

Illinois Sustainable Energy Plan: *Energy Efficiency Portfolio Standard*



ILLINOIS DEPARTMENT OF COMMERCE AND ECONOMIC OPPORTUNITY
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Illinois Sustainable Energy Plan

Per Gov. Blagojevich's 2005 State of the State Proposal

Key Components Include:

- Energy Efficiency Portfolio Standard
- Renewable Portfolio Standard
- Competitive procurement
- Full cost recovery
- Independent program evaluation
- Illinois Sustainable Energy Advisory Council

Illinois Sustainable Energy Plan

Per Gov. Blagojevich's 2005 State of the State Proposal

Goals:

- Reduce total energy costs for consumers
- Reduce the cost of doing business in Illinois by reducing total energy costs for businesses
- Capture economic development benefits of renewable energy and energy efficiency development
- Increase in-state self-reliance for energy
- Improve environmental quality in Illinois

Illinois Sustainable Energy Plan

Per Gov. Blagojevich's 2005 State of the State Proposal

Efficiency investments bring real cost reductions for all customers:

*“...investments in energy efficiency (and load management) are not only beneficial to those consumers who use the technologies, they also lower the wholesale market prices paid by **all** consumers...the ability to reduce peak demand reduces the power costs paid to every unit running at the time of the peak.”*

- Per Regulatory Assistance Project, *Efficient Reliability*, Cowart, page 65.

Illinois Sustainable Energy Plan

ICC recognized benefits of efficiency in Nicor case:

“...the Commission understands the importance and critical necessity of using energy efficiency plans as strategic tools to protect Illinois consumers and reduce their energy costs. Indeed, this Commission has begun to address other aspects of this issue in the Illinois Sustainable Energy Plan. We believe that smart energy efficiency programs will have two effects. First they will lower the cost of heating the home or business participating in the program. Second, targeted correctly, they will reduce the amount of high cost natural gas that Illinois has to buy, thus reducing everyone’s costs, as well.”

- docket 04-0779 (page 192):

Energy Efficiency Portfolio Standard

Per Gov. Blagojevich's 2005 State of the State Proposal

- Utilities and alternative retail energy suppliers (ARES) to procure energy efficiency & demand reduction to reduce projected annual load growth by:

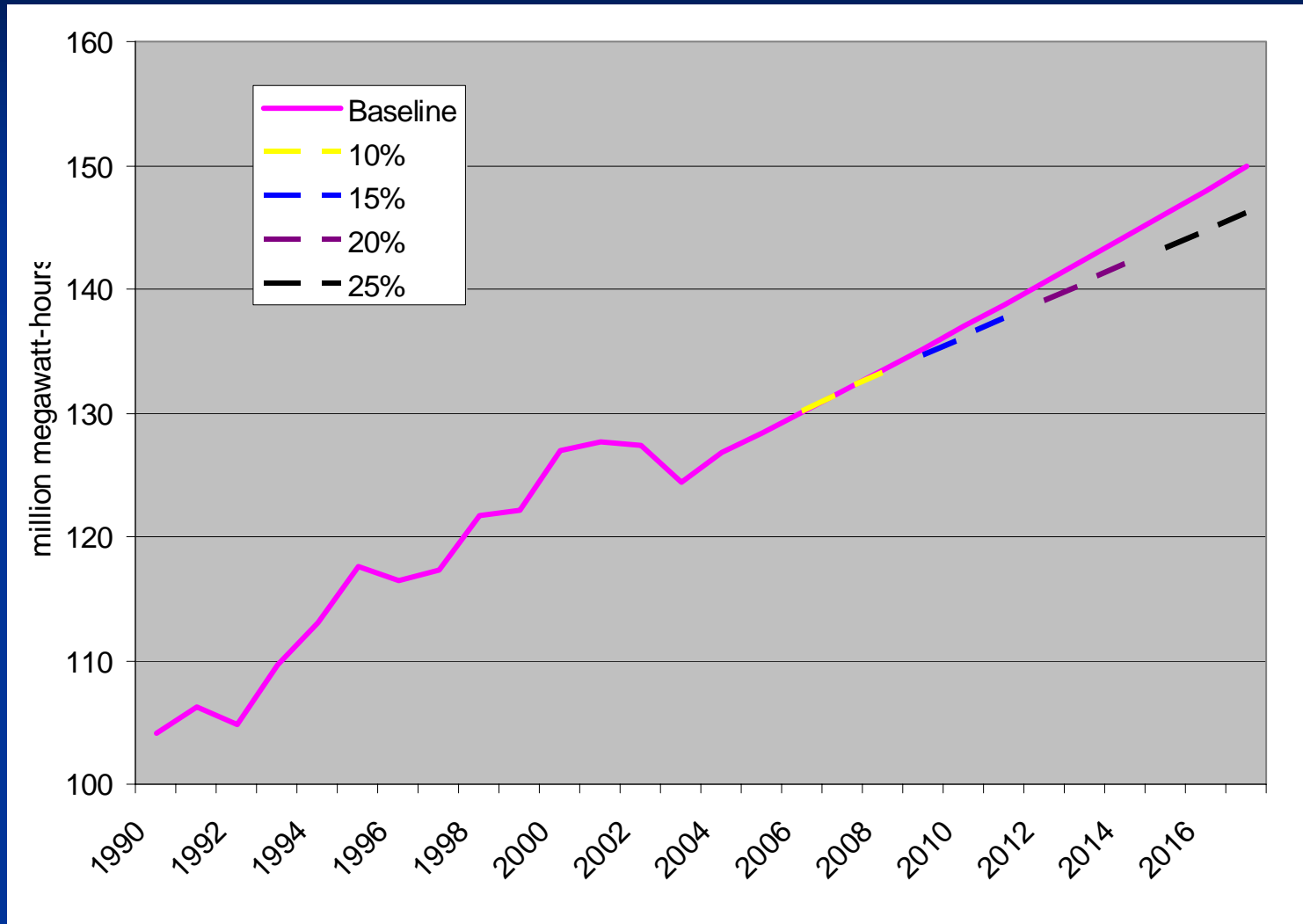
10% in 2006-2008

15% in 2009-2011

20% in 2012-2014

25% in 2015-2017

Baseline vs. EE Portfolio Standard



Source: Historical data from ICC, *Comparison of Electric Sales*; forecast from ERC-UIC, *The Economic Environmental Impacts of Clean Energy Development in Illinois*, June 2005 based in on EIA data and forecasts.

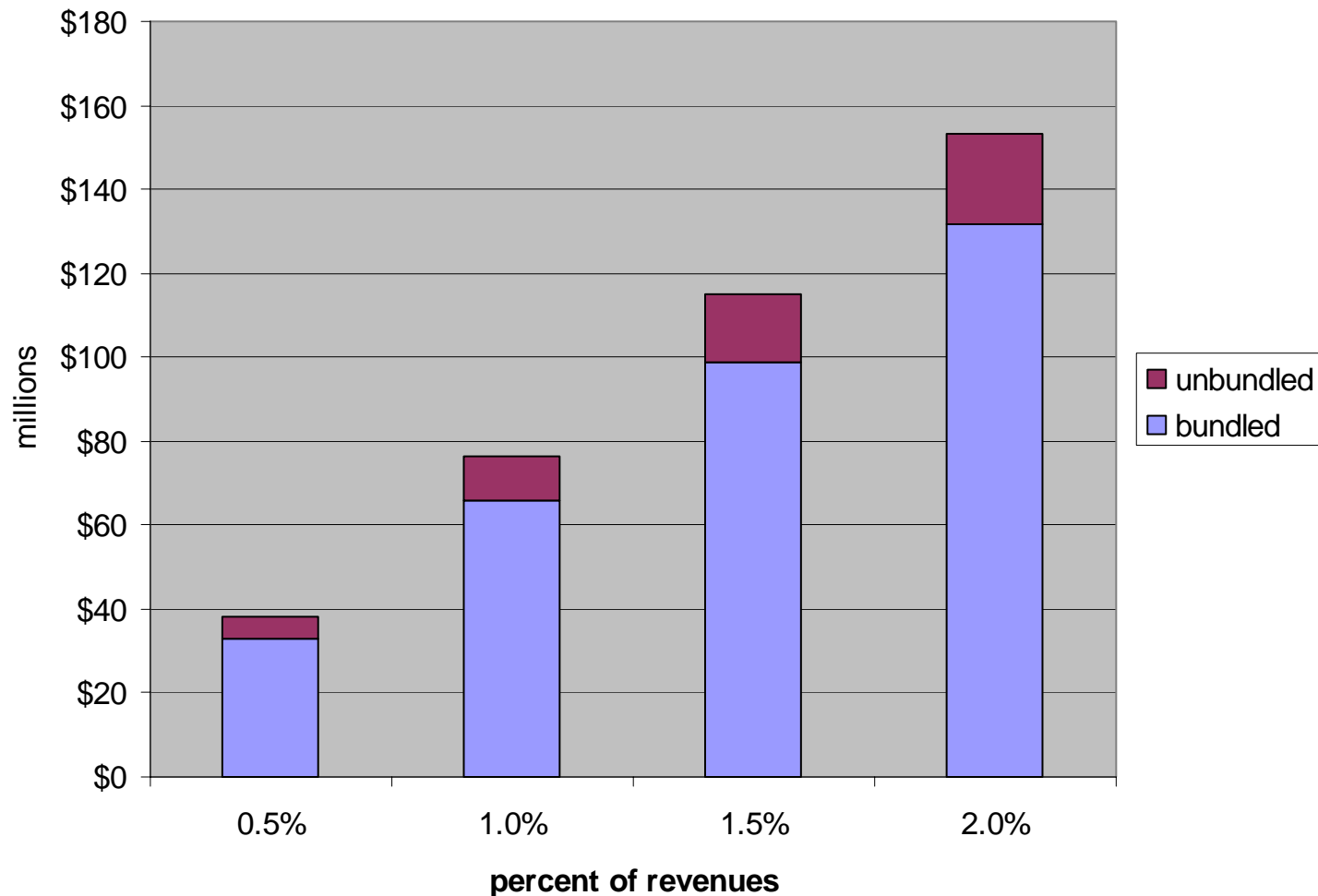
ICC Staff Report: Key Issues

- Accepted Governor's EEPS size/schedule but postponed the start of the program until 2007
- Rate impact cap of 0.5% increase per year
- Voluntary participation of electric utilities and alternative retail electric providers (ARES)
- Arms-length transactions – all energy efficiency should be secured through auctions or RFPs managed by independent third parties
- After-the-fact review limited to mismanagement or improper execution of programs

ICC Staff Report – Rate Test

- Adopt rate impact test of 0.5% increase per year, 2% cumulative
- Applied to before-the-fact expected costs
- Computed separately for each rate class, based on typical energy bills
- Annual/biannual reports showing current & planned levels of energy efficiency & demand response & comparing performance to targets

Potential EEPS Budget Per ICC Staff Rate Impact Test



Source: Illinois Sustainable Energy Initiative, ICC Staff Report, July 7, 2005

Customer Costs by Class

Revenue/customer	Avg. Monthly Bill	1/2 %	2%
Residential	\$59	\$0.30	\$1.18
Commercial bundled	\$413	\$2	\$8
Commercial DS-PPO	\$2,683	\$13	\$54
Commercial DS-RES	\$950	\$5	\$19
Industrial bundled	\$34,211	\$171	\$684
Industrial DS-PPO	\$61,266	\$306	\$1,225
Industrial DS-RES	\$19,776	\$99	\$396

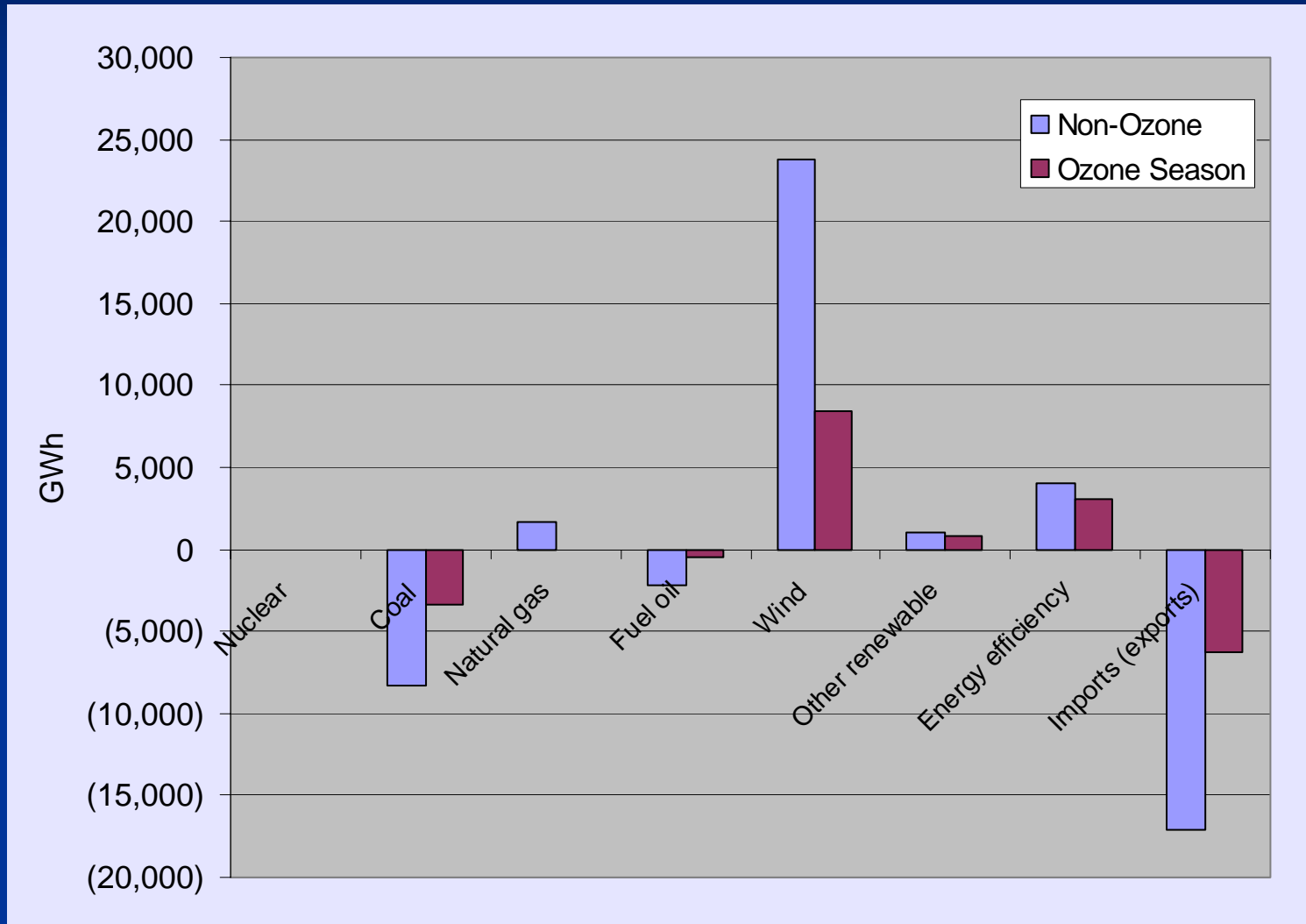
Data is based on ICC, *Comparison of Electric Sales Statistics for Calendar Years 2004 and 2005*

Achievable Efficiency Targets

- Several studies show that the efficiency targets are readily achievable.

<i>Study</i>	<i>Dates</i>	<i>Reduction in projected load</i>	<i>Reduction in projected growth</i>
U of I-ERC	2006-2020	16%	98%
ACEEE	1999-2015	43%	113%
ELPC	2000-2010	16%	84%
ELPC	2000-2020	28%	63%

Change in Illinois Generation, 2007-2013



Preliminary Results:

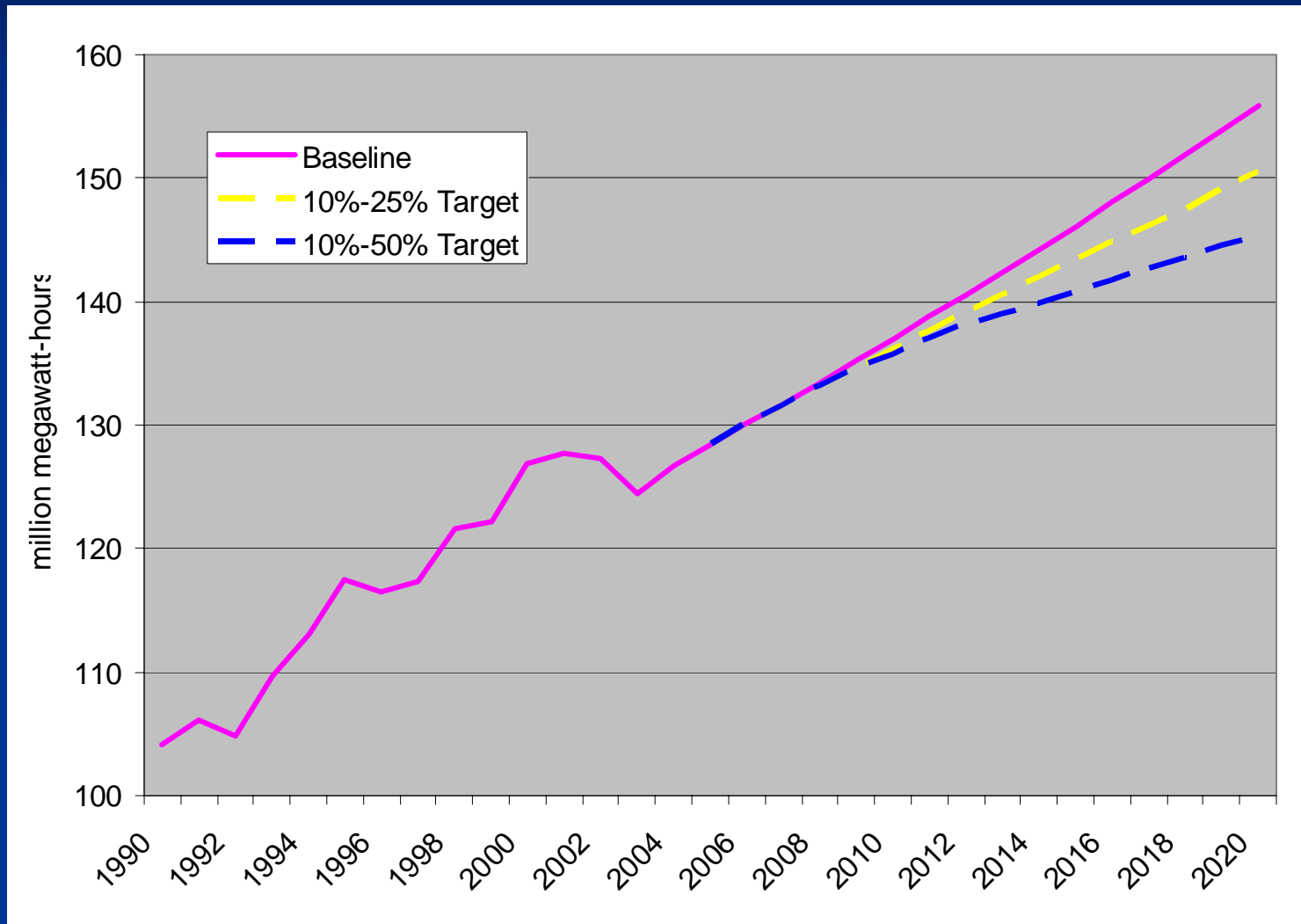
Environmental Benefits

- Illinois Sustainable Energy Plan will contribute in a modest way to ozone attainment both in Illinois and across the eastern US.
- The reductions in NO_x are greater in the non-ozone season, but the Illinois RPS/EEPS brings some ozone season benefits.
- Less than half of NO_x reductions occur in Illinois, the rest in other states, since Illinois generators are generally low-cost producers and increase electricity exports.
- >Half of the generation displaced out-of-state is up wind of Illinois, thus also contributing toward ozone attainment in the state.
- Coal, which has the highest NO_x emission rate, is the primary fuel displaced, along with some oil and natural gas (out-of-state).

DCEO Recommendations

- EEPS should be mandatory
- Scale of EEPS should be increased and schedule accelerated
- EEPS should apply to ARES
- Hybrid administration approach by both utility contractors and DCEO
- Full cost recovery
- Independent program evaluation

Comparison of Schedules



DCEO Recommendation: Administration – Utilities

Market-based acquisition of Energy Efficiency Resources:

- Commercial and Industrial Standard Offer Programs
 - Such as procurement of guaranteed energy reductions through Energy Service Companies
- Residential Lighting and Appliance Programs
 - Such as programs run by the Midwest Energy Efficiency Alliance
- Primary (but not exclusive) focus on peak efficiency programs to ensure net benefits for all customers

Program Design – DCEO Role

- **Support market transformation** to ensure availability of wide range of energy efficient products and practices
- **Target hard to reach customers:**
 - Capital-poor
 - Removed from price signals (tenants, new construction, etc)
- **Provide education and critical technical information** to residential, commercial, and industrial consumers and building and energy professionals.
- **Coordinate monitoring and evaluation** of load impacts, and economic and environmental impacts, to measure progress with Sustainable Energy Plan goals.

DCEO EE Programs

- Commercial: Small Business Smart Energy (SBSE) design assistance program
- Industrial: Manufacturing Energy Efficiency Program identifies cost-effective energy efficiency improvements
- Residential: Home Performance with ENERGY STAR
- Low Income: Energy Efficient Affordable Housing Construction Program
- Training: building operator certification, commercial building code, 2006 code update, residential code

Utility Recommendations

- Accountability – clear responsibility
- Voluntary
- Direct administration
- Evaluation – 5% of budget
- Sufficient time to implement/phase in programs
- Rate impact concerns

Future

- Without a legislative mandate, or even a draft rule, progress has been slow
- Three “workshops” on “best practices”
- Report to ALJ on existing programs by end of month
- AG to draft rule for consideration of parties by mid-November