



# ActOnEnergy for Business

Lance Escue, SAIC

Energy Education Council

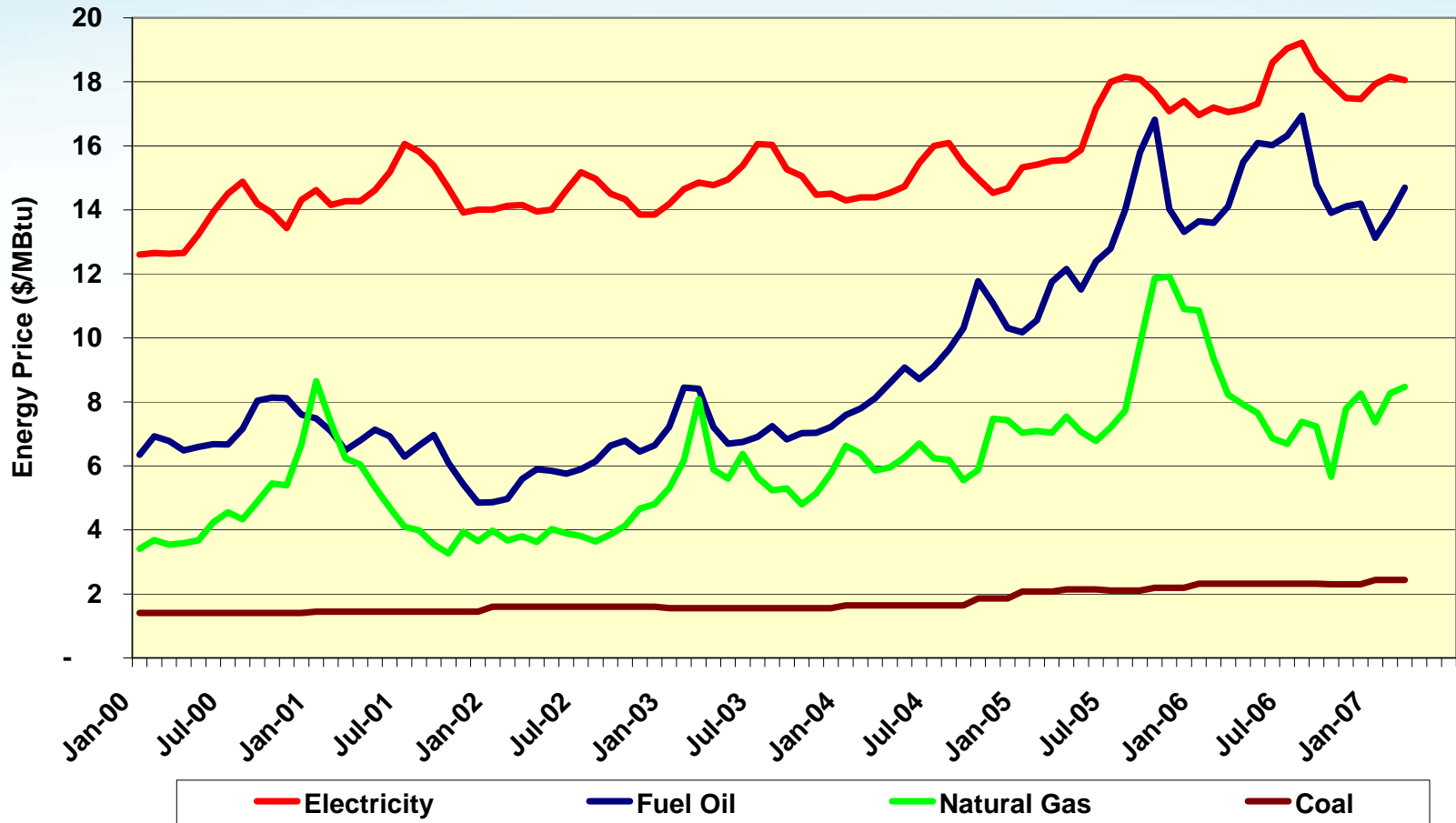
Energy Solutions Workshops

Sept. 9 – 11, 2008

# Presentation Overview

- Program Purpose
- Program Incentives
  - Standard
  - Lighting Incentive Application review
  - Custom
- Program Allies
- Program Technical Support

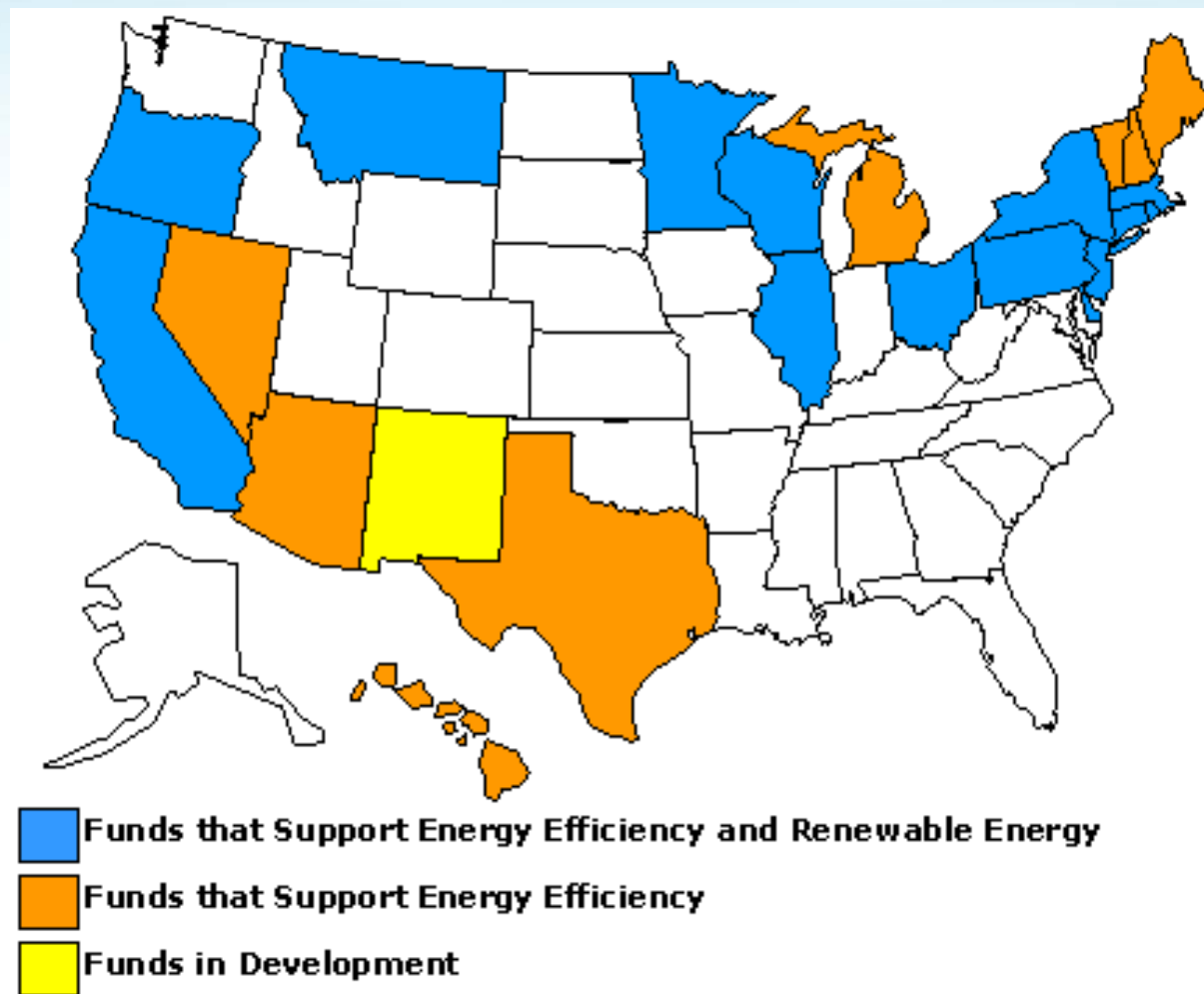
# Increased Energy Prices and Volatility



# Illinois Energy Efficiency Programs

- In 2007 the Public Utilities Act was modified to require Ameren Illinois Utilities and ComEd to develop **electric** Energy Efficiency program plans for non-public customers
- The Department of Commerce and Economic Opportunity (**DCEO**) was also required to develop plans for all **public organizations** in Ameren Illinois Utilities and ComEd service territories – public schools, state/municipal buildings, etc.

# Similar Programs to Act on Energy



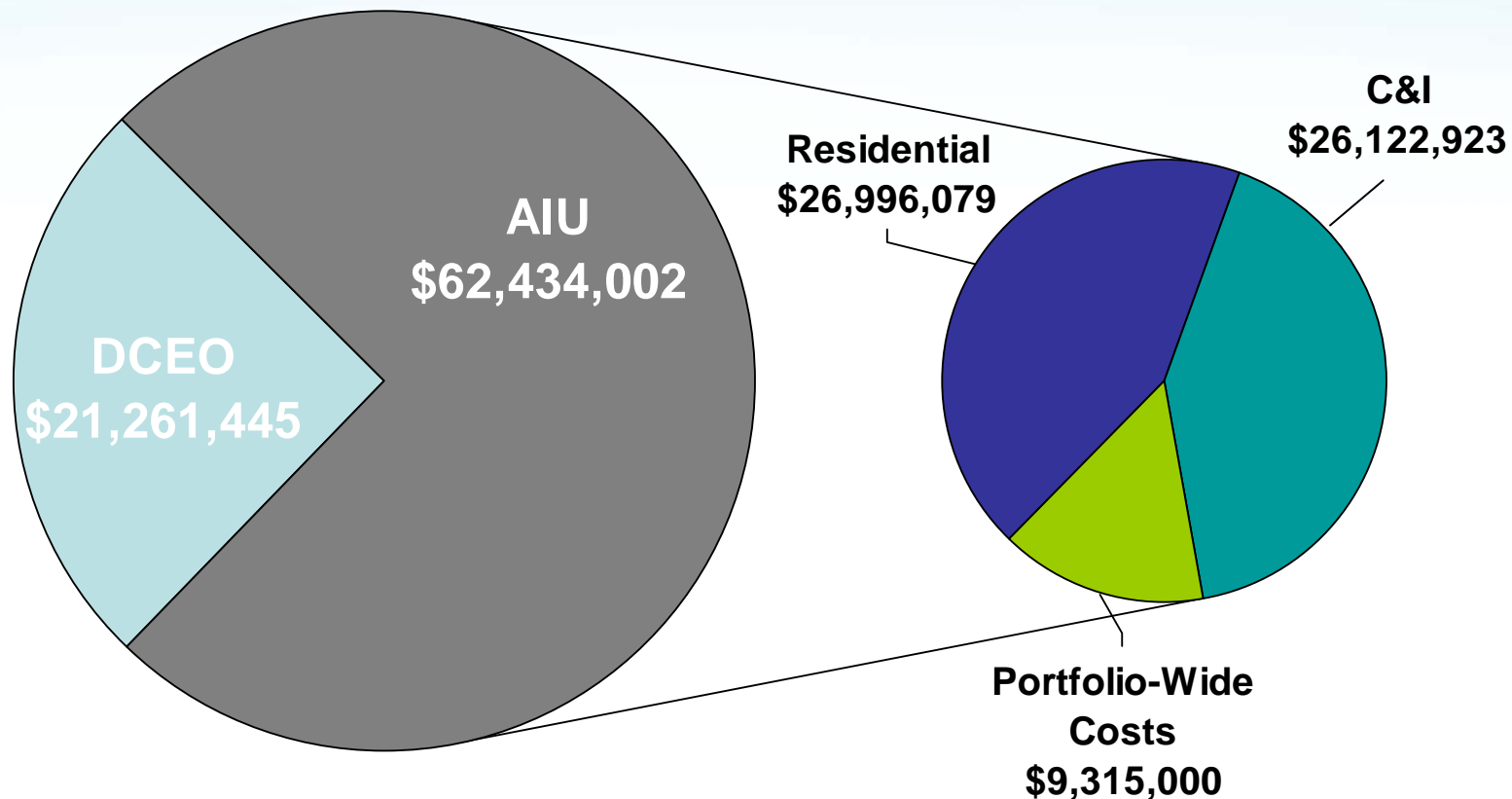
# Charges on Customer's Bill

- Charges to pay for the program will be listed on customer's bills starting June 1, 2008.
- These charges will appear on the customers bill as:

## “Rider EDR Charge”

- Actual charges (Rider EDR Charge) on customers bills:
  - DS-1 : \$0.00037859 per kWh
  - DS-2, DS-3, DS-5: \$0.00056297 per kWh
  - DS-4: \$0.00021316 per kWh

# Overall 3-year Funding: Electric



# Act on Energy Business Program Incentive Budgets and Goals

	Incentive Budget (million)	MWH Goal	Lifetime savings (million)	Reduced future power plant costs (million)
Year 1	\$3.0	48,765	\$47	\$33
Year 2	\$7.0	111,579	\$107	\$75
Year 3	\$10.7	164,584	\$158	\$111

# Business Programs

## Current Programs:

- Standard Incentives
- Custom Incentives

## Future Programs:

- Retro-Commissioning
- Street Lighting
- Demand Credit
- New Construction

# Business Programs

- Great interest in standard and custom programs since program roll-out June 23, 2008
- Anticipating greater interest in program year 2 when budget doubles
- Approximately 76% of program year one incentive budget applied for (as of September 1, 2008)
- Program year one applications still being accepted

Program Year 1: 6-23-08 thru 5-31-09

Program Year 2: 6-01-09 thru 5-31-10

# Standard Incentives – Lighting

- Lighting Systems
  - Incandescent replacements
  - Linear fluorescent and occupancy sensors
  - Pulse start metal halides
- Incentives by lamp types and fixture types
- Pre-approval required for total incentive >\$25,000 and for special measures

# Standard Incentives – Lighting Example

- T8 fluorescent lighting replacing HID
  - 400 watt HID – 455 watts
  - 6 lamp T8 fixture – 235 watts
  - Saving 220 watts per fixture
  - At 4000 hours per year – 880 kWh saved
  - At \$0.07 per kWh - \$62 saved
- Fixture costs \$180 – payback **2.9 years**
- Incentive from Act On Energy is **\$88**
- Final payback is **1.5 years!**
- **\$660 reduction in future power plant costs for everyone!**

# Standard Incentives – HVAC

- **Efficient HVAC**
  - Water and air-cooled chillers
  - Room air-conditioners
  - Packaged terminal AC units

# Standard Incentives – Motors

- Premium Efficiency Motors
  - NEMA Efficiency Standards
  - Covers most common motors

# Standard Incentives – Refrigeration

- Refrigeration
  - Walk-in chillers and freezers
  - Anti-sweat heater control
  - Evaporator fan controls
  - Ice makers

# Standard Incentive Process

- Pre-approval highly recommended
  - Ensure project eligibility
  - Ensure funds still available
  - >\$25,000 incentives pre-approval required
- Invoice and project specification sent in with form after project completed (within 60 days)
- Customer (or ally) paid in 6 to 8 weeks

# Custom Incentives

Custom Incentives	
Energy Savings Incentive	\$0.05/kWh
Minimum Payback	1.5 years
Maximum Payback Period	7 years

# Custom Incentives

- Cap of \$100,000 per facility per year
- Project cap at 50% of incremental or retrofit cost
- Standard incentive measures not eligible

# Custom Incentive Process

- Approval needed before project decision is made
- Project savings calculations and documentation needed
- Each application reviewed and approved by Ameren Illinois Utilities
- Incentive >\$25,000 will need customer signature indicating need for incentive to move project

# Custom Incentive Example

- VFD on pump
  - 100 HP pump (80 kW at full load)
  - VFD saves 20 kW on average over 4000 hours
  - Total savings is 80,000 kWh
  - At \$0.07 per kWh - \$5,600 saved
- VFD costs \$15,000 – payback **2.7 years**
- Incentive from Act On Energy is:
  - $\$0.05 * 80,000 \text{ kwh} = \$4,000$
- Final payback is **2.0 years!**
- **\$60,000 reduction in future power plant costs for everyone!**

# Program Technical Support

- Provide ideas on how to reduce energy use
- Tools to help you manage energy use – PEM
- Link with DCEO tools and training
- Best practice fact sheets on common systems
- Case studies on successful projects
- Timely information on Emerging Technologies

# Multiple Benefits of Energy Efficiency

## 1. Reduces energy costs for facility

Typical facilities can save 10 to 20% of energy use with best practices.

## 2. Reduces environmental impact of energy use

Increasing efficiency is by far the most cost effective solution

## 3. Reduces future rate increases

Energy Efficiency < \$500 per kW while it costs >\$2,000 per kW for new power plants

# Be a Hero

- It is not often that you can save money at your own facility while being a hero and helping us all:
  - Reduce the environmental impact of energy production and use
  - Reduce the need for new power plants keeping everyone's rates lower in the future

# We are all in this together

- Intent of the program funds is to stretch customers to do MORE than they would without the program
- Only way to achieve the benefits of the program, including reducing your future electric rate increases, is to influence your decisions
- We are all stewards of this money – so use the program to stretch, saving more money at your facility while also being a part of the overall solution

# Program information

- Website: [www.ActOnEnergy.net](http://www.ActOnEnergy.net)
- Phone: **866-800-0747**
- Email: [ActOnEnergy@ameren.com](mailto:ActOnEnergy@ameren.com)
- Fax: **309-677-7950**

# Questions?