Outlook

- Fossil fuel prices are highly volatile and unpredictable
- Since the beginning of 2005 U.S. energy prices have been progressively increasing
- Higher energy costs have significantly curbed economic growth as energy costs were at least $\frac{1}{2}$ trillion higher than expected
- The global economic recession has depressed energy prices in the near term
- Carbon Constraints are more likely than ever before
- All predictions of forward energy curves show that long term new highs are inevitable
Illinois
Energy Context
Illinois Energy Context

Illinois has an abundant supply of electric capacity (45,000 megawatts) and produces 190 billion kilowatts per year at 61 facilities

- **Nuclear**
  - Illinois is the nation's leader in the production of nuclear power, generating approximately 90.9 billion kilowatt hours with 11 nuclear units
  - In recent years, approximately half (49 percent) of the electricity sold by utilities and alternative retail electric power suppliers in Illinois have been generated by nuclear facilities

- **Coal**
  - Coal underlies 37,000 square miles of Illinois – about 65% of the state's surface
  - Recoverable coal reserves account for almost 1/8 of total US reserves and account for more BTUs than the oil reserves of Saudi Arabia and Kuwait
  - 47 percent of Illinois' electricity is generated by coal-fired facilities located throughout the state

- **Alternative Energy**

Source: http://business.illinois.gov/io_energy.cfm
National Energy Context: Expectations

- Increasing energy demand with continued dependence on imported energy sources
- Rising fossil fuel prices that will significantly impact electricity and natural gas rates
- Electricity deregulation
- Transmission constraints, increasing cost of new transmission and aging distribution systems
Illinois Energy History
Illinois Energy History

- 1997
  - Electric Restructuring

- 2007
  - Illinois Power Agency
  - Renewable Portfolio Standard
  - Electric Efficiency Portfolio Standard
Illinois Energy Policy
2009 to Present

- Natural Gas Efficiency Portfolio
- RPS extended to ARES
- High Impact Business designation for Wind Farms
- Extended standardized property tax valuation regime for Wind Farms
- Long Term Power Purchase Agreements for Renewable Generation
- Smart Grid
Carbon Dioxide Emission Reductions (million metric tons)

2007

2009

Legend:
- EEPS-natural gas
- EEPS-electric
- Renewable Portfolio Standard
Public Benefit Funding for Energy Efficiency as a Percent of Utility Revenues

Source: American Council for an Energy-Efficient Economy, September 2007
Public Investment

- Illinois Energy Efficiency Portfolio Standard
- American Recovery and Reinvestment Act
- Illinois Funded Programs
  - Renewable Energy
  - Biofuels
  - Efficiency
  - Recycling
- Illinois Capital Bill

\[ \text{GDP} = C + B + I + G \]
Economic Benefits

• Renewable Energy
  ▪ Direct Benefits
    • $ Invested in Renewable Industry facilities in IL
    • 1 MW of installed wind capacity = $1.7 M investment
    • Significant contribution to the local tax base
  ▪ Indirect Benefits
    • Hedge against fossil fuel price volatility
    • Increased fuel diversity
    • Downward pressure on energy prices
    • Further savings linked to environmental externalities

• Energy Efficiency
  ▪ Direct Benefits
    • Each $1 spent on EE saves $2-4
    • EE Contractors market
  ▪ Indirect Benefits
    • Downward pressure on energy prices
    • Consumers have more $ to spend in the economy
    • Increased jobs to meet economic stimulation
    • Further savings linked to environmental externalities
the Future
Illinois Today

- Illinois is a leader in new alternative energy development and production
- Illinois has reached an alternative energy and energy efficiency tipping point – the rate of development and utilization is and continue to increase dramatically
- Illinois is committed to Global environmental sustainability and stewardship
Illinois Goals

• Diversify Illinois generation to reduce dependence on fossil fuels
• Hedge a portion of energy consumption against likely future fossil fuel price volatility
• Provide Illinois consumers with tools to use energy smarter and more efficiently
• View renewables and efficiency as valuable resources to mitigate higher energy costs and deliver both economic and environmental benefits
Illinois Tomorrow

- Diversify Illinois generation to reduce dependence on fossil fuels
- Hedge a portion of energy consumption against likely future fossil fuel price volatility
- Provide Illinois consumers with tools to use energy smarter and more efficiently
- View renewables and efficiency as valuable resources to mitigate higher energy costs and deliver both economic and environmental benefits
Illinois Challenges

• Aging Coal Fleet
• Renewables
  • RPS
  • Production Tax Credit
  • Natural Gas Prices – “Marginal Fuel”
• Smart Grid
• Net Metering
• Distributed Generation
Thank You