

2003 Energy Situation & Hot Topics

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“May You Live in Interesting Times”



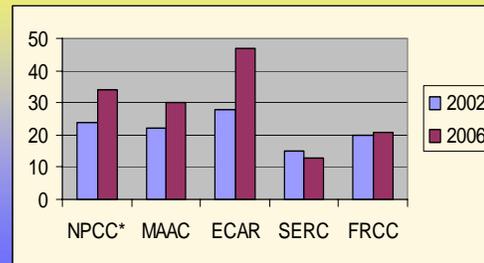
2003 Energy Interesting Times



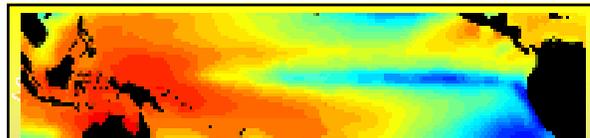
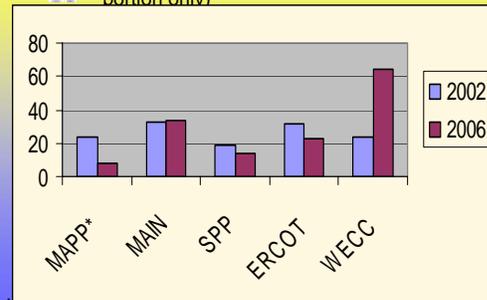
2003 Energy Presentation Outline

- Electric Load Forecasts
- Regional Capacity and Energy Prices
- Current Conditions
- Near Term Regional Changes
- Federal Energy Legislation and National Energy Policy
- Pace and Direction of Electric Re-regulation
- Energy Industry Financing and Investment

2003 Energy Eastern US Summer % Reserve Margins (NPCC figures are US portion only)



2003 Energy Western US Summer % Reserve Margins (MAPP & WECC figures are US portion only)



- Electric Load Forecasts
- **Regional Capacity and Energy Prices**
- Current Conditions
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2003 Energy Regional Capacity and Energy Prices

- o NYMEX Palo Verde
- o NYMEX Mid Columbia
- o NYMEX Cinergy
- o NYMEX Entergy
- o PJM Interconnection

Prices are for melded capacity and energy costs on peak. For off peak, assume 85% of on peak

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2003 Energy Regional capacity and energy prices MW

Daily Platts News Service

PJM Futures

Year	Price (\$/MWh)
Sept 03	41.5
Q4 03	40.5
2004	42.5
2005	41.5
2006	42.0

Entergy Futures

Year	Price (\$/MWh)
Sept 03	33.5
Q4 03	34.5
2004	37.0
2005	35.5
2006	36.5

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2003 Energy

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THE WHITE HOUSE WASHINGTON

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2003 Energy High Priced Commercial Electricity Areas

Top 5 Letterman Service Area Electricity Price

Service Area (mill population)	Nominal Price (cents/kwh)
NYC (16.0)	16.0
SDiego (2.3)	2.3
LA (11.4)	11.4
SF/SJ (5.1)	5.1
Boston (2.8)	2.8

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2003 Energy Commercial Electricity Prices – The Cheap Seats

Dollar Store Prices

Service Area (mill population)	Nominal Price (cents/kwh)
Mia (1.9)	1.9
Atl (2.2)	2.2
KC (1.8)	1.8
StL (1.9)	1.9
Jacks (0.7)	0.7

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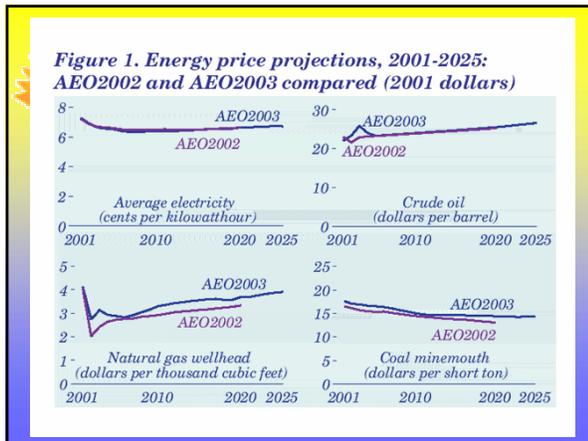
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2003 Energy Fuel Supply Adequacy

Hydroelectricity is impacted by precipitation which cannot be accurately predicted

Most of the new generation is fueled by natural gas. The near-term and long-term adequacy of both the availability of natural gas and the infrastructure to move it to the generating stations is coming under increased scrutiny.

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2003 Energy Transmission Adequacy

TX systems generally are expected to perform reliably in the near term

7,100 miles of new TX (=>230 kV) to be added in the near term 2003 - 2007

10,100 miles to be added during the 2003-2011 time frame (5% increase in the total amount of installed TX)

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2003 Energy Two views of the AK Pipeline

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2003 Energy Tx Reliability Solutions in addition to new TX line construction

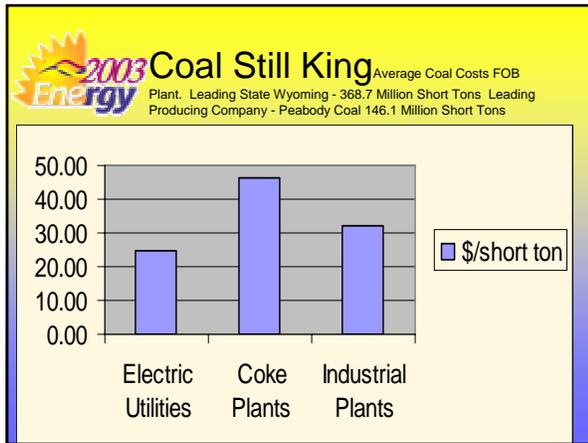
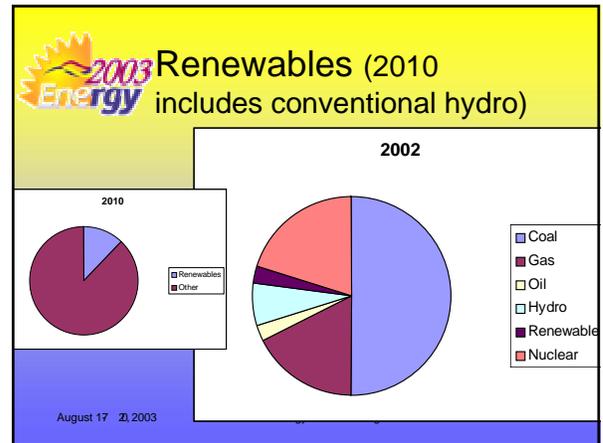
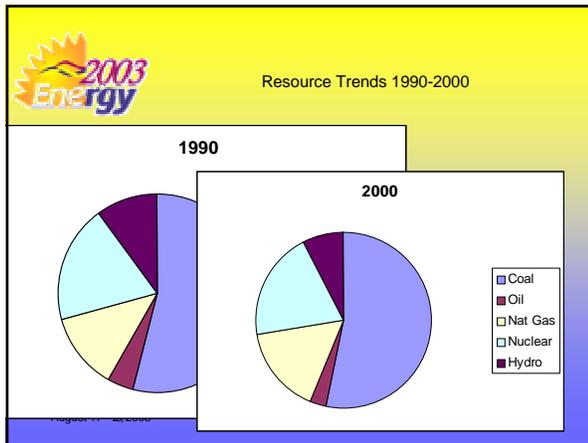
- Redispatch
- Load Shedding/Control
- Interruptible Services
- TX system improvements
- Distributed Generation

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2003 Energy Six Commandments re: Upward Pressures on Electricity Rates

- Poor re-regulation design and implementation
- Increase in demand that outstrips supply (new and expanding businesses, new power plants not built, and existing power plants do not perform as planned)
- Electricity Inelasticity (little storage options, few substitutions, and tied to productivity)
- High Fuel and/or Financing Costs
- Severe Weather
- Transmission unreliability (including primary fuel)

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- Federal Energy Legislation & NEP
- Pace and direction of Electric Re-regulation
- Energy Industry Financing and Investment

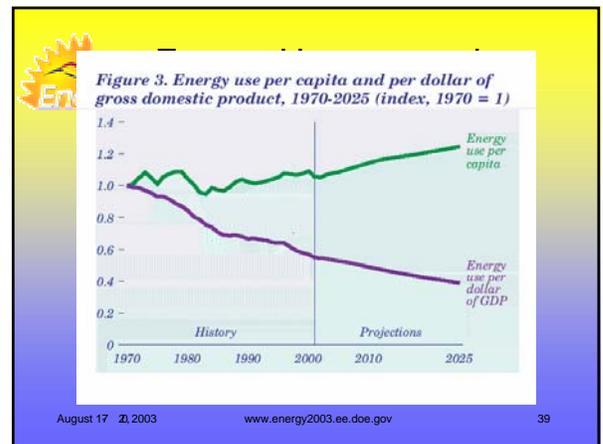
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2003 Energy There is job security er, well at least for Federal Energy Managers

The differences in the Senate and House versions won't effect

- (1) More stringent base line for energy efficiency
- (2) Metering requirements for facilities

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2003 Energy AEE Survey on NEP



- Who Participated
- Rear View Mirror Reflections and Dilbert Responses
- National Energy Policy Opinions

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2003 Energy Have you reviewed the NEP?

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2003 Energy AEE Survey – NEP Review

Have You Reviewed the NEP?

Response	Percentage
Yes	~55%
No	~45%

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2003 Energy Does the NEP adequately address energy management?

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2003 Energy AEE Survey – Addressing Energy Mgmt

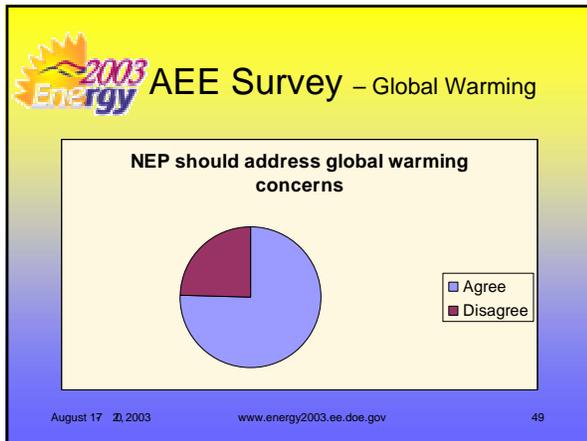
The NEP Adequately Addresses Energy Management ...

Response	Percentage
Yes	~15%
No	~75%
Don't Know	~10%

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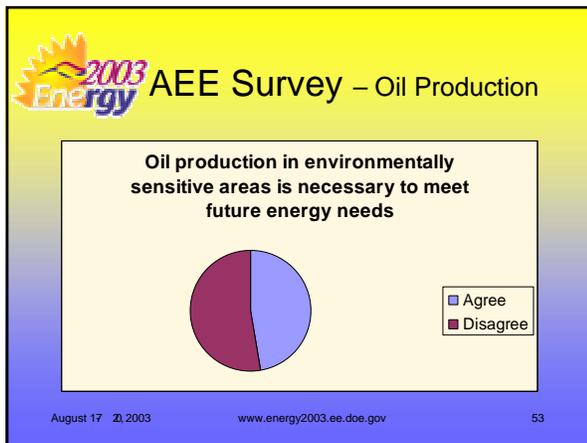
2003 Energy Should the NEP address Global Warming?

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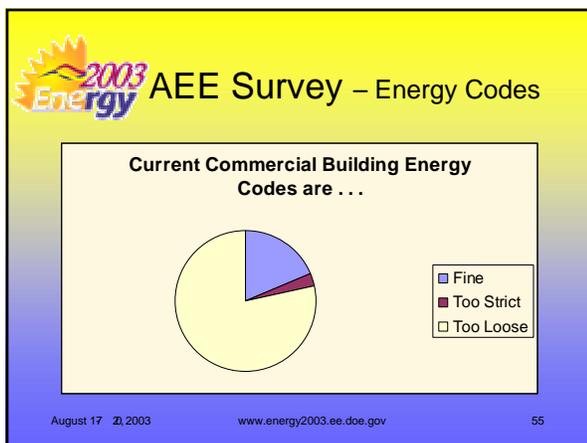
2003 Energy Oil Production in Environmentally Sensitive Areas is Necessary to meet future energy needs.

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2003 Energy Energy Codes are fine .. Too strict ... too loose

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2003 Energy

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Pace and direction of Electric Re-regulation

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In the past year my electric rate has increased, decreased, stayed the same?



Electric Rate Changes – Interesting Times

In the past year, my electric rate has . . .



- Increased
- Decreased
- Stayed the Same

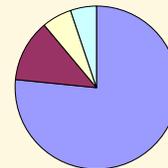


If it has increased, how much



Rate Increases

My electric rate has increased by . . .



- 1-5%
- 6-10%
- 11-15%
- >15%

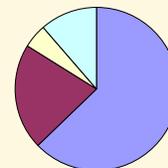


If it has decreased, how much



Rate Decreases

My electric rate has decreased by . . .



- 1-5%
- 6-10%
- 11-15%
- >15%

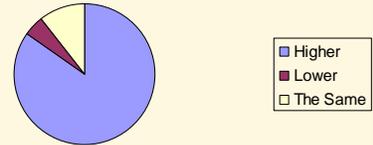


Dibert Q – in the next five years
my utility bill will increase?
Decrease? Stay the same? If it
changes by how much?

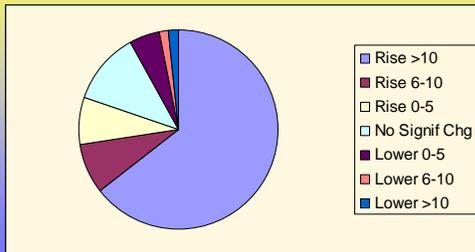


Future Electric Rate in
interesting times

In the next three years my electric rate
will be . . .



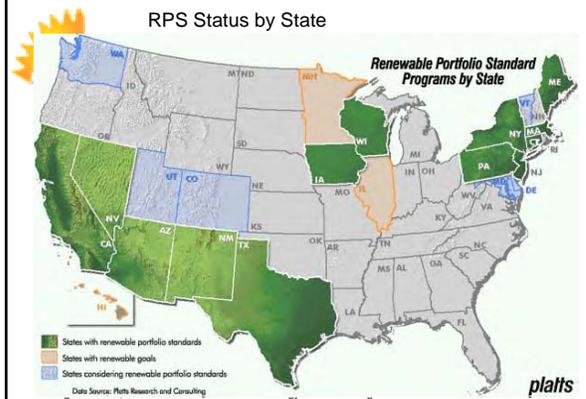
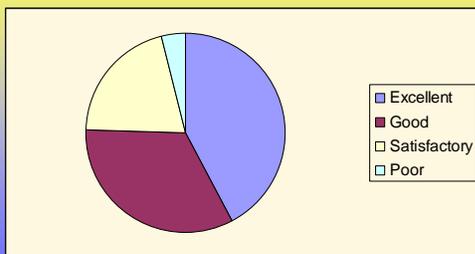
%wise, my elect rate will
(end users in states not yet dereg'd, if
dereg'd)



The service I get from my
electricity provider is Excellent,
good, fair, or poor?



The Service I get from my
Electricity Provider is



2003 Energy www.dsireusa.com

Web site that tracks EE and RE incentives by state

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2003 Energy

• Pace and Direction of Electric Re

Energy Industry Financing and Investment

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2003 Energy Utilities w/ AA and BBB ratings

03/04/03 Testimony of Suzanne G. Smith before the U.S. Senate Energy and Natural Resource Committee

Rating	2001	2003
AA	~7	~2
<BBB	~6	~18

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2003 Energy

The C Three Group Energy Utility Indices™ (12-Month Performance thru March 2003)

Source: The C Three Group

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2003 Energy Financial Factors

Underfunded Pensions
Price Caps/St'd Offers
Support from

- Banks
- Bond Holders
- Regulators

Interest rates

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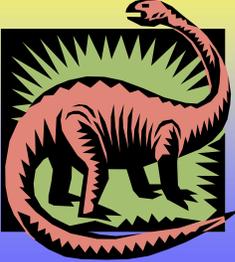
2003 Energy Increased Nat'l Debt can cause interest rate rise

US National Debt

Year	Debt (\$ Billion)
1988	~2,500
1990	~3,000
1992	~3,500
1994	~4,000
1996	~4,500
1998	~5,000
2000	~5,500
2002	~6,000

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 First Energy Survey circa
120 million years ago



There is
OIL in
my
future!!!