
 - EE Experts responded to same series of Questions
 - Issues Discussed: Program Planning, Program Budgets, EM&V, Experiences of other Utilities and States
- Regional Stakeholder Meetings September 19 and 20
 - Reviewed progress on EE program development and TRC results
 - Included larger Stakeholder Group
- Regional Stakeholder Meetings October 16 and 17
 - Review progress of EE and DR Program Development
 - Solicit Input from Broader Stakeholder Group
- File Portfolio with Illinois Commerce Commission November 15

Program Analysis



From the measures analysis, ComEd has bundled various costeffective measures into programs for modeling

- This process is being viewed as an *evolution* with the first step being to establish the foundation of energy efficiency programs
 - The initial programs are more basic in approach starting with the "low hanging fruit" that can obtain sizable number of kWhs in a short period (e..g, CFLs)
 - With the foundation in place, more complex program ideas e.g., the integration of EE / DR / smart grids can be introduced into the portfolio over time
- The programs will be bundled into offerings that make sense to customers and that will evolve over time with new services
 - For Example, all C&I programs could be bundled under a "Commercial Solutions" program such that customers do not need to be aware of all the programs, but have a "one-stop destination" to determine what energy efficiency opportunities are available



Portfolio Programs



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Residential Programs

- Residential Lighting Program*
- Appliance Recycling Program*
- Residential Multi-family "All Electric Sweep Program
- HVAC Diagnostics & Tune-Up
 Program
- Energy Star Performance for Single Family Homes Program
- Residential Advance Lighting
 Package Program
- Residential New HVAC Program

C&I Programs

- C&I Prescriptive Program*
- C&I Custom Program*
- Small C&I CFL Intro Kit Program*
- C&I Retrocommissioning Program
- C&I New Construction Program

* As currently designed, these 5 programs are projected to produce 90% of the 1st year goal