

MINUTES OF THE HOUSE ENERGY AND UTILITIES COMMITTEE

The meeting was called to order by Chairman Carl Holmes at 9:15 A.M. on March 18, 2008 in Room 783 of the Docking State Office Building.

All members were present.

Committee staff present:

Mary Galligan, Kansas Legislative Research
Carol Toland, Kansas Legislative Research
Melissa Doeblin, Revisor's Office
Rena Hansen, Committee Administrative Assistant

Conferees appearing before the committee:

David Owens, Executive Vice President, Edison Electric Institute
Caren Byrd, Executive Director, Morgan Stanley

Others attending:

Forty six including the attached list.

Discussion on:

SB 586-Incentives to encourage development of nuclear power by utilities and authorizing recovery of certain costs.

Representative Forrest Knox, (Attachment 1), spoke to the committee on a proposed amendment to **SB 586** noting that what we do now will affect our grandchildren and we need to get this correct.

Representative Forrest Knox moved to amend SB 586, (Attachment 1), seconded by Representative Bill Light.

Discussion ensued between Representatives: Forrest Knox, Tom Sloan, Josh Svaty, Annie Kuether, and Terry McLachlan.

Motion to amend carried 12-4.

Melissa Doeblin, Revisors Office noted a technical error on line 20 page 1, removal of the coma before the strike out.

The chairman allowed the staff to make said changes.

Discussion continued by Representative Tom Sloan.

Representative Tom Sloan moved to amend SB 586, adding language that would "Upon application of a utility the KCC may provide an expediated ruling on the prudence of major expenditures proposed to acquire equipment for a nuclear generation plant, including monies expended to acquire a containment vessel. Seconded by Representative Dan Johnson.

Discussion on the motion ensued between Representatives: Vern Swanson, Tom Sloan, Josh Svaty, Tom Hawk, and Vaughn Flora.

Representative Sloan closed on the motion to amend.

CONTINUATION SHEET

MINUTES OF THE House Energy and Utilities Committee at 9:15 A.M. on March 18, 2008 in Room 783 of the Docking State Office Building.

Motion to amend fails 6-9.

Representative Joshua Svaty moved to amend the energy efficiency bill **HB 2632** into **SB 586**, seconded by Representative Rob Olson.

Discussion ensued by Representatives: Don Myers, Josh Svaty, Rob Olson, and Annie Kuether.

Motion to amend passed,

Representative Tom Sloan moved to amend **SB 586** adding the words “upon application of a utility the KCC will consider any single projected expenditure over 20 million dollars to start a project”, seconded by Representative Dan Johnson.

Discussion ensued between Representatives: Don Myers, Tom Sloan, and Forrest Knox.

Motion to amend failed, 6-7.

Chairman Holmes suspended the debate on **SB 586** until Thursday.

Senate Utilities Chairman Jay Emler, convened a joint House and Senate committee meeting.

Presentation by:

David Owens, Executive Vice President of Business Operations, Edison Electric Institute spoke to the committee on, “Current National Issues Affecting the Electric Utility Industry”, (Attachment 2). He noted that we are entering into an interesting time period in our nation economically. He noted our energy demand is increasing because of the increase in population but more importantly the increase in use of electronic equipment. Additionally, our transmission lines are getting older. The average age of transmission lines nationwide is about 27 years. He noted that the price of copper alone from 2003-2006 has increased 400% and that is just one part of the piece. The addition of other nations into the industrialized world that were formerly third world countries is putting a strain world wide on the resources needed to industrialize. We are in a rising cost and price environment that are clearly out of our control.

He also spoke to the Committee on green house gas emissions. He noted 6 solutions that need to be looked at to help slow green house gas emissions 1. Renewables 2. Energy Efficiency 3. Clean coal technologies 4. Carbon capture and storage. 5. New Nuclear Energy Production, and 6. Plug-in hybrid electric vehicles. He noted the lowest hanging fruit to help change the course of green house gas emissions are to highly promote energy efficiency.

Whatever we do will be very expensive, but we should not be concerned only with the cost, but with involving all potential solutions to the problem. Furthermore, all major countries and industrial areas need to be involved with finding the solution to the green house gas problem.

In summary he noted there are four significant problems, and how we deal with them will determine if we are in a situation of solution or of chaos.

1. Energy Supply margins are declining and demand is increasing
2. No longer a declining cost industry
3. Aging workforce increasingly an important problem
4. Increasing concerns about the environment

CONTINUATION SHEET

MINUTES OF THE House Energy and Utilities Committee at 9:15 A.M. on March 18, 2008 in Room 783 of the Docking State Office Building.

Finally, he commented that this is a global issue that requires the involvement of all countries and all new technologies and technological advancements. He noted that energy infrastructure security legislation will be necessary. It was noted that the Federal Administration stated that energy efficiency will have to be incorporated into a smart grid with more real time comprehensive and instantaneous information. A board needs to be set up to develop a comprehensive plan. Mr. Coles noted some of the issues that Europe has had with their energy emission solutions and we need to look at their mistakes so that we don't repeat them. Additionally, as we look at carbon emission solutions we need to be investing and accumulating funds that can go into technological advancement for the future. He noted that he believes that the Nuclear Regulatory Commission will choose three designs for new nuclear power plants and that there will be investment by collective groups.

Questions were asked and comments made by: Senator Roger Reitz, Senator Janis Lee, Representative Tom Sloan, and Representative Vern Swanson.

Caren Byrd, Executive Director-Investment Banking Division, Morgan Stanley, spoke to the joint committee on , "The Investor Outlook for the Electric Utility Industry", ([Attachment 3](#)).

From the investor point of view, capitol requirements over the next 15 years is needed to double the United States' existing electric capacity, generation, distribution, transmission, conservation, and efficiency. We will spend about 900 billion dollars over the next 15 years, or 60 billion dollars a year. She noted that as a nation we will require 50 - 100 % more needed capitol investment from the capitol markets. For investment to take place, the utility companies need at least a BBB (triple B) financial rating. Big rate increases will be necessary across the board for this needed expansion to take place. Ms Byrd also noted that there are many pending rate increase cases nationwide. She noted that over the next 15 years the cost of electricity will double. Energy efficiency is being embraced across the nation but she commented that the rules need to be laid out so that the best dollar investment is made. Energy production will have to increase two-fold, and coal and nuclear will have to be part of that mix. The overall challenge for the future is the need for collaboration not confrontation for rate regulation and energy policy change. She also noted that one of the unexpected consequences of an RPS is the cost of transmission lines to get the renewable energy to the market areas.

Questions were asked and comments made by: Representative Annie Kuether, Senator Mark Taddiken, and Senator Janis Lee.

Westar also offered to the Committee a biographical business summary, ([Attachment 4](#)) for each of the presenters.

The next meeting is scheduled for March 19, 2008.

The meeting was adjourned at 10:31 a.m.

JOINT MEETING OF
 SENATE UTILITIES COMMITTEE
 AND
 HOUSE ENERGY & UTILITIES COMMITTEE

GUEST LIST
 DATE: MARCH 18, 2008

Name	Representing	Name	Representing
- David Sprung		Curb	
Steve Miller		Sunflower	
Lindsey Douglas		Hein Law Firm	
Maril Hazlett		CEP	
Tom Thompson		Sierra Club	
Carol McDowell		Tallgrass Ranchers	
Liz Brosius		KS Energy Council	
Will Lawrence		Capital Consulting Group	
Doug Smith		Pnege, Smith & Associates	
Steve Johnson		ONEOK, Inc.	
Rick Greenwood		LABORER'S LOCAL 1290	

JOINT MEETING OF
 SENATE UTILITIES COMMITTEE
 AND
 HOUSE ENERGY & UTILITIES COMMITTEE

GUEST LIST
 DATE: MARCH 18, 2008

Name	Representing	Name	Representing
Joe Duke	KCBPU		
Wes Ashton	Aquila		
Tom Day	KCC		
Shirley Akre	KDHE		
Mick Urban	KGS		
Stacey Harden	CURB		
Patricia Waco	KEPL		
Lindsey Douglas	Heinlaw Firm		
Dan Holcomb	KEC		
Kimberly Linder	KMU		
John C. Batten	Westar		
Paul Johnson	KS Cath Conf		

SENATE BILL No. 586

By Committee on Utilities

2-11

10 AN ACT concerning the state corporation commission; relating to nu-
11 clear generation facilities; concerning recovery of certain costs; amend-
12 ing K.S.A. 2007 Supp. 66-128 and repealing the existing section.
13

14 *Be it enacted by the Legislature of the State of Kansas:*

15 New Section 1. On and after July 1, 2008, the state corporation com-
16 mission, upon application and request, shall authorize an electric utility
17 to recover the utility's prudent expenditures for ~~study and feasibility~~ costs
18 for a new nuclear generation facility by an adjustment to the utility's rates.
19 The application and request shall be subject to such procedures and con-
20 ditions, including review, ~~in an expedited manner~~, of the prudence of the
21 expenditures and the reasonableness of the measures, as the commission
22 deems appropriate.

23 New Sec. 2. An electric utility which receives on and after July 1,
24 2008, a license to operate a nuclear generation facility from the United
25 States nuclear regulatory commission shall be allowed to use a book de-
26 preciable remaining life of not more than the amount of time remaining
27 on the United States nuclear regulatory commission operating license of
28 such facility.

29 Sec. 3. K.S.A. 2007 Supp. 66-128 is hereby amended to read as fol-
30 lows: 66-128. (a) The state corporation commission shall determine the
31 reasonable value of all or whatever fraction or percentage of the property
32 of any common carrier or public utility governed by the provisions of this
33 act which property is used and required to be used in its services to the
34 public within the state of Kansas, whenever the commission deems the
35 ascertainment of such value necessary in order to enable the commission
36 to fix fair and reasonable rates, joint rates, tolls and charges. In making
37 such valuations the commission may avail itself of any reports, records or
38 other things available to the commission in the office of any national, state
39 or municipal officer or board.

40 (b) (1) For the purposes of this act, except as provided by subsection
41 (b)(2), property of any public utility which has not been completed and
42 dedicated to commercial service shall not be deemed to be used and
43 required to be used in the public utility's service to the public.

development costs, which include preliminary engineering, study,
feasibility, prepayments for major equipment and permitting

HOUSE ENERGY AND UTILITIES

DATE: 3/18/2008

ATTACHMENT 1-1

1 (2) Any public utility property described in subsection (b)(1) shall be
 2 deemed to be completed and dedicated to commercial service if: (A)
 3 Construction of the property will be commenced and completed in one
 4 year or less; (B) the property is an electric generation facility that converts
 5 wind, solar, biomass, landfill gas or any other renewable source of energy;
 6 (C) the property is an electric generation facility or addition to an electric
 7 generation facility, ~~which facility or addition to a facility is placed in service~~
 8 ~~on or after January 1, 2001;~~ or (D) the property is an electric trans-
 9 mission line, including all towers, poles and other necessary appurte-
 10 nances to such lines, which will be connected to an electric generation
 11 facility.

12 (3) ~~Electric generation facilities under the provisions of subsection~~
 13 ~~(b)(2)(C) or (b)(2)(D) shall not include facilities used in generating elec-~~
 14 ~~tricity by nuclear resources.~~

15 ~~(4)~~ Nothing in this subsection (b) shall be construed to preclude the
 16 state corporation commission, either on the commission's initiation of a
 17 docket or in a utility rate proceeding, from reviewing whether expendi-
 18 tures for public utility property were efficient and prudent.

19 (c) As used in this section, "electric transmission line" means any line
 20 or extension of a line with an operating voltage of 34.5 kilovolts or more
 21 which is at least five miles in length and which is used or to be used for
 22 the bulk transfer of electricity.

23 Sec. 4. K.S.A. 2007 Supp. 66-128 is hereby repealed.

24 Sec. 5. This act shall take effect and be in force from and after its
 25 publication in the statute book.

1-2

1-2



**EDISON ELECTRIC
INSTITUTE**

Key Electricity Issues

David K. Owens
Executive Vice President
Edison Electric Institute

Kansas State Legislature
March 2008

ENERGY AND HOUSE UTILITIES

DATE: 3/18/08

ATTACHMENT 2-1

Transformation or Chaos? The Challenge of Balancing Core Drivers

Enormous CapEx

\$750 -900 Billion
Exceeds current capitalization
Major new coal and nuclear and transmission

Rising Costs and Prices

No longer a declining cost industry
Fuel, infrastructure components,
global industrialization and competition

Climate Change

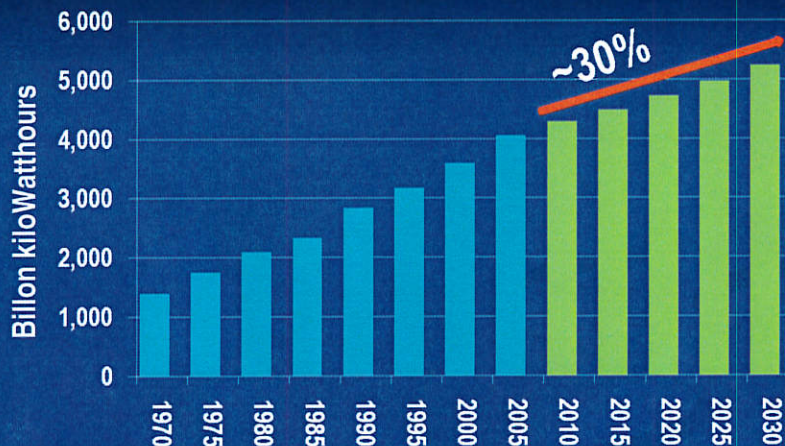
Dozen bills pending in Congress
States becoming aggressive
Role of Renewables
> \$1 Trillion ???

Energy Efficiency

Low hanging fruit for Climate Change
Need to make it a sustainable business
"Smart" appliance, buildings, grid



Demand Projected To Increase 30% by 2030



Sources: U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2006*
and *Annual Energy Outlook 2008 Early Release*
*Electricity demand projections based on expected growth between 2006-2030

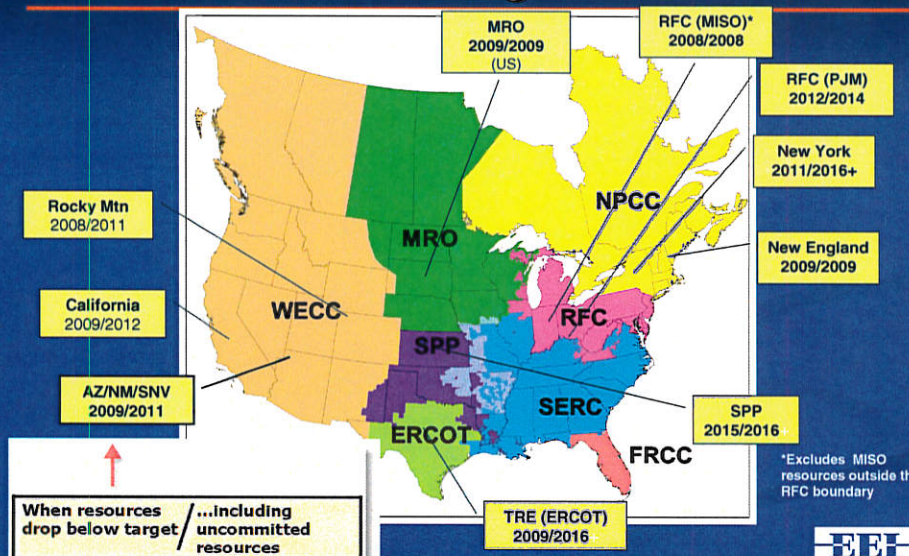


Causes for Rising Demand

- Increasing population **11.18% in 10 years**
- Increased economic growth **50.1% in 8 years**
- Increased number of homes with central A/C **49% in 9 years**
- Plasma TVs up **50%** 1st Qtr 05 from 1st Qtr 04
- MP3 players up **>17 million in one year**
- Average US household owns **26 consumer electronics products**
- Increased number of homes **47.85% in 8 years**
- Increased number of larger homes **72% in 9 years** (over 2400 sq. ft.)



Margins Projected to Fall Below Minimum Target Levels

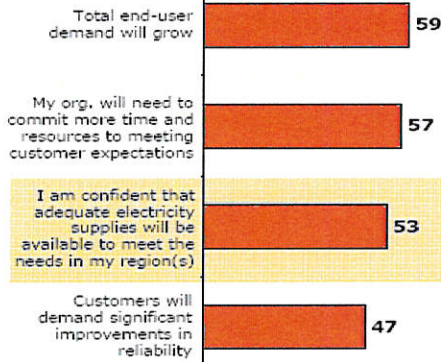


Can We Meet Tomorrow's Demand?



There is growing concern that the industry won't be able to meet surging demand

Five Year Trends
(% Agree Completely/Somewhat)



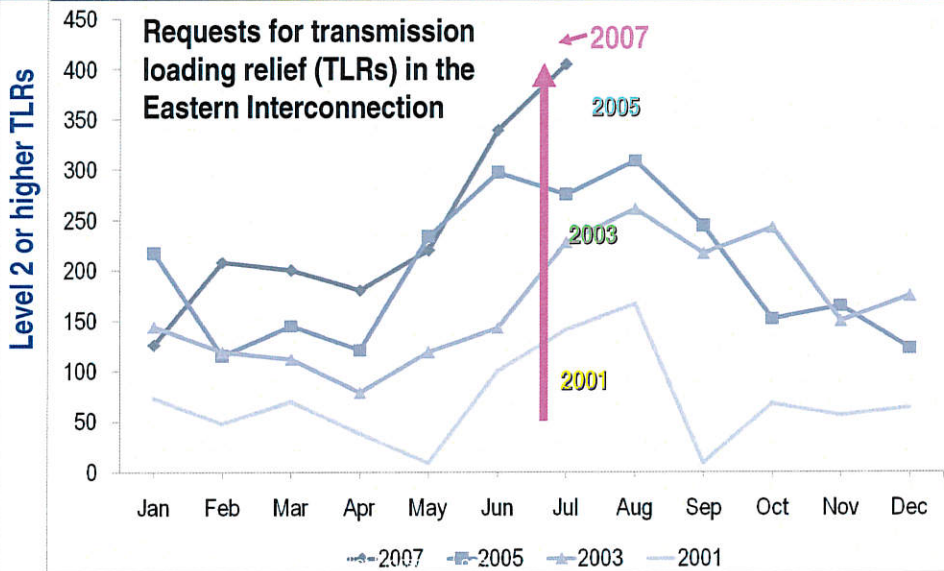
- In the next 5 years, only **53%** of respondents are **confident** they will be able to provide the needed supply in their region.

- Other survey data suggests generation commitments are being deferred.

47% NOT confident

Q36. Thinking about five years from today, how much do you agree with each of the following statements (5-point scale)?
Source: GE Energy 2007 Electricity Outlook Entering the Climate Zone, June 18, 2007

Transmission Congestion Dramatically Increasing



Aging Transmission Infrastructure

- “Rising Utility Construction Costs: Sources and Impacts”
 - Edison Foundation/Brattle Group Report
- 70 % of **transmission lines** are 25 years or older
- 70 % of **power transformers** are 25 years or older
- 60 % of **circuit breakers** are more than 30 years old

http://www.globalenvironmentfund.com/GEF%20white%20paper_Electric%20Power%20Grid.pdf



Infrastructure Affects Reliability

Number one challenge facing reliability today
(NERC's 2007 Survey of Reliability Issues)

***“High likelihood ... reliability risk due to
aging infrastructure and limited new
construction”***

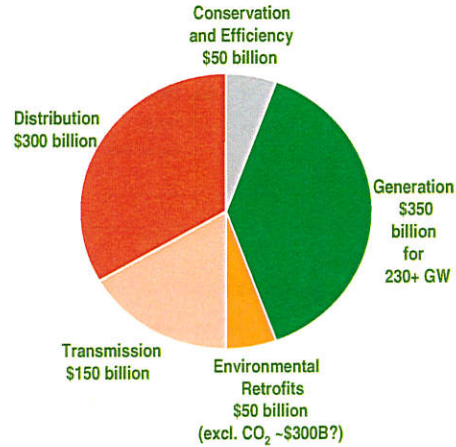
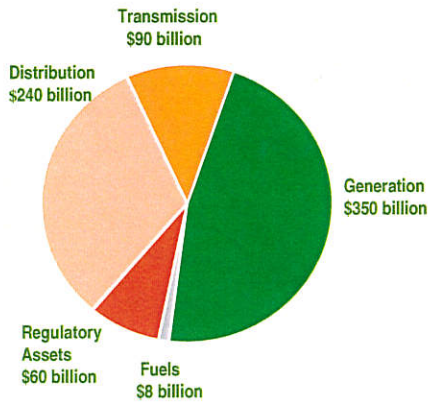
www.nerc.com/pub/sys/all_updl/docs/pubs/Reliability_Issue_Survey_Final_Report.pdf



Significant Electric Capital Investment Required

Existing Net Plant in Service \$750 Billion⁽¹⁾

Investment Need for Next 15 Years: \$900 Billion⁽²⁾



1. End of 2006. 2. 2006 dollars
Source: Lehman Brothers, July 2007



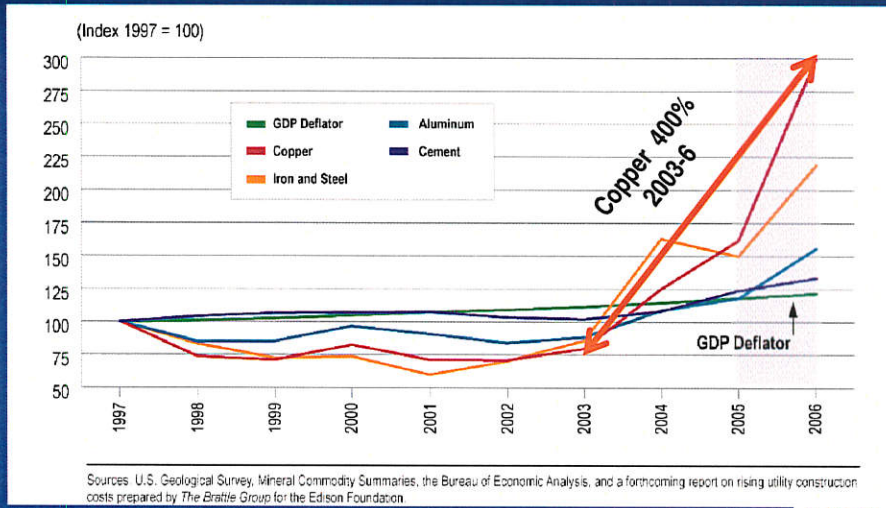
Significant Natural Gas Investments Required

- **Distribution \$5.3 billion / year**
 - Net distribution gas plant = \$46.6 billion
- **Transmission \$2.4 billion / year**
 - Net transmission gas plant = \$50.1 billion
- **Natural Gas Exploration / Supply \$47.2 billion / year**

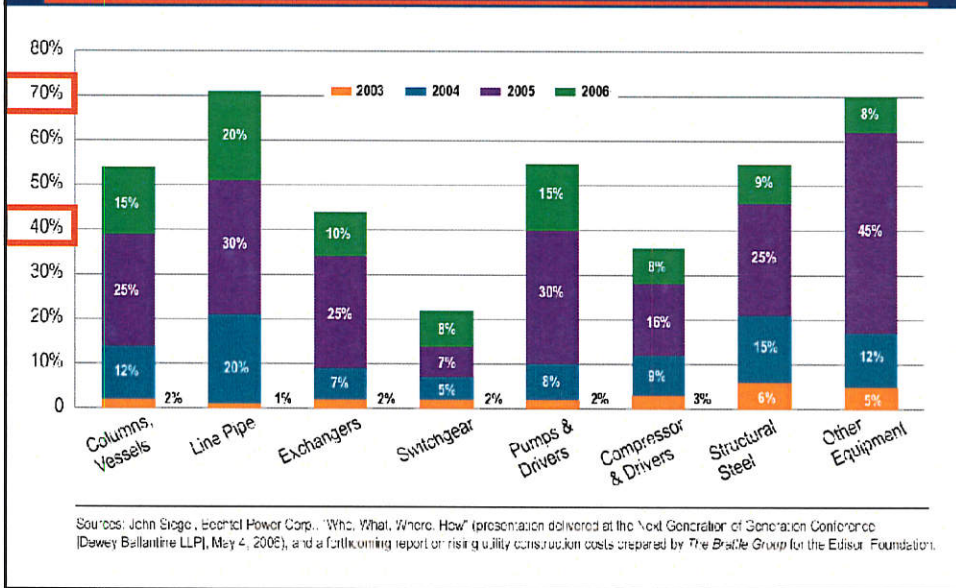
Source: National Petroleum Council's 2005 report, *Balancing Natural Gas Policy*



Raw Materials Price Indexes

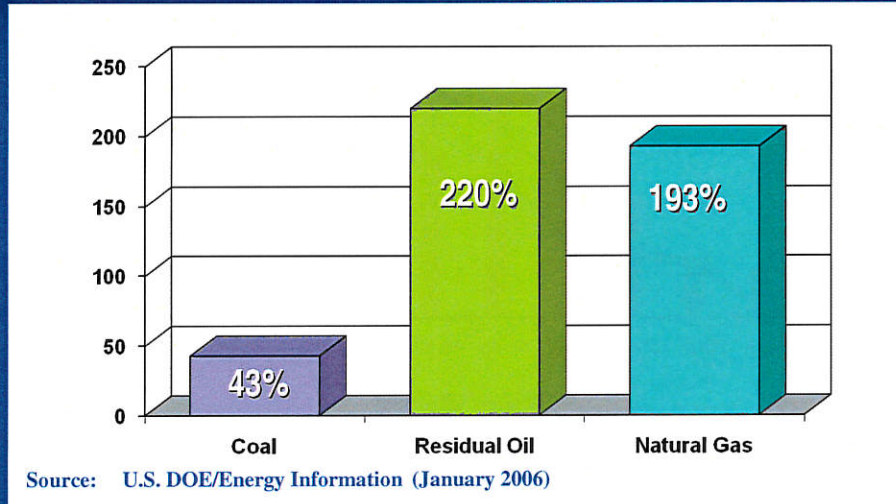


Equipment Price Increases 2002-2006



Fuel Costs Increasing Dramatically

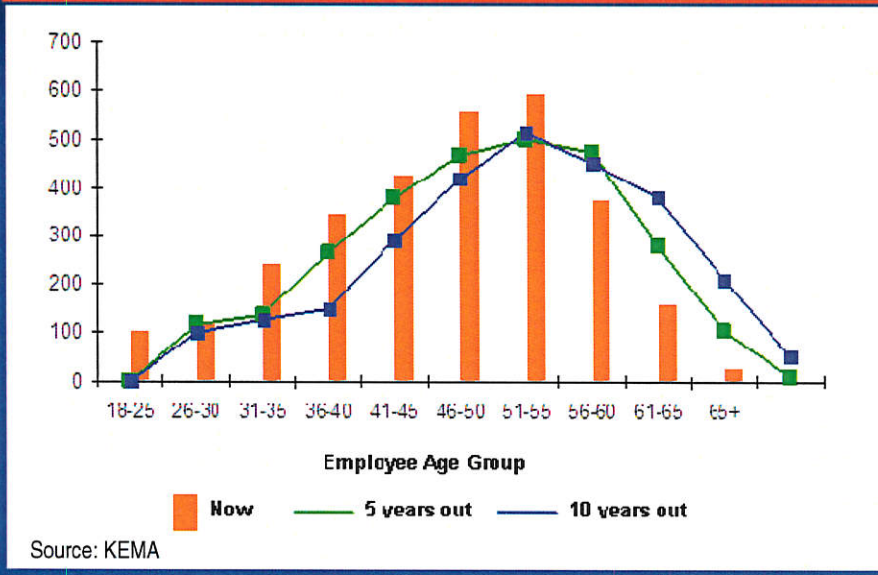
1999 – 2006



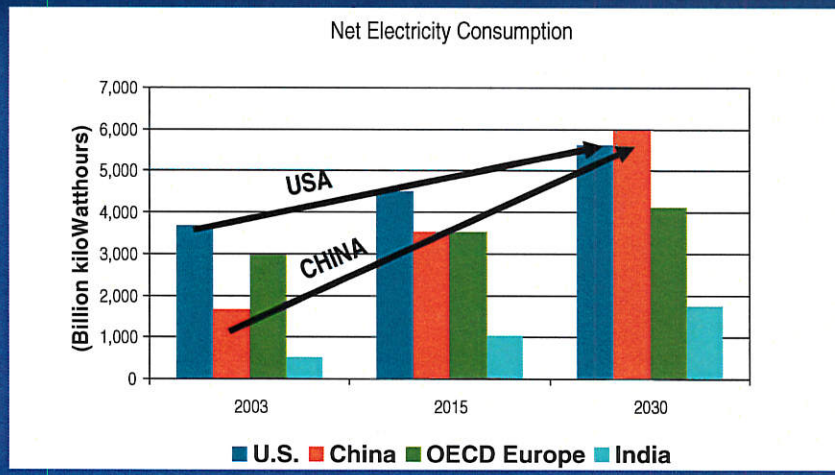
Increasing Reliance on Natural Gas

- Continued dependence on natural gas for electric generation
- Dependency could impact reliability
 - Competition increasing for gas supply and delivery capacity
 - Canadian imports declining
- Can overseas markets provide new supply?
 - Requires new LNG terminals
 - Increase the grid's exposure to global economic and political risk
- Steps already taken to mitigate reliability impact ... But more needs to done

Aging Workforce



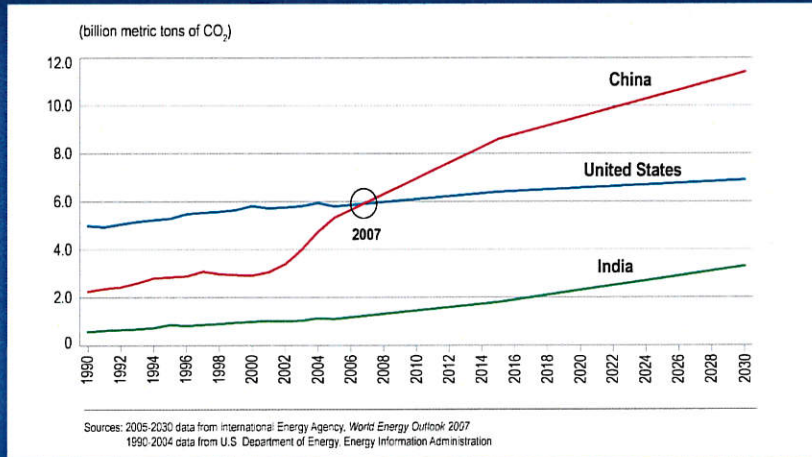
Worldwide Electricity Demand Growth



Source: Energy Information Administration, International Energy Outlook 2006



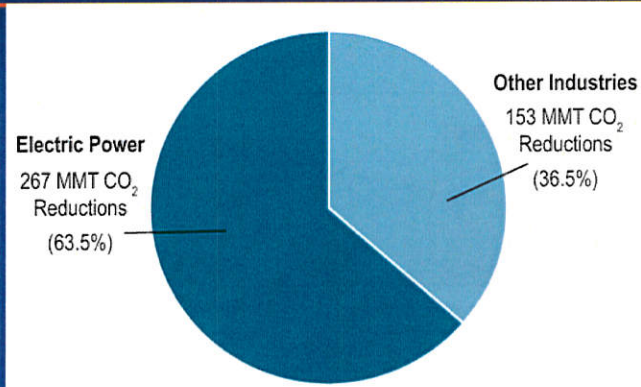
China's CO₂ Emissions Surpass U.S. in 2007



* Based on projected data from the International Energy Agency, November 2007.



Electric Power Sector Leads All Other Industrial Sectors in Reducing CO₂



2005

Note: million metric tons (MMT) represent the greater of project or entity amount, on a reporter-by-reporter basis.

Source: EIA Voluntary Reporting of Greenhouse Gases Program, 2005 Annual Report. Analysis by Edison Electric Institute.

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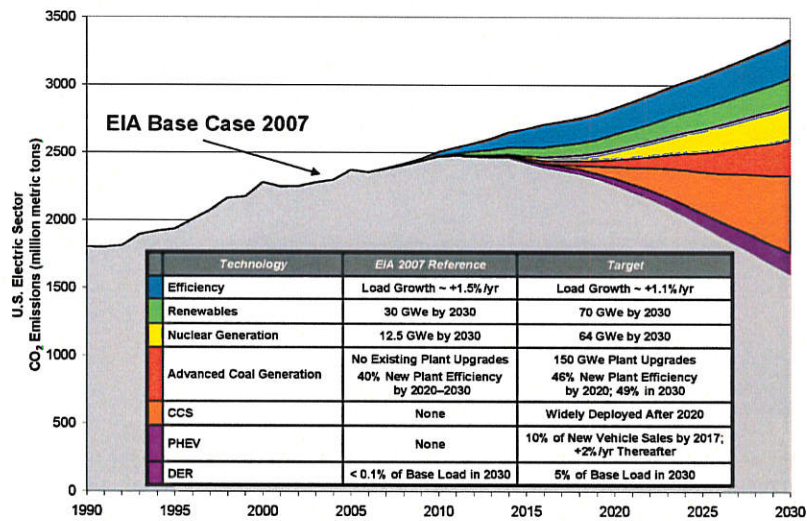
What Will It Take?

There Is No Silver Bullet!

- Renewables
- Energy Efficiency
- Clean Coal Technologies
- Carbon capture and storage
- Nuclear
- Plug-in hybrid electric vehicles



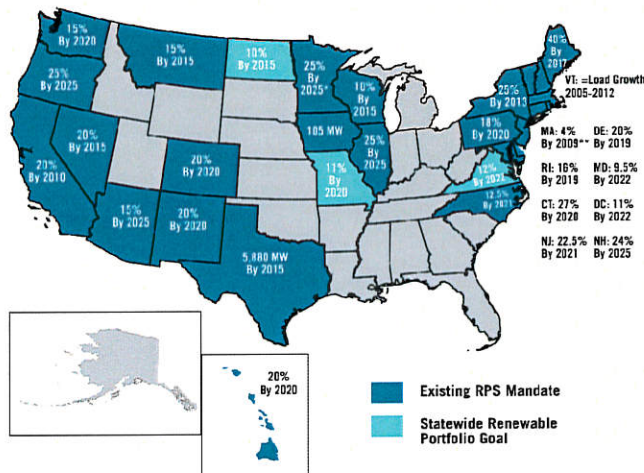
CO₂ Reductions ... What's Technically Feasible



* Achieving all targets is very aggressive, but potentially feasible

2-11

26 States & D.C. Mandate Renewable Portfolio Standards (RPS)



*Xcel Energy: 30% By 2020 **Increasing 1% per year thereafter

Source: Edison Electric Institute, status as of February 19, 2008.

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What Will It Take?

An Intensified National Commitment To Energy Efficiency

- Aggressive campaign for technologies
 - Smart buildings
 - Smart appliances
 - Smart electric meters
 - Smart thermostats
- Use of “smart technologies” and new rate designs can
 - Allow consumers to control their energy usage to save money
 - Avoid wasting energy
 - Control how and when appliance do their jobs
 - Help utilities efficiently operate their systems and maintain reliability
 - Help keep supply and demand in balance
 - Support more efficient use of generating resources
- Commercializing plug-in hybrid electric vehicles



Key Elements In GHG Debate

- We need a full suite of technologies
- Harmonize compliance dates and technology availability
- An effective cost containment mechanism to avoid economic disruption
- Robust domestic and international offsets to lower costs and promote effectiveness
- Requirement that developing countries participate – China / India



Challenge: Technologies and Timeframes

- **Clean coal technologies**
 - Not commercially available until **2015**
- **Carbon capture and storage (CCS) technologies**
 - Not commercially available until **2020-2025**
- **Deployment of nuclear plants**
 - Not possible until **2015** at earliest



Summary: **Challenges Are Plentiful**

- **Supply margins are declining and demand is increasing**
 - Need significant infrastructure investment but costs increasing rapidly
- **No longer a declining cost industry**
 - Need significant outreach to explain the reasons for increasing cost
- **Aging workforce increasingly important**
 - Need to support programs for science and engineering
- **Increasing concerns about the environment**
 - Need to accelerate development and deployment of new technologies
- **Energy efficiency is viable option**
 - Need to create regulatory climate for making EE a sustainable business

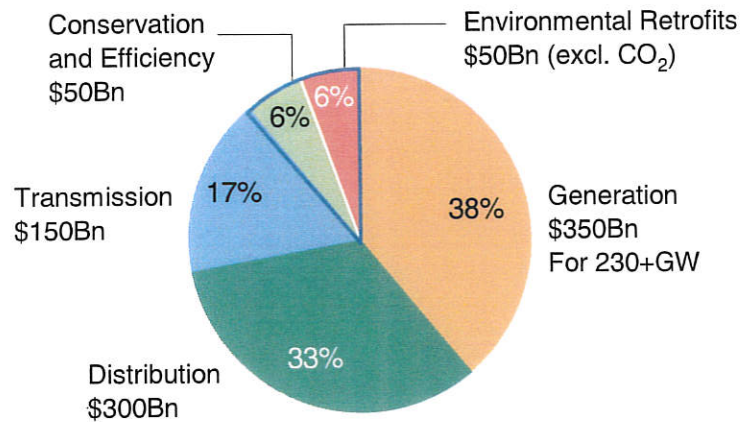


Kansas Electricity Briefing

Caren Byrd, Executive Director, Morgan Stanley, New York

Electric Industry Challenges

Capital Requirements Next 15 Years



Rate Pressures

- “Catch-up” rate cases
- Rates to reflect \$1T capital expenditures
- Incremental costs for Global Warming Offsets

Ratepayers

Regulators

Environmental Concerns

- Greenhouse Gas costs
- Renewable Portfolio Standards
- Energy Efficiency impact
- Clean Coal
- Nuclear Spent Fuel

Technology Opportunities

- Energy efficiency
- Alternative Energy
- Smart Grid
- Etc, etc, etc.

Collaboration Essential

- Rate Regulation
 - Pre-approvals for cap ex
 - Incentives for energy efficiency
 - Opportunity for fair return
- Energy Policy
 - Non-partisan
 - Long-term
 - Positive business environment
- Informed Stakeholders

Joint Meeting of the House Energy and Utilities Committee and Senate Utilities Committee

March 18, 2008

David Owens

David K. Owens is Executive Vice President, Business Operations, at the Edison Electric Institute (EEI). Owens has responsibility over the strategic areas of energy supply and the environment, energy delivery, energy services and international affairs. Prior to joining EEI, Owens served as Chief Engineer of the Division of Corporate Regulation of the Securities and Exchange Commission. Owens also was an engineer in the Division of Rates and Corporate Regulation at the former Federal Power Commission and worked as a design and test engineer for General Electric and Philadelphia Electric Companies, respectively.

Owens has over 35 years of energy-related experience. He is a recognized authority on utility issues frequently appearing in proceedings before Congress and the states. He frequently appears on television and radio forums addressing energy issues. Owens holds a BS and Masters Degree from Howard University and a Masters in Engineering Administration from George Washington University. He is on the Board of AABE.

Caren Byrd

Caren Byrd is an Executive Director in Morgan Stanley's Global Power and Utility Group. She joined the Investment Banking Division of the firm in 1972, and has focused all her career on the electric utility industry. She is an expert on the requirements of investors in the equity and debt securities of this industry. Over the years, she has been involved in the firm's utility activities for the electric utility industry including financing, advisory services, restructuring and mergers and acquisitions.

She currently serves on the Advisory Council of the Institute of Nuclear Power Operations (INPO), having previously served in this capacity for seven years (1986 – 1993). She has also recently been named to the Advisory Council of the Electric Power Research Institute (EPRI). Additionally, she had been involved with the Nuclear Energy Institute's outreach program to the New York financial community. Byrd is a chartered financial analyst, a member of the CFA Institute, the Wall Street Utility Group, and the New York Society of Security Analysts. She received a Bachelor's Degree from Smith College and an MBA degree from the Wharton School of Finance, University of Pennsylvania.

HOUSE ENERGY AND UTILITIES

DATE: 3/18/08

ATTACHMENT 4