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BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

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IN THE MATTER OF: :

CREDIT AND CAPITAL ISSUES AFFECTING : Docket Number

THE ELECTRIC POWER INDUSTRY : AD09-2-000

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Commission Hearing Room
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D. C. 20426

Tuesday, January 13, 2009

The above-entitled matter came on for technical
conference, pursuant to Commission Order, at 1:00 p.m.

COMMISSIONERS PRESENT:

- Chairman Joseph T. Kelliher, presiding
- Commissioner Marc Spitzer
- Commissioner Philip D. Moeller

P R O C E E D I N G S

(1:05 p.m.)

CHAIRMAN KELLIHER: Thank you. Good day and welcome to the FERC Technical Conference on Credit and Capital Issues affecting the U.S. Electricity Industry.

We appreciate the willingness of the panelists to join us and share their perspectives on these important issues.

At today's technical conference, FERC will examine the credit and capital issues facing the electricity industry, to better understand the implications of the current financial crisis on electricity infrastructure development and operation of competitive wholesale power markets.

One question I would ask the panelists to address, is the extent to which there is a need for change in existing FERC policy with respect to credit and capital issues, or the extent to which it's important that current policy continue in place.

If you would be specific in your recommendations, and, to the extent you offer specific recommendations, I hope your fellow panelists will feel free to offer their views.

I am particularly concerned about the implications of the current financial crisis on the

1 development of energy infrastructure, particularly
2 electricity generation and transmission. Whereas we are at
3 a point in the United States right now where there is need
4 for tremendous investment in electricity generation,
5 transmission and distribution, to assure a secure
6 electricity supply at reasonable cost, the level of
7 investment needed to meet the climate change challenge, will
8 be even greater.

9 However, the financial crisis threatens to impair
10 the ability of the industry to finance capital expenditures
11 and may particularly affect independent power producers and
12 wind developers.

13 It's important that the Commission understand how
14 the current financial crisis affects infrastructure
15 development, and whether the crisis more particularly
16 affects certain market participants, and the implications
17 for current and future Commission policy.

18 This technical conference will also examine
19 credit policies in different competitive wholesale power
20 markets, both the organized and bilateral markets.

21 Many of the credit issues are correctly being
22 examined by stakeholders, to determine the adequacy of
23 existing practices and whether there's a need for change.

24 Indeed, the Commission anticipates receiving
25 filings from some of the organized markets, on credit-

1 related issues, though they're not here today to discuss the
2 merits of these anticipated filings, but are seeking context
3 to evaluate any changes or reforms that are being proposed
4 to existing credit policies.

5 While this conference is focused on credit and
6 capital issues affecting the U.S. electricity industry, we
7 recognize that these issues also affect the natural gas
8 industry.

9 I want to thank the panelist for joining us
10 today, and I want to recognize my colleagues for any
11 comments they might want to make. Commissioner Moeller?

12 COMMISSIONER MOELLER: Thank you, Mr. Chairman.
13 I'll second your comments, particularly our concern over
14 these issues impacting the ability to finance the energy
15 infrastructure the nation needs.

16 I trust today's conference will be illuminating.
17 I'm here to learn. My staff has made a point of sitting
18 down with the CFTC staff to talk about these very issues in
19 the last couple of weeks.

20 I would thank not only the Staff, for putting
21 this together, but, of course, our panelists. I know that
22 it takes a tremendous amount of effort to come here to help
23 us out, and I appreciate it, Mr. Chairman.

24 CHAIRMAN KELLIHER: Thank you. Commissioner
25 Spitzer?

1 COMMISSIONER SPITZER: Thank you, Mr. Chairman.

2 I, too, agree that your summary of the topic, was
3 accurate and timely. We've had a number of disturbing
4 events in the last three months, that are the equivalent to
5 any of I've seen in the prior 30 years, and in an endeavor
6 such as ours, which is essential to the life blood of the
7 U.S. economy and also very capital-intensive, access to
8 credit markets is an imperative.

9 There is a clear interface with federal public
10 policy. I know that we've had extensions on the renewable
11 side, of tax credits, but as a former tax lawyer, I was
12 often reminded by clients, when I was in the private sector,
13 that a tax credit does no good, if you've got no taxable
14 income.

15 If you read through the briefing book, as I have
16 done, we are concerned that we've got a perfect storm here,
17 that will contravene our mission to provide reliable energy
18 supplies at reasonable prices.

19 So I'm extremely attentive to this, and I thank
20 you for coming and look forward to the conference.

21 CHAIRMAN KELLIHER: Let me turn to Scott Miller
22 now, who will make some administrative announcements
23 regarding the technical conference. Scott?

24 MR. MILLER: Thank you, Mr. Chairman. As many of
25 you will note, there is a docket number on this, that is

1 AD09-2-000. That is so that any comments that wish to be
2 submitted by parties, interested parties, can be made up
3 until January 3th, and we would encourage anyone to do that,
4 to supplement the record.

5 Secondly, I'd like to note that some panelists
6 have offered and submitted some PowerPoint presentations, as
7 well as written statements, which have been put into the
8 record. They will not, however, be on the television
9 monitors here, however, the Commissioners and Staff do have
10 them, and, in some instances, the audience has been given
11 copies, if you have supplied. But they are available on the
12 FERC website, and for those that are participating by
13 webcast, I believe they are also available that way.

14 The same will be true for the second panel; if
15 anyone's submitted PowerPoint slides, we have copies of
16 them, and they are, again, available on the FERC website.

17 The panelist have between eight and ten minutes.
18 Obviously, shorter is always better. I believe you will be
19 notified when we've hit the nine-minute mark, but we'd like
20 to allow for ample time for questions and then there will be
21 a ten-minute break between panels, and we'll go to the
22 second panel. Thank you, Mr. Chairman.

23 CHAIRMAN KELLIHER: Thank you, Scott. I will
24 recognize you and Staff will cut you off, if you exceed your
25 time, so I'm doing the pleasant part of the job.

1 (Laughter.)

2 CHAIRMAN KELLIHER: I told Gary that the state
3 regulators can get by --

4 (Laughter.)

5 CHAIRMAN KELLIHER: With that, why don't we start
6 the conference, and why don't we start with Mr. Anthony
7 Ianno, Managing Director of Global Risk Capital Markets of
8 Morgan Stanley.

9 MR. IANNO: Good afternoon and thank you, Mr.
10 Chairman. My name is Anthony Ianno. I'm Managing Director
11 and head of the Energy and Retail Global Risk Capital
12 Markets for Morgan Stanley.

13 I thank you all for inviting me here today to
14 discuss the credit and capital issues that are affecting the
15 U.S. electric power industry.

16 As the panel will discuss, 2008 did bring
17 unprecedented change and volatility to both the debt and
18 equity capital markets. We lived through the collapse of
19 some of the most well respected financial institutions, the
20 elimination of some of the key advisors and capital
21 providers for the industry, through mergers and
22 transformation of Morgan Stanley, Goldman Sachs, and the
23 bank holding companies.

24 Obviously, these events had a significant impact
25 on the cost and availability of capital and liquidity to the

1 industry. If anything else, this will illustrate the
2 increasing volatility and increasing capital costs.

3 The first chart represents credit strength, the
4 difference between yield on basis points from the New York
5 Treasury to a comparable maturity, U.S. A-rated utility
6 company. This level has increased dramatically, as you can
7 see.

8 The second chart shows the performance of the
9 Philadelphia Utility Index, PTY, a stock index consisting of
10 20 of the largest utility companies. That utility index is
11 down significantly, which is a good proxy for the increased
12 cost of equity capital for U.S. utility companies.

13 The third chart I show, shows the alternate cost
14 for utility companies, both before and after the
15 bankruptcies. As you can see, although the Treasury levels
16 in the state slots, came down, the overall financial costs
17 went up considerably, about 150 basis points, on average.

18 Not surprisingly, the cost increase is more
19 pronounced for lower-end companies and for normal
20 maturities.

21 The most frequent question I get from issuers,
22 is, when will the markets return to normal? I think the
23 answer to that question, is, you really have to redefine
24 what our definition of "normal" is.

25 I don't think we're going to have the low credit

1 spreads for A-rated companies that we had received for a
2 substantial period of time. I'll go through a little bit
3 later, how people are looking at risk and pricing risk in
4 this new market environment.

5 Over all the capital markets available to the
6 sector, I'll walk you briefly through what we saw in 2008,
7 in the sense of all the markets that are open to utility
8 companies.

9 The first is liquidity. There appeared to be no
10 limit to the amount of liquidity that industrial companies,
11 and, particularly, utilities, can get from commercial banks.
12 I would argue that these banks were not adequately
13 compensated for the risks associated with these bank
14 facilities.

15 We also saw the maturities going out, and utility
16 companies generally had access to five-year maturities in
17 the bank market.

18 The CP market grew tremendously and utility
19 companies can borrow in the short-term market at extremely
20 low rates to fund working capital, and using the bank
21 service as a backup.

22 In 2008, we saw the CT market, particularly for
23 A2P2 issuers, severely interrupted. Utility companies had
24 to draw down on their bank facilities.

25 In the banking crisis, the number of lending

1 institutions has been reduced significantly. The remaining
2 banks have now reassessed the cost of lending and the amount
3 of leverage extended and have re-priced credit accordingly.

4 As the utility companies to look to expand
5 liquidity in 2008, they found that the rate of capital in
6 this market, was challenging, more costly, and generally
7 limited to 364 days.

8 The tax-exempt market, is another market which
9 has been severely interrupted. Prior to the Lehman
10 bankruptcy, this market was very efficient. You could
11 borrow in this market, short-term, using both the variable-
12 rate demand note market and the auction-rate market.

13 Although they relied on credit support from
14 insurance companies and NBIA Excell, among others, or
15 standby letters of credit from banks, they were still
16 certain they could borrow short-term at low rates with very
17 little refinancing risk.

18 Not only did the cost of this market increase
19 significantly, but access became an issue. Utility
20 companies can no longer rely on this market, without some
21 form of backup for liquidity.

22 In the investment-rate debt market, which I
23 mentioned earlier, the costs have increased substantially.
24 The fourth page of my presentation tries to give you a
25 snapshot of how investors are now pricing risk.

1 Before the credit crisis, investors would
2 calculate the expected return, by adding the credit spread
3 associated with default risk, to the risk-free rate. This
4 equation has now changed.

5 In addition to default risk, investors are asking
6 that return accrue the premium for volatility, a premium for
7 liquidity, and an excess return in the form of a new-issue
8 premium. The lower the credit rating, the greater the
9 premium investors are expecting.

10 Although utility companies have access to the
11 credit markets, relative to other industries, throughout
12 this crisis, that does not tell the full story.

13 As you can see, the last page of my handout shows
14 that of the \$13.6 billion of issuance, post the Lehman
15 bankruptcy, only 35 percent was issued by triple-B-rated
16 companies. This is despite the fact that now 70 percent of
17 the industry is triple-B-rated or below. This remains a
18 critical issue in the year 2009 and beyond.

19 I'll talk a little bit about the non-investment-
20 grade market. In that market, basically they shut down in
21 2008. The market that had been defined in 2007 by a
22 significant liquidity, declined in credit spreads, was now
23 closed.

24 This market has reversed somewhat, but liquidity
25 is gone, and although the market is reopening, I think that

1 we see the same issues that I talked about in the
2 investment-grade market, except we have more pronounced
3 below-investment-grade issuers.

4 So, going back to the first question of, how do
5 you define "normal markets," in the credit markets in 2009,
6 investment-grade companies will have access to bank loans at
7 more than 364 days. That's essential for us to be back to a
8 normal market.

9 A2P2 issuers have to know that they will be able
10 to get lower credit, but get maturities above 30 days.
11 We're starting to see some of that come back.

12 Stability returns in the tax-exempt market.
13 We've seen more issues in that market now. Triple-B
14 companies, non-investment-grade companies have continuous
15 access to capital, at a price.

16 We're still not at that point. It's going to
17 have be a challenge, with A-rated companies having access to
18 capital, without significant new-issue premium. We're still
19 seeing that new-issue premium broken into spreads.

20 When things are back to normal, we'll see a
21 reversal of that, but we still need a more balanced risk
22 return for investors. I don't think we're going to be
23 returning back to the very low credit spreads we saw back in
24 2007.

25 What we do need to have, is more transparency in

1 pricing, so the company will know in advance, whether there
2 were transactions done.

3 We need to see liquidity return to the market,
4 but all the financial markets are being de-levered and we
5 see some convergence back to the credit default swap market
6 and the cash market.

7 Another thing we need to see, is access to
8 capital at reasonable new-issue premiums for generating
9 companies and lower triple-B credit, as well as non-
10 investment-grade companies.

11 I think the other big challenge we're going to
12 have, is measuring the capital in the form of convertibles,
13 mandatory convertibles, hybrid capital. That market is not
14 going to return with any depth, I don't think, in the short
15 term.

16 So I'm sure that other panelists will discuss
17 this in greater detail, but the capital requirements in this
18 industry over the next 50 years, are tremendous. The
19 estimates exceed \$1 trillion, which is on top of the rate
20 base today for the U.S. utilities, which is about \$750
21 billion.

22 You're looking at adding a trillion dollars to
23 that, and it's primarily associated with replacing aging
24 infrastructure and improving the transmission grid, renewing
25 the portfolio standards, and environmental upgrades. It's

1 not really financing growth in the form of new construction.

2 The last time the industry went through this type
3 of a construction cycle, it was back in the '70s, and most
4 of the companies in the sector, were rated A or better.

5 Right now, most of the companies are rated
6 triple-B, and even the last time around, we almost had a
7 problem with a lot of the companies in the sector almost
8 going bankrupt. We started at a much lower credit rating in
9 the face of global recession, and the shortage of capital
10 liquidity.

11 The other challenge we're going to have, is, once
12 the economy starts to recover, investors will have a choice
13 and may look elsewhere to invest their capital.

14 There are going to be winners and losers in this
15 environment. The winners will be defined by strong balance
16 sheets, excellent regulator relationships, management of
17 capital expenditure plans, and diversified liquidity
18 sources.

19 They will have track records of providing
20 adequate risk and investment returns to investors.

21 That concludes my prepared remarks.

22 CHAIRMAN KELLIHER: Thank you very much.

23 Excellent timing.

24 (Laughter.)

25 CHAIRMAN KELLIHER: I'd like to now recognize

1 Paul Bowers, Executive Vice President and CFO, Southern
2 Company, on behalf of Southern, as well as Edison Electric
3 Institute.

4 MR. BOWERS: Thank you, Mr. Chairman. My name is
5 Paul Bowers. I am Executive Vice President and Chief
6 Financial Officer of Southern Company.

7 I'm here today testifying on behalf of the Edison
8 Electric Institute and Southern Company. Before I begin my
9 remarks, on behalf of EEI and its member companies, I want
10 to express our appreciation to you, Mr. Chairman, for your
11 leadership that you have provided FERC and the industry,
12 during your tenure at this Commission.

13 We want to thank you as Chairman, but also want
14 to thank you for what you've done for this industry.

15 This is a critical time for the electric utility
16 industry as it confronts the challenge of meeting its
17 significant infrastructure and environmental investment
18 requirements at a time when cost of capital has
19 significantly increased.

20 I will today briefly address many of the key
21 factors that create this challenge, as well as potential
22 solutions. In doing so, I will primarily focus on issues
23 facing the broader industry, but also reference Southern
24 Company's experience in this time. More detail is included
25 in our written testimony.

1 The electric utility industry is the second most
2 capital-intensive sector in this country, surpassed only by
3 the railroad industry. Utilities have and must continue to
4 invest billions of dollars to maintain reliability, replace
5 aging infrastructure, and to meet all of those requirements,
6 in addition, many utilities face substantial capital needs
7 to comply with environmental requirements, even before the
8 cost of potential climate change legislation and state or
9 federal renewable portfolio requirements are taken into
10 account.

11 Our nation's energy policies are evolving, but it
12 is increasingly clear that we must expand the portfolio for
13 generation, by using a broad array of technologies such as
14 nuclear power, clean coal, and renewable resources.

15 We also need to invest in enabling technologies
16 for the smart grid, smart technologies, and plug-in electric
17 vehicles. Capital expenditures for the period of 2008
18 through 2010, are projected to be at \$230 billion, which
19 factors in the recent downward revisions by many companies
20 in 2009 and 2010.

21 For the period of 2010 through 2030, estimates
22 range from \$1.5 to \$2 trillion net of projected savings from
23 aggressive energy efficiency and demand response programs.
24 For Southern Company, we, alone, expect to spend almost \$10
25 billion in 2009 and 2010.

1 As the industry enters this period of historic
2 capital investment, it confronts two separate but
3 interrelated challenges: First, the industry's credit and
4 financial strength, is substantially lower, comparable to
5 the same type of period in the 1980s; and, second, the
6 capital markets are in turmoil, with unprecedented
7 volatility, negatively impacting the availability and terms
8 and cost of capital.

9 The current credit crisis facing the electric
10 utility industry, has come about for many reasons, including
11 the general state of the economy, contraction of lending by
12 weakened financial firms, fewer financial firms to compete
13 for the industry's financing needs, and the increased risk
14 that many industry participants face, due to legislative and
15 regulatory uncertainty.

16 Historically, utilities have had ready access to
17 capital markets at reasonable rates, however, much has
18 changed in recent years. As a whole, the average credit
19 rating of the industry, has dropped to triple-B at this
20 point.

21 Look at the credit ratings of utilities in 1970,
22 versus 2007. In 1970, 97 percent of the utilities were A-
23 credit-rated or better. In contrast, only 30 percent are
24 rated that way in 2007.

25 This decline in credit ratings, has been

1 compounded by the recent upheavals on Wall Street, that have
2 led to substantial increases in risk premiums for debt and
3 equity for all utilities, but, especially for those without
4 high credit ratings.

5 As a result, the cost of debt and capital for
6 lower investment-grade companies, is now significantly
7 higher than companies with stronger ratings.

8 For example, in mid-2008, the credit spread on
9 the Treasuries for average triple-B-plus utility, was around
10 50 basis points higher than those credit ratings of A, but
11 the spread doubled, almost to 100 basis points by the end of
12 the new year.

13 That effect has been even more pronounced for
14 triple-B-minus and triple-B utilities. This widening cost
15 difference, even within investment-grade ratings,
16 illustrates the importance of maintaining high credit
17 ratings in this capital-intensive period for the industry.

18 Some companies with lower credit ratings, have
19 not been able to access commercial paper or other short-term
20 credit markets, further exacerbating the impact of the
21 credit crunch.

22 In addition to this increased cost of debt, the
23 availability and cost of credit from banks, has been even
24 more severely impacted, due to their financial troubles.
25 This is important, since many lower-rated utilities, rely on

1 banks, rather than capital markets, especially for short-
2 term debt financing.

3 In addition, pricing for new credit lines, has
4 increased dramatically. Part of the financial cost is up-
5 front fees on bank credit facilities, which were often ten
6 basis points, but now have risen to 150 to 300 basis points.

7 Southern's experience is instructive, concerning
8 the absolute and relative importance of maintaining a strong
9 credit portfolio to ensure ready access to capital markets
10 at reasonable prices.

11 One of Southern's financial imperatives, is to
12 maintain an A credit rating. The benefit of this financial
13 belief has shown its value as we weathered the current
14 financial crisis.

15 Throughout 2008, we issued approximately \$3.6
16 billion of long-term debt, at an average rate of 4.5
17 percent. Even as the financial crisis worsened in the
18 fourth quarter, we issued \$1 billion in long-term debt, with
19 an average maturity of eight years, at an average rate of
20 5.7 percent.

21 In contrast, other utilities in the triple-B
22 category, issued similar long-term debt at an average rate
23 of roughly 300 basis points higher. If you go to this
24 morning's Wall Street Journal, there's an article on the
25 bond markets that just highlights this whole issue, that

1 this has been a pronounced opportunity in the financial
2 markets for the utilities, but you see the spread is almost
3 a 160-point spread, almost 700 basis point spreads that the
4 utilities have seen this year.

5 Faced with these challenges, how do we retain the
6 ability of the industry to access capital at reasonable
7 cost?

8 First, the global capital markets must retain
9 their stability and the financial industry must resolve its
10 problems, in order to resume their lending practices.

11 Second, our industry has the responsibility to
12 take specific measures to improve its ability to access the
13 financial markets, and to regain and maintain the strong
14 credit rating, is absolutely essential.

15 To do this, many utilities must take steps to
16 shore up their balance sheets and liquidity positions,
17 including a major focus on cost containment.

18 Finally, implementation of constructive
19 regulatory policies that reflect the risks inherent in the
20 current utility environment, policies which improve the
21 certainty of recovery for capital investment to improve
22 credit ratings, and the ability to raise capital at
23 reasonable rates.

24 Regulatory predictability and certainty, are just
25 as important in structured markets, as they are in

1 traditional regulated markets.

2 In conclusion, the current credit crisis is
3 having an impact on the industry participants, but, by and
4 large, we're managing through the crisis. Utilities must
5 continue to work closely with the regulatory and financial
6 communities, to assure continued access to sufficient
7 capital on reasonable terms.

8 The industry is facing substantial costs in the
9 next several years. Rates will go up, probably more quickly
10 than at any other time in our history.

11 In view of that fact, we must also provide
12 customers with tools such as smart grid and energy
13 efficiency programs to control their costs. We must take
14 the steps necessary to ensure that problems in the capital
15 markets and credit markets, do not threaten the ability of
16 utilities to provide environmentally sound and reliable
17 electricity to customers. Thank you, Mr. Chairman.

18 CHAIRMAN KELLIHER: Thank you very much, Paul.
19 I'd like to now recognize Mr. Robert Trippe, Senior Vice
20 President and CFO with American Municipal Power of Ohio.
21 Welcome.

22 MR. TRIPPE: Mr. Chairman and members of the
23 Commission, good afternoon. It's a pleasure for me to be
24 here today.

25 I am CFO of American Municipal Power,

1 headquartered in Columbus, Ohio. I've been involved in the
2 electric utility industry for over 30 years. I've been CFO
3 of AMP-Ohio since 1991, and before that, I served at several
4 financial positions at the Detroit Edison Company.

5 AMP-Ohio is an A-rated large public power
6 organization that generates and buys electricity for 126
7 municipal electric systems in six states -- Ohio, Michigan,
8 Pennsylvania, Virginia, West Virginia, and Kentucky.

9 AMP-Ohio constructs, finances, and operates
10 generating facilities. AMP-Ohio has embarked on a \$70
11 billion capital expenditure program through 2014, including
12 23 percent ownership share in the Prairie States Generating
13 Facility, a 1,682-megawatt coal-fired power plant being
14 constructed in southern Illinois.

15 During the process of building a thousand-
16 megawatt baseload coal-fired power plant in southern Ohio,
17 we've been moving forward with the development of 350
18 megawatts of hydro development on the Ohio River.

19 The capital expenditure program at AMP-Ohio,
20 targets a balanced portfolio of power supply with an
21 underlying goal of 15 percent of renewable resources. In
22 addition, AMP-Ohio has initiated an energy efficiency
23 program designed to save one percent annually by 2015.

24 AMP-Ohio utilizes tax-exempt commercial paper for
25 interim construction and financing for our projects.

1 Permanent project financing is provided through the issuance
2 of long-term tax-exempt fixed-rate bonds.

3 Signs of a deteriorating tax-exempt market, began
4 early in 2007 and continue through today. Long-term tax-
5 exempt bonds have traditionally been insured against default
6 by triple-A-rated bond insurance companies like AMVAC, MBIA,
7 and others.

8 Today, those companies have either been
9 downgraded or are out of business, and there's no insurance
10 to provide an investor against default.

11 Rating agencies have come under scrutiny and
12 investors have lost some confidence in the ratings over the
13 past couple of years.

14 Credit availability at banks and many financial
15 institutions, is low or nonexistent. Throughout 2008,
16 markets and economic conditions continued to deteriorate, as
17 we all know. We don't need to recite, I don't think, the
18 events at AIG, Lehman Brothers, Bear-Stearns, and so on.

19 Investors began withdrawing their savings from
20 mutual funds. Investment rates went under one percent.
21 Investment banks on Wall Street saw their worst earnings
22 ever, in 2008, and most of them have been downgraded.

23 Tax-exempt bonds, late last year, long-term
24 bonds, yielded almost seven percent, all-time high. Despite
25 AMP-Ohio' efforts to ensure sound credit quality of our

1 members, the financial crisis threatens AMP-Ohio's capital
2 expenditure program.

3 If the program is significantly delayed due to
4 this ongoing crisis, this could be detrimental to regional
5 reliability and the increase in economic and environmental
6 risk to our member electric systems.

7 AMP-Ohio has taken a number of steps in light of
8 this financial crisis: The Company has reorganized itself,
9 streamlined our operations.

10 We have reviewed our operating budgets, we've
11 implemented stringent cost control measures, and efforts are
12 underway to review and increase our levels of cash reserves
13 and liquidity. We're monitoring our members on the
14 soundness and creditworthiness of our members, more than
15 ever before.

16 Our financial plans for 2009, are to continue to
17 finance our projects and our capital expenditure program.
18 We were fortunate in 2008, and in spite of the crisis in the
19 financial markets, we were able to issue nearly a billion
20 dollars in bonds to fund our capital expenditure program,
21 including \$760 million for our initial financing of the
22 Prairie States Project.

23 But we assume, going forward, during 2009, that
24 no bond insurance would be economically available, so bond
25 yields, in all likelihood, would be higher. We're assuming

1 that it's going to be difficult to sell these bonds, because
2 there will be fewer institutional investors, so we're going
3 to have to rely more in retail sales, than institutional
4 sales.

5 Negative arbitrage on bond proceeds helped the
6 construction fund. The investment rates we're seeing today,
7 are so much lower than the yield on those bonds, the
8 negative arbitrage will be substantial and add to the cost
9 of these construction projects.

10 In summary, we think that the actions of the
11 Federal Government thus far in dealing with this crisis, are
12 moving in the right direction. We recommend the following
13 steps to the Commission:

14 One, the creation or support of a bond insurance
15 company to receive Federal Government backing, to provide
16 investors with a triple-A insurance policy to protect
17 against default on tax-exempt bond issues.

18 Two, we would like to see a Federal Government
19 guarantee on tax-exempt bonds issued to develop power plants
20 such as our hydro facilities and our coal generation project
21 in southern Ohio.

22 Three; we would like to see the Federal
23 Government guarantee an issuance of tax-exempt bonds to
24 finance capital expenditures for primary carbon capture and
25 sequestration. Carbon capture and sequestration is

1 important to the environment. Coal is one of the most
2 abundant and economic resources in AMP-Ohio states.

3 These recommendations are important for
4 reliability in our member electric systems, and these
5 recommendations are important for the creation and
6 preservation of jobs.

7 On behalf of AMP-Ohio and the American Public
8 Power Association, I thank you again for allowing me to be
9 here today to examine the credit and capital market issues
10 that affect the electric utility industry.

11 CHAIRMAN KELLIHER: Thank you very much. That
12 was good time management on your part, as well.

13 I'd like now to recognize Bruce Levy, President
14 of International Power America. Welcome.y

15 MR. LEVY: Good afternoon. Thank you, Mr.
16 Chairman and members of the Commission. My name is Bruce
17 Levy. I'm a member of the Board of International Power
18 America and President of its U.S. operations.

19 International Power is a global independent power
20 generation company with more than 45 generating facilities
21 totalling over 30,000 megawatts. These assets are
22 diversified by geography, with about a third in Europe, 25
23 percent, or about 7500 megawatts here in the United States,
24 and the rest spread between Australia, the Mideast, and
25 Asia.

1 There's a diversified mix of fuel types --
2 natural gas, coal, wind, and hydro -- and, in fact,
3 International Power has financed, developed, constructed,
4 and operated power plants all over the world, in every
5 conceivable regulatory structure and in a vast variety of
6 economic climates, and, indeed, we regard our ability to
7 finance power plants, as a core expertise.

8 The Commission is holding this conference to
9 examine the availability and cost of capital necessary to
10 support long-term investments. As the Chairman has stated,
11 the inquiry is driven by the Commission's concern that the
12 cost and availability of capital, both debt and equity, for
13 construction of much needed power generation infrastructure,
14 has been dramatically and negatively affected by the
15 upheaval in the financial markets.

16 Over the past two decades, the Commission and
17 Congress have repeatedly endorsed competition as the
18 preferred model to meet the nation's infrastructure and
19 reliability needs at the least cost to consumers.

20 Competition not only led to the most appropriate
21 investment decisions, but it also transferred risk from
22 consumers to suppliers and from government to the private
23 sector.

24 As we face a need for approximately \$600 billion
25 in new investment in power generation facilities over the

1 next years, it's important to ensure that impediments to
2 this needed investment, are properly and promptly addressed.

3 Though the recent financial market collapse had
4 made financing of such projects more difficult, the
5 financial market remains available to properly structured
6 products. In the last two weeks, we closed on an 120-
7 megawatt life cycle project we're building in Belgium.

8 This financing was underpinned by a 15-year PPA,
9 demonstrating that we can continue to meet the needs for
10 additional generation in all markets, despite the weak
11 financial markets, if the correct commercial structure and
12 regulatory policies are in place.

13 Before we discuss the current market, we need to
14 acknowledge that during the past few years, the developers
15 of new generation facilities, have had unprecedented access
16 to low-cost capital to support their construction.

17 This allowed the construction of significant new
18 capacity additions to many markets, including free-merchant
19 markets and a large wave of renewable generation --
20 primarily wind -- for the first time.

21 Those favorable market conditions are now
22 replaced with a new reality. All participants in our
23 industry, developers, equipment suppliers, and regulators,
24 must adapt to these new conditions.

25 FERC can play an important role in facilitating

1 that adaptation, by taking the necessary steps today to
2 frame a regulatory environment that will support the
3 development of new energy infrastructure projects in a
4 credit-constrained world.

5 With the reduction in available credit affecting
6 all sectors in the economy, it will have an even greater
7 impact on the power sector. The cost of financing, as we
8 have heard, has increased and the availability of such
9 financing has simultaneously decreased as the market now
10 views investments as being more risky and having less
11 certainty of cost recovery.

12 Currently, lenders are viewing these investments
13 as more risky, for several reasons: First, since the
14 recession has reduced energy demand growth and is projected
15 to continue to do so in the short term, some members
16 questioned whether new generation projects are really
17 needed.

18 Second, the combination of lower fuel prices and
19 decreased demand for electricity will likely result in lower
20 margins for electric generators.

21 These lower margins are substantially below the
22 level needed to support new investment in major baseload
23 power plants. This has raised concern by lenders, that the
24 market assumptions used in making the existing loans, may
25 not be realized.

1 As a result, we've seen the secondary market for
2 existing debt and generators trade up toward credit spreads
3 well above normal levels, and any new financing for new
4 projects, will be priced at or above these levels.

5 The credit crisis has had similar harmful effects
6 on the availability of equity financing for the projects.
7 The impact is substantial. Since the debt markets have
8 tightened, the leverage available for future investments,
9 has decreased, increasing the need for additional equity
10 financing.

11 Prior to the recent change in economic outlook,
12 most investors expected the market prices to continue to
13 rise, based on the well known need for new generation
14 capacity in all markets, both organized and deregulated.

15 In capacity markets, the need for new capacity
16 additions, suggested that market prices be driven to levels
17 needed to support new investment. However, the recession,
18 with its corresponding drop in demand for energy and energy
19 prices, has altered those forecasted increases and increased
20 the uncertainty surrounding future capacity needs.

21 This uncertainty has been further driven by
22 reports from many power pools and ISOs, that capacity
23 additions currently proposed, are sufficient to meet the
24 need for new capacity for five or ten years. As a result,
25 equity financing for new investment is depending solely on

1 market energy rates for revenue and margins, and that has
2 become considerably more difficult and costly to finance.

3 These conditions will likely persist until
4 financial stability is restored to energy and commodity
5 markets. Generally speaking, there are three models that
6 can support financing for new generation: Merchant banks,
7 supported by projected annual revenue from organized
8 markets; annual financing, supported by revenue from long-
9 term and medium-term PPA, and then traditional cost-based
10 rates, supported by regulatory assurance.

11 The model based on capacity markets, the newest,
12 and, in my opinion, the most promising, in the long-term, of
13 these options, is also the most imperiled by the present
14 crisis. Many of the organized financial markets, have
15 sought to spur development of new baseload generation to
16 develop capacity markets such as FCM.

17 If allowed to continue to develop in organized
18 markets, these regimes show great promise to foster the
19 development of new power plants at the ultimate lowest cost
20 to consumers.

21 These markets have already provided valuable
22 market signals regarding the value and need for new capacity
23 for generation, demand response, or energy efficiency, and
24 will continue to do so, as their track record and
25 reliability in these pricing models mature.

1 In the interim, in order to encourage the
2 development of long-term investment in power plants, support
3 in the form of competitively-determined medium-term PPAs,
4 would be needed, due t the fact that current terms available
5 in organized markets, such as five-year PPAs, are simply
6 inadequate to attract the substantial debt and equity
7 necessary to put steel in the ground.

8 Our recent experience with the financing in
9 Belgium, suggests that a 15-year PPA will be necessary to
10 support financing and construction of new baseload
11 generation until the financial markets settle and organized
12 capacity markets develop further.

13 We do not think the financial crisis, no matter
14 how bad it ultimately gets, can justify the return to
15 traditional cost-based rates in all markets, and urge the
16 Commission and state regulators, to resist this route. As
17 the nation begins its painful recovery from the current
18 economic crisis, the Commission can affirm its commitment to
19 building a reliable electric system, by taking steps to
20 encourage the development of needed new resources in a
21 competitive environment that it has worked so hard to
22 support.

23 Development of new clean generation is overdue
24 and has become more critical as time passes. Only the next
25 wave of new generation will provide the reliable electricity

1 generation to fuel our nation's recovery through capital
2 investment and job creation, but it's a core requirement to
3 the nation's approach to greenhouse gas reduction.

4 We urge the Commission to take all necessary
5 steps to ensure that these resources are developed through
6 competitive means, with the need to continue to implement
7 policies that further promote the involvement of capacity
8 regimes in wholesale markets, and acknowledging the
9 necessity, however, that during the ongoing financial
10 crisis, the competitive-based PPAs of sufficient duration to
11 support capital investments in new power plants and only
12 approving cost-based rates as a financing method, if no
13 other market alternative exists.

14 Finally, the Commission can recognize that the
15 key to maintaining momentum in these troubled times, is
16 regulating to an understanding of adjusting to the realities
17 of financial markets, by facilitating or mandating the types
18 of financial structures and incentives that would promote
19 the development of these investments.

20 Financial markets will recover, the emerging
21 capacity markets will continue to progress. FERC and state
22 commissions cannot afford to sit back and wait till the
23 markets are here, given the size of the infrastructure
24 needs.

25 I appreciate the opportunity to share my views,

1 and look forward any questions you may have. Thank you.

2 CHAIRMAN KELLIHER: Thank you very much. I'd
3 like to now recognize Michael Polsky, President and CEO of
4 Invenergy, LLC.

5 MR. POLSKY: Thank you, Mr. Chairman, thank you,
6 members of the Commission, for inviting me to be on this
7 panel. My name is Michael Polsky, President and CEO of
8 Invenergy, LLC. Invenergy is an independent power producer
9 of thermal and renewables, primarily wind.

10 Invenergy has about 3500 megawatts of power
11 plants around the United States, and we currently operate
12 about 2,000 megawatts of wind power plants throughout the
13 country. We also have operations in Europe, as well.

14 This is my third IPP that I started and founded.
15 The first one was in '85 at the very beginning of the IPP
16 markets, and I'm now on the third one, and I've seen in the
17 last 23 years, ups and downs and variations in the market.

18 When I started Invenergy in 2001, we basically
19 started to continue our term of business, then in 2002 and
20 2003, we saw a really rapid change in the market.

21 We saw issues of national security and we started
22 to see a rise in natural gas and oil prices. We started to
23 see resistance to coal, particularly, and some other
24 generation technologies, and we looked at potential for fuel
25 diversity and economic development, and I've never been an

1 environmentalist in my life, but I looked at the renewables,
2 and, to me, it just made sense.

3 I thought, if our country would have a certain
4 percentage of renewables, it must makes sense for everybody,
5 just as a diversity and forget about anything else.

6 So then I started Invenergy and I tried to sell
7 -- basically, I went around and tried to sell electricity to
8 electric utilities, and I saw a lot of resistance.
9 Basically, they didn't want to buy, and the reason was, they
10 just had their own generation and they really had no reason
11 to buy from wind.

12 Obviously, at that time, we started seeing some
13 state RPSs, because that was the only market that RPS
14 established for renewable developers to sell. And as RPSs
15 show up, obviously, the utilities start signing long-term
16 power purchase agreements, and basically we went through
17 renewables to get financing.

18 As the market got mature and prices, particularly
19 of natural gas, went up, a couple of other models appeared
20 to build renewable projects.

21 The merchant model, where people simply built
22 projects in anticipation they would sell and develop it
23 later on, and also hedge market modeling, where you
24 basically hedge fuel prices or power prices for times to
25 come, in addition to the PPA.

1 With the current change in the financial markets,
2 those two models have totally disappeared. You can't hedge,
3 you can't build merchant, so the only real option, is long-
4 term power purchase agreements.

5 Power purchase agreements, despite the state
6 RPSs, is not that easy to execute, because, primarily, the
7 utilities that are power aggregators, control, basically,
8 the market, so they decide when to buy, how much to buy, and
9 so on.

10 So, as an independent power producer, we are at
11 the mercy of the utilities and basically their terms. Some
12 of these terms are unreasonable, and it's very, very
13 difficult to finance, as well.

14 So, really, just to echo what Mr. Levy said, to
15 really have financeable project, you have to have a PPA,
16 especially for the new project. Unlike fossil fuel
17 projects, with the renewable space, generally, the
18 independent power producers have an edge and generally have
19 lower costs and can build lower-cost plants than utilities,
20 because, in the wind business -- and I'm speaking about wind
21 right now -- the wind speed is basically the major factor in
22 the cost of the electricity from those facilities, so,
23 generally, IPP developers that have been looking for a long
24 time, generally have access to better wind than utilities,
25 in particular, and also developers like ourselves, who

1 really build a lot of projects at the same time, buy a lot
2 of wind turbines and their prices are more competitive than
3 those who are buying turbines only sporadically.

4 So, IPP can produce electricity from wind
5 projects at more competitive prices, however, around the
6 country, there has recently emerged, where utilities
7 discovered that they really want to build and own their own
8 wind facilities, so there was sort of this competition
9 between independent power producers and utilities, of who
10 would own the facility.

11 Generally, the IPP, in most cases, might lose,
12 because they don't really have that good access to the
13 markets, so, in our opinion, it's very important that we're
14 close to electricity from wind facilities, no matter who
15 would own the plant.

16 Having this financial crisis, it has become more
17 and more difficult to build wind facilities. You are
18 familiar that in the case of wind, you have production, and
19 you have to monetize it, especially after the end of the
20 second half of last year.

21 Basically, the capital all but disappeared, so it
22 became very difficult to get access. Access to that market
23 has become very, very difficult.

24 In spite of that, if you have a strong PPA, so
25 merchant projects and hedge projects are very, very

1 difficult to finance, but if you have very strong power
2 purchase agreements, then you really can build and finance
3 the project.

4 So, my point here is that renewable technology,
5 in particular, is a policy-driven technology. It's not a
6 free market technology; it's policy driven.

7 The reason we have renewable energy, is because
8 we have state renewable portfolio standards and hopefully
9 we'll have federal portfolio standards. Unless we have a
10 strong policy, renewable energy simply will not flourish.

11 In addition to that, it's very important to have
12 transmission access, because, unlike fossil fuel technology,
13 where you can build basically anywhere where there's a
14 transmission line and fuel supply, in the case of renewable
15 energy, renewable energy is in certain areas of the country,
16 so called renewable energy zones and areas, and it's very
17 important to have cooperative transmission access to those
18 areas.

19 So it's very important to build transmission
20 lines, because most of the renewable energy, wind, in
21 particular, is in areas where there is not very strong
22 transmission systems. If we ever want renewable energy to
23 meet certain standards, we have to have appropriate policy
24 regarding transmission, interconnection, and access to the
25 markets.

1 In conclusion, I just want to tell you that
2 renewable energy is all about policy. If we don't have
3 policy, we don't have that technology, and it's very
4 important that not just FERC, but all federal regulators and
5 entities will promote certain policies, from the RPS to
6 transmission, to interconnection, to long-term agreements
7 that would encourage, promote, and enable this technology.

8 Otherwise, we're just talking about this and
9 nothing much will happen. Thank you very much.

10 CHAIRMAN KELLIHER: Thank you very much. I'd
11 like to recognize the Honorable Gary Brown, Chairman of the
12 New York Public Service Commission, also Chairman of the
13 NARUC Electricity Committee, speaking on behalf of NARUC.

14 Gary, I want to apologize. We normally have
15 state regulators go first, but you seem to fit better, going
16 last.

17 MR. BROWN: I was in on the discussion of it, so
18 no problem at all.

19 Good afternoon. Thank you for the opportunity to
20 address this important conference. As the Chairman just
21 pointed out, I'll be speaking today as the Chairman of the
22 New York Public Service Commission and as the Chairman of
23 the National Association of Regulatory Utility Commissioners
24 Committee on Electricity.

25 The New York Public Service Commission's

1 response, both for setting rates and assuring adequate
2 service is provided by New York utilities, the NARUC
3 Electricity Committee has developed and advanced policies
4 that promote reliable, adequate, and affordable supplies of
5 electricity.

6 Through strong collaboration with the Federal
7 Energy Regulatory Commission and other related federal
8 agencies, the Committee seeks ways to improve the quality
9 and effectiveness of regulation through education,
10 cooperation, and exchange of information.

11 We've just heard from a number of experts
12 representing investors and various electric industry
13 participants. It's quite evident that there are many
14 challenges facing the industry as a whole.

15 At the outset, I want to note that it is
16 typically the responsibility of state utility regulators, to
17 assure that the state's electric utilities supply safe and
18 reliable service at a reasonable price.

19 This requires utilities to make investments, some
20 of which are very substantial, and utilities generally
21 desire certainty from regulators, so that they can recover
22 their investments and include a reasonable return.

23 With that said, it's important to recognize the
24 economic realities of the recession and expect utilities to
25 take a hard look at their capital programs with an eye

1 towards prioritizing.

2 This not only reduces utility exposure to the
3 volatile financial market, but also helps to relieve upward
4 pressure on rates and end use customers, caused by the
5 decrease in the utility rate base.

6 For example, those projects that are essential to
7 safety and reliability, must go forward, while those that
8 are discretionary and can be deferred, should be evaluated
9 on a case-by-case basis, as to whether customers are best
10 served by going forward with the projects at this time.

11 I note that there are several potential drivers
12 of utility investment on the horizon: Transmission and
13 distribution upgrades, due to aging infrastructure, to meet
14 new needs and meet the needs for expanded renewable resource
15 base; requirements to create a smarter grid and advanced
16 metering technologies; energy efficiency investments;
17 renewable energy mandates; and, in some part of the country,
18 capital for new power plant construction, financed by the
19 utilities.

20 These potential investments will require
21 literally hundreds of billions of dollars, in total, to
22 support, and we need to be able to make that balance between
23 the need for these various investments, and the problems
24 related with obtaining money at reasonable cost at this
25 point.

1 Large capital programs such as the one noted,
2 make it very important that electric utilities continue to
3 have access to the financial markets and regulatory policies
4 should support utilities' abilities to raise capital.

5 I'll speak parochially from a New York
6 perspective. Our policies over the years, while not always
7 viewed by all as being investor-friendly, have, nonetheless,
8 resulted in no New York electric utility currently being
9 rated less than triple-B-plus, and many are A-rated.

10 In the last two months, New York electric
11 utilities have raised about \$800 million in the markets,
12 thus, our utilities have been able to raise capital, even in
13 these difficult times.

14 That said, however, the interest cost associated
15 with new utility debt issuance, has been extremely high,
16 relative to yields on comparable Treasury securities. I
17 should note that there's a clear relationship between the
18 utility's bond rating and its ability to borrow at a
19 reasonable cost, especially in the times of economic
20 distress we're now facing.

21 For example, in New York, we have, for many
22 years, considered the question of what the most cost-
23 effective electric utility bond rating is for ratepayers.
24 While the Commission has never formally stated a particular
25 policy, I think most experts would say that over the last 15

1 years, the answer was probably someplace in the triple-B to
2 A range, depending on the assumptions employed in the
3 analysis.

4 While this may be a good answer over the long-
5 term, it flies in the face of the current reality. Given
6 current economic realities, 100 to 200 basis-point premiums
7 on the yield for triple-B debt over A debt, may indicate
8 that A is cheaper to ratepayers now.

9 The policy question for utilities and regulators
10 to grapple with, is, how long the current situation will
11 continue and how often we can expect similar situations in
12 the future.

13 While there is a large difference between A and
14 triple-B, there is even a brighter line between investment-
15 grade and non-investment-grade. The cost of issuing non-
16 investment-grade debt, assuming the market is receptive to
17 it, has in some cases, been hundreds of basis points over
18 the yield on investment-grade securities.

19 You do not want to be rated at the lower end of
20 the triple-B range, because an unexpected shock could leave
21 you outside the investment-grade range.

22 Now, turning to the implications of the current
23 financial environment on market players, I think you will
24 hear from the next short-term electric markets panel,
25 regarding the need to tighten up credit requirements and

1 reduce the risk of default in the markets.

2 For example, in New York, the rules for extending
3 credit by the New York Independent System Operator, are
4 largely based on lagging data, such as rating and prior
5 financial statements that may not adequately capture the
6 potential for the type of rapid financial deterioration that
7 we've been seeing.

8 While the cost of market defaults will ultimately
9 be paid by consumers, the cost of potential revenues to
10 avoid defaults, such as reducing load-serving entities'
11 unsecured credit lines or requiring accelerated cash
12 payments, will also be borne by consumers.

13 It is, therefore, incumbent upon both state and
14 federal regulators to ensure that these will provide balance
15 and the entities that administer these markets, have the
16 tools and ability to react quickly to changing conditions.

17 More than anecdotally, given the last two
18 speakers, we have heard that the current environment is
19 leading to difficulties in raising capital for investors in
20 certain renewables projects.

21 Many states, including New York, have RPS goals
22 in place. Some of the projects rely partly on state and
23 federal funding. If the current financial situation
24 continues, there may be an impact on the achievement of RPS
25 goals.

1 Regulators may need to consider how their funding
2 for renewables should be changed to help achieve these RPS
3 goals. Clearly, we are in uncharted waters.

4 There remains a significant concern that some
5 might try to use this opportunity to achieve other goals.
6 We need to be diligent to ensure that what actions we might
7 take today, are, indeed, the best decision to ensure the
8 safety and reliability of the electric power industry in
9 these economic times.

10 Our job as regulators, is to ask tough, pointed
11 questions. We need to be watchful, and asking questions
12 does not mean that we are not supportive; it means we, as
13 regulators, must continue to recognize that our primary
14 responsibility is to ensure safety and reliability at just
15 and reasonable costs.

16 Finally, I'd like to take this opportunity, on
17 behalf of myself and on behalf of NARUC, to thank Chairman
18 Kelliher for his service at the Federal Energy Regulatory
19 Commission. His leadership and direction are much
20 appreciated.

21 Talking to many more veteran regulators than
22 myself, the relationship between federal and state energy
23 regulatory bodies, is one of the strongest ever. We really
24 appreciate things like the joint FERC/NARUC collaboratives,
25 which have been a shining example of the way that regulatory

1 bodies can work together in trying to resolve some difficult
2 issues that, frankly, cross jurisdictional lines.

3 I want to thank you and wish you good luck in
4 your future endeavors.

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1 CHAIRMAN KELLIHER: Thank you. I'm especially
2 grateful since I was at your meeting with the state
3 regulators, and I mentioned that I was from New Jersey, I'm
4 the New Jersey chairman. I guess I was trying to sidle up
5 to Gene Fox. I thought you were from New York.

6 (Laughter.)

7 CHAIRMAN KELLIHER: I only have one home state.
8 We have 55 minutes. I think Commissioner Kelly will be
9 joining us, and I would like to say that staff are the fifth
10 man. Why don't we divide 55 by 5 and have 11 minutes each?

11 Let's think of excellent staff questions. We
12 want to at least start, and we'll miss the excellent
13 questions that you all had asked. So why don't -- if I can
14 have 11 minutes, and Rufus may cut me off, whoever is in
15 charge of the time.

16 I want to start with an observation, I guess, and
17 then I have some questions. The observation is we knew this
18 when we established this conference, when we set this
19 conference, that somebody might identify solutions or
20 actions that are actually beyond our authority, and of
21 course that is always a risk you run, because FERC is an
22 agency of limited powers and we have to respect those
23 limits.

24 I don't say that as an apology, but really as an
25 explanation. Some of you have raised some suggestions that

1 might go beyond those limits or stretch those limits to the
2 full, particularly FERC's ability to bring about 15 year
3 contracts.

4 We generally regulate power sellers rather than
5 power purchasers, and if either is beyond or really at the
6 utmost limit of our authority, to somehow bring about 15
7 year power purchase contracts across the board, I really
8 think that's more a state policy than federal policy,
9 because state regulation of utilities, you're regulating a
10 retail seller, rather than a wholesale purchaser.

11 So I think that's really more of a question to
12 state, a matter of state policy. I know there's been some
13 studies that are on the gas side. How did state policy
14 encourage long-term purchase of wholesale gas?

15 There was some AGA study a few years ago that
16 said how 42 states had a permissive attitude towards long-
17 term contracts, and that to me is unremarkable. They don't
18 rule them out.

19 But then the question is how many have policies
20 in place so that a state-regulated utility, in this case a
21 gas utility, could enter into a long-term contract with
22 minimal, not no risk. That was a smaller number.

23 But this is something that Commissioner Spitzer
24 has worked on, and we do have a collaboration in the area of
25 power procurement. Here's an area where there's both

1 federal and state responsibility for different reasons.

2 The reason that Chairman Brown mentioned, we'd
3 rather start off with discussions about policy and hopefully
4 we can have some concert or purpose in policy direction, and
5 then we don't have to worry so much about jurisdictional
6 boundaries, particularly when they're arguably somewhat
7 blurred.

8 Some of you have indicated that you think the
9 model for building power generation in the short term is
10 either rate-based generation by vertically integrated
11 utilities, or through a long-term contract, that capacity
12 markets themselves, according to some of the witnesses, are
13 going to be an insufficient basis to support new generation.

14 I guess I just wanted to ask is that the general
15 impression of the panelists, that the forward capacity of
16 markets has a longer term, let's say a five-year term. Is
17 that going to be an insufficient basis for new generation?

18 That's what Mr. Levy said. You agree with
19 yourself?

20 (Laughter.)

21 MR. LEVY: There are two things that have
22 happened. Clearly one is the organized capacity markets are
23 new. There's been limited experience with them, and I think
24 the next few years of them will be more telling.

25 The second, of course, is that the other half of

1 the margin formula is the energy margin, which we have been
2 able to lock in by doing forward hedging between five and
3 seven years with some of the financial institutions that had
4 big trading operations.

5 Most of those trading operations have been
6 significantly scaled back if not shut down completely. So
7 now at best, we're going to get a two or three year hedge
8 for energy. So in addition to the uncertainty and newness
9 of the capacity markets, we've got essentially the
10 elimination of the energy hedge, which had made the
11 situation much more difficult for forward hedging in the
12 organized markets.

13 MR. IANNO: I certainly would agree with that,
14 and I think the challenge that we have is that we're trying
15 to build long-term assets with short-term pricing, and that
16 just doesn't line up, particularly if you want to get to
17 something that is investment grade.

18 I think going back a couple of years ago, we were
19 able to do that, because of how fluid the non-investment
20 grade markets were. People were willing to take that risk.
21 People were willing to put on hedge industries a lot more
22 liquidity, a lot more leverage in the system to do that.

23 But with that market growing up, the only way to
24 do that is to push through some policy decisions, to have
25 longer-term pricing rules. Whether that's long-term PPAs or

1 whether that's some form of Commission regulation, or
2 whether that can promote the ability to build those long-
3 term markets and finance them with 10 or 15 year debt, that
4 could be essential.

5 Otherwise, we're subject to the fluctuations of
6 the credit markets.

7 CHAIRMAN KELLIHER: Paul?

8 MR. BOWERS: In response to that, Mr. Chairman, I
9 believe that the PPA market gives some reduction of risk.
10 That's what you're really looking at. You're making trade-
11 offs on what is the cost of risk in the marketplace versus
12 energy margins that you have available to you.

13 As volatile as the markets have been, you've seen
14 the shrinking of the energy margins, that some of the IPPs
15 are seeing. So naturally the PPAs, if you look at our
16 model, from Southern Power's perspective, the trade-offs
17 between large margin versus risk, you look down to try to
18 give us some higher credit rating on what are called
19 capital.

20 Right now, our portfolio has an average ten year
21 of about 11 years in those PPAs. So that only trade-offs
22 are in the short term energy margins. This might be minimal
23 versus the risk that you're taking on the longer-term.

24 MR. TRIPPE: I'll just say about AMP Ohio. We're
25 a tax-exempt corporation. We build utility assets to meet

1 the need of our members. Although we do monitor the
2 capacity markets, particularly in PJM, it's not a driving
3 factor.

4 Having said that, we have to remember purchase
5 power agreements over the years. Right now, the agreements
6 are at the end of five years.

7 MR. BROWN: People have been asking for PPAs
8 since PURPA. It's not surprising. I was in the power plant
9 development business in my time too. A PPA does make it
10 easier to build a project. It also shifts some of the risks
11 back to the consumer that we were hopeful could be moved to
12 the developer to some degree.

13 The fundamental question today is has this
14 economic crisis in any way fundamentally changed the
15 appetites for developers to move forward? It may be.
16 People have been saying they've been wanting PPAs for a long
17 time, but I've also seen people move with much shorter time
18 horizons.

19 I've talked to developers. Some would say I've
20 got to fix my price for 20 years. To even think about it,
21 others say give me three to five years, and I can absorb the
22 risk. The question is whether this financial crisis, lack
23 of capital, not knowing how permanent is it yet, do we have
24 to kind of change the paradigm on how we deal with merchant
25 projects and the financing of merchant projects.

1 I don't think any of us know yet. I don't think
2 any of us know exactly where this is all going.

3 CHAIRMAN KELLIHER: One comment. Do you see the
4 distinction between reliance on the capacity markets versus
5 reliance on a contract? A contract is something you can
6 place a great deal of confidence in. The Commission
7 supports contracts. Contracts we'll continue to respect.

8 But the capacity market, to some extent, you're
9 placing a bet on the constancy of the rules approved by
10 FERC, and those rules are fairly new. So far, I think we've
11 shown we've supported forward capacity markets and those
12 rules, and I think the Commission is committed to forward
13 capacity markets.

14 The short-term markets didn't work so well, and
15 we can see from the market participant's point of view, to
16 some extent, it relies on something different. It's
17 reliance on a contract versus reliance on some level of
18 constancy in Commission rules.

19 MR. POLSKY: I think the whole merchant model of
20 power, in my opinion, is being driven by -- it's the same
21 crisis as mortgage and derivatives. You cannot build power
22 plants. That's not a risk that's possible for everybody to
23 take.

24 People do it because financial institutions allow
25 them to take it, and now these risks are on the table, just

1 like derivatives or some other instruments are no longer on
2 the table. In my opinion, going forward in five years PPA
3 for a new-built plant or a capacity market is simply, in my
4 opinion, again it's just not doable.

5 As far as renewables, you know, renewables
6 definitely need long-term contracts, okay. Whether it's
7 obviously FERC jurisdiction or anybody, the whole purpose of
8 RPS is a long-term contract, just like in Europe. We just
9 can't avoid that.

10 Any agency can close out and say "Let's do
11 renewables," but we have to have contracts. I think this
12 whole financial market, putting things back in order the way
13 it's supposed to be in the past, we have to have a contract
14 and you've got to build a power plant.

15 All these five years and three years you have
16 just this, that was just simply the financial place. You
17 know for the first three years, I don't worry what's going
18 to happen, and after that it's somebody else's problem. Now
19 simply you can't do this anymore.

20 CHAIRMAN KELLIHER: I think my time is done. I
21 haven't seen -- do I have time? I'll turn to my colleagues.
22 Commissioner Spitzer.

23 COMMISSIONER MOELLER: You have two minutes.

24 CHAIRMAN KELLIHER: Let me ask one question. The
25 surgeon's injunction, do no harm. One of the dumbest things

1 that we might do that you would warn us away from doing.
2 We're going to start off with "do no harm." That handicaps
3 what we might do, but just start off thinking what are the
4 worst changes we could make.

5 MR. LEVY: I actually had that statement in my
6 first draft of these remarks.

7 (Laughter.)

8 MR. LEVY: I think developing capacity markets or
9 organized markets, and it's going to take some time to
10 establish a track record.

11 We'd say the short term slowness for those
12 markets to develop, and they are developing. We've been
13 working on projects. Lots of people working on projects. A
14 lot have been held up by transmission connection issues, not
15 lack of markets.

16 Do not -- we strongly recommend that you not slow
17 down or take emphasis off the continued development of
18 competitive markets. They really need time to establish a
19 track record that people can depend on.

20 CHAIRMAN KELLIHER: Paul?

21 MR. BOWERS: Mr. Chairman, you made the point
22 about certainty and predictability, especially around the
23 criteria on transmission incentives. People now are moving
24 to investments. But changes to that could basically hinder
25 their development.

1 From a historical perspective, we saw about a \$4
2 billion per year investment in transmission, with the
3 criteria the Commission has put forward. Now moving between
4 nine and eleven billion per year on transmission investment,
5 an abrupt change could cause that to retrench. That
6 predictability and certainty is critical.

7 CHAIRMAN KELLIHER: Thank you. Any other
8 comments?

9 (No response.)

10 CHAIRMAN KELLIHER: With that, let me turn to my
11 colleagues. Let's see how things go. We're going to start
12 with Commissioner Spitzer.

13 COMMISSIONER SPITZER: Thank you, Mr. Chairman.
14 We've got obviously the power sector here. The gas sector
15 is also involved in the inquiry. It would appear in natural
16 gas and in transmission storage that we haven't had them
17 here in the same degree.

18 You've got tax-efficient investment vehicles
19 certainly in the transmission sector, and steel is getting
20 put in the ground. We have a plethora of proposed projects.
21 On the commodities side, you've got price signals that have
22 been abrupt, frankly, and anticipated some of the people in
23 exploration and production.

24 Nevertheless, there's an alignment between the
25 capital deployed and the commodity price signals that are

1 being heard what in the economic or legal/regulatory
2 structure in natural gas is permitting these successes, that
3 is somehow impeding the similar success on the power side?

4 MR. BROWN: In my mind, there's a fundamental
5 distinction with natural gas. Natural gas was real obvious
6 from the beginning that you were going to need a large
7 pipeline system to get the supply that existed originally
8 the Gulf Coast area and elsewhere, up into the populated
9 areas.

10 For 60 years, we've developed a regulatory
11 history of how to get the pipelines built, how to pay for
12 the pipelines, etcetera. Electricity, on the other hand,
13 has traditionally been build the power plant somewhat close
14 to the loads, and it's pretty much an intra-state problem of
15 how to get the transmission lines built to deliver from the
16 power plants to the loads.

17 And still, for example, in our districts and in
18 New York City, we've seen several new power plants built in
19 New York City. You can't do that in natural gas. You can't
20 suddenly drill wells in New York City and get your supply
21 there.

22 So I think it's 60 years of history,
23 Commissioner, that the rules are fully developed. The same
24 sort of thing could happen in electricity. I'm just
25 worrying, you know, in Year 2 or 3, in terms of really

1 thinking hard about how to get power supply loads separated
2 by long distances, from the generation sources and how then
3 to get the transmission built.

4 I think we're all thinking about that, both at
5 the state regulatory perspective and at the federal
6 perspective. So I just think it's the way the business is
7 evolving, the basics of the business that drove gas to be so
8 different at this time from electricity.

9 COMMISSIONER SPITZER: A lot of people who drew
10 that analogy with the FERC policies started with PURPA and
11 then proceeded to the 1992 federal legislation.

12 MR. BROWN: Even PURPA and things didn't really
13 envision this evolving system, especially with renewables.
14 The generation load being a considerable distance. Excuse
15 me. The generation facilities being at considerable
16 distance from the load.

17 COMMISSIONER SPITZER: You think it's more of a
18 timing issue? Take the issue of renewable deployment, which
19 is similar to gas, where the resource is located at a
20 distance from the load. The issue then is on the table.

21 MR. BROWN: Just beginning to get on the table,
22 in my mind.

23 COMMISSIONER SPITZER: Any other comments on
24 this?

25 MR. POLSKY: I think there's a fundamental

1 difference, in my opinion. With gas or oil, there's a
2 really free market. If you're a producer, you can see your
3 product at the market price. With electricity, there is no
4 free market in many cases. You can produce power cheaper
5 than other people, but you can't sell it.

6 So you know, in many places, there is a very
7 significant limitation in your ability to sell the product.
8 And yes, there's no vertical integration. Somebody produces
9 gas. Somebody transports and the consumer buys.

10 In the electricity market, we have half of the
11 country fully regulated. You can't penetrate the market.
12 You can't sell it even if you're cheaper than other people.
13 So I think as long as we have that impediment, it is going
14 to be fundamentally different.

15 That's why you can't finance, because the first
16 question of the bank is can you sell your product? You
17 can't even sell your product at any price, or at whatever
18 prices. You just can't do that. With the gas or oil, at
19 least you can do this model and say "Okay, the market is
20 this. I can sell at this price." With electricity, the
21 market is not free.

22 COMMISSIONER SPITZER: That's somewhat circular,
23 but absent transmission, the gas supply becomes shut in. If
24 the federal government did not have a framework for timely
25 certificating and the financial markets did not create

1 investments, that amount would obtain on the gas side.

2 MR. POLSKY: But for electricity, you can build
3 lower transmission. But if you have demand, it's
4 constrained. In other words, you can build transmission and
5 build cheaper electricity from elsewhere, but how can you
6 penetrate that market? This is the issue.

7 MR. IANNO: I would just add with gas, there was
8 an economic incentive to get the gas to the customers. It
9 was going to be the low cost alternative to burning fuel in
10 a power plant or to the customer, providing heating in the
11 home. Whereas renewable energy, you can talk about policy
12 decisions.

13 You're talking about energy independence, and
14 it's much more important. There are policy reasons for
15 that, which drive that, as opposed to pure economic
16 decisions to get the gas to the home.

17 COMMISSIONER SPITZER: The next question I'm
18 going to pose is more big picture. The Chairman has used
19 this analogy, fighting the last war when the French built
20 the Maginot Line in the World War I strategy, and then were
21 defeated in 1940.

22 We have, the government wants to not fight the
23 last war. That leads to this question of whether it's
24 speculation on whether we have a short-term phenomenon, or
25 whether we have some long term play that requires a

1 permanent solution.

2 I go back to July. When you look at the
3 commodity crisis, the crisis was on one side. Now you've
4 got a short six months later a crisis on the other side of
5 the commodities, with the bulls and the bears.

6 This is one line of the Chairman's question about
7 doing no harm. So I guess I'm calling for some speculation
8 on the one hand, and on the second, if there was one item, I
9 know you'd make a number of recommendations. But in the
10 effort to develop some consensus, you'd come up with one or
11 two conclusions, based upon your long-term economic
12 observations.

13 MR. LEVY: I think one thing we've come to learn,
14 more than we expected in the last few months, is how a very
15 small change in demand has a significant change in price,
16 certainly for commodities like oil and natural gas.

17 If you look at the actual demand, it isn't down
18 all that much. If you take the difference in price of a
19 market that's two percent short, versus a market that's two
20 percent long, you'll see possibly a 30 or 40 percent swing
21 in prices.

22 I think some of the design of some of the
23 capacity prices and some of the markets that are being
24 designed have the same type of swing. Someone builds a
25 1,000 megawatt plant in the market and all of the sudden

1 capacity prices collapse.

2 That sensitivity is probably one that is too
3 foreign for markets like ours, where we're making billion
4 dollar investments. We've seen it right now. Most of the
5 power pools have dropped their load growth forecasts from
6 three percent to one percent.

7 All of the sudden, the forecast capacity prices
8 dropped significantly, just by a small change in that
9 forecast capacity price. Maybe that sensitivity is too
10 fine.

11 COMMISSIONER SPITZER: What I was getting at was
12 the overreaction, and the pendulum swinging. I had a famous
13 comment that was made by a Wall Street expert in Arizona.
14 This was during the last bear market, after the savings and
15 loan fiasco in the 80's, a repetition of history.

16 He said a bank will finance a 24-story Ritz
17 Carlton Hotel in the middle of the Gobi Desert, because it
18 can, and it all depends on the timing. If you're in one of
19 the bull markets, you can. If you're in one of the bear
20 markets, the central function won't get money.

21 We've seen how slashing affects the production
22 side. If the economy does turn and we have increased
23 demand, it's going to press further on the ratepayers in New
24 York and every state in the Union. To some extent, this is
25 difficult because we're on the same page here.

1 How do we guard ratepayers collectively on the
2 investment side, on the production side and the federal and
3 state regulatory side from this overreaction on the upside
4 and then on the downside about the financial cost? Or is
5 this beyond the power of government?

6 MR. BROWN: Just to go to your theme of fighting
7 the last war, as you've noted, this has happened to us
8 before. Oil prices went up in the late 70's, early 80's.
9 They came back down and we kind of forgot about energy
10 policy.

11 If there's any lesson from my perspective that we
12 learned from this, it's just because oil has dropped back
13 down, nothing has changed in the world dynamics. Nothing
14 has changed in terms of the need for energy efficiency,
15 renewables and to do the sort of programs and likely get us
16 off oil so we don't have to depend on the vagaries of the
17 market to determine whether times are good or times are bad.

18 So I think we should stay the course is the point
19 I want to make. We may have to make an adjustment in the
20 ship, but we have to stay the course of trying to develop a
21 national and state energy policy that wean us off the
22 continued dependence on oil.

23 COMMISSIONER SPITZER: Irrespective of short
24 term?

25 MR. BROWN: Absolutely. Just because prices go

1 lower, let's not buy the Hummers and the plasma TVs again.
2 We've done that once.

3 MR. BOWERS: Commissioner Spitzer, I agree with
4 Chairman Brown. We asked the question about short-term
5 versus longer-term, but understand. The financial market
6 has changed dramatically from a long-term perspective.

7 There's fewer lending institutions out there.
8 You look at the onslaught of investment that's coming in
9 from the total sector at the time frame of \$230 billion.
10 There's going to be a lot of volatility in corresponding
11 equity, and how much the market advertises the equity.

12 The financial integrity of government
13 institutions or utilities trying to upgrade the credit
14 ratings in this market, that's going to have a longer-term
15 effect, and I think there is systemic change.

16 MR. IANNO: I would certainly agree with that,
17 and that gets back to what I said earlier. Whether it's
18 long-term contracts or long-term regulatory compacts,
19 derisking will help.

20 Even with long-term contracts, that requires
21 imputed debt on the companies that are on the other end of
22 those contracts, which mean they have to have more equity in
23 their ratios in order to ensure they're going to get their
24 returns.

25 So realizing the financial impacts and then

1 preparing by helping to derisk the industry for the
2 intermediate term.

3 COMMISSIONER SPITZER: The derisk you allude to,
4 obviously I'm familiar with the debt implementation issue.
5 It seems to me that that issue is exacerbated or minimized
6 by regulatory policies.

7 MR. IANNO: That's correct.

8 COMMISSIONER SPITZER: Where there's regulatory
9 certainty, that issue tends to be. I don't think you can
10 have it completely eliminated, but certainly minimize it.

11 MR. IANNO: That's true. What we've talked about
12 here is the difference between financing for Triple B
13 companies and single A companies. But even within the A-
14 rated complex or the Triple B complex, there are variations
15 depending on long-term regulation interaction on that.

16 MR. BOWERS: I'll reiterate one other point,
17 Commissioner Spitzer. Chairman Brown put it in his opening
18 remarks. The lowest cost of capital now has shifted from
19 the Triple B rated companies to single A. That's where you
20 see the economic advantage of the lower cost of capital.

21 MR. LEVY: One last comment on that. I think
22 Anthony said it earlier, that the volatility of our markets
23 has really shifted significantly. Certainly right now, A
24 rated bonds have lower costs than Triple B. In six months
25 or a year, it might shift somewhere else, and I think I've

1 spent my time at the utility.

2 I was CFO, and that's another change. The
3 markets changed. Spreads went up 20 or 30 basis points.
4 But you didn't see 100, 200 or 300 basis point shifts in
5 things.

6 I think we have to prepare ourselves that markets
7 these days are more global. They move faster. Things don't
8 always happen here that cause markets to move, and we have
9 to make sure regulatory policy is possibly more flexible to
10 affect those more likely moves about interest volatility.

11 CHAIRMAN KELLIHER: Thank you. Commissioner
12 Moeller.

13 COMMISSIONER MOELLER: Following up on that, as
14 Chairman Brown said, we may have shifted the optimal credit
15 rating now to A. Can we predict or can we state in short
16 term or long term what that optimal rating might be, or is
17 it just too uncertain?

18 Obviously, Mr. Bowers you strive for A and
19 constantly have. But any thoughts?

20 MR. IANNO: I'll start on that. I don't think
21 you can predict it. But I think what we can predict is the
22 higher-rated. The higher the rating, the lower the
23 volatility, and I think as we go into this investment cycle
24 we want to reduce volatility, both to ratepayers and to
25 issuers, in allowing access to capital.

1 MR. LEVY: Volatility affects ratepayers when
2 it's financed by the utility. When it's financed by
3 independents, it affects my shareholders and it does not
4 affect the utility's ratepayers.

5 Volatility can be managed many ways. PPAs are
6 one; capacity markets are another; and certainly better
7 credit ratings are a third one.

8 MR. BROWN: Commissioner, I think you asked the
9 question that every state regulatory commissioner is going
10 to be asking themselves in every rate case for the next
11 year.

12 Obviously, there is a cost to consumers of
13 raising the returns to utilities, to allow them a higher
14 rating that may be more than made up for by the decreased
15 cost in capital by those utilities.

16 But on the other hand, it may not. You might be
17 better off with a considerably higher-rated Triple B, but
18 you know, the consumers may be better off. I think the
19 point I made in my remarks was there is certainly a level if
20 you get below a Triple B, you're really putting everybody at
21 risk.

22 But that question, how long of a phenomenon is
23 this, is unanswerable to all of us. We're all going to be
24 making our guesses over the next year as we go through rate
25 cases.

1 COMMISSIONER MOELLER: What have you seen in
2 terms of demand in New York, weather-adjusted over the last
3 six months or so?

4 MR. BROWN: We've seen a decrease, especially in
5 the New York City area, not surprisingly. That's been hit
6 by the recession. So we've had anecdotal, I have to say
7 that, anecdotal evidence. We've not seen a rise in demand.
8 In some places, we may be seeing a decrease.

9 COMMISSIONER MOELLER: A question for Mr. Trippe.
10 As I'm often reminding my friends in public power, I spent a
11 significant time in my time on Capitol Hill working through
12 the issues of tax exempt financing, private uses for public
13 power.

14 So I'm curious on your recommendations. Have you
15 proposed any federal legislation to address those
16 recommendations, and can you elaborate on that?

17 MR. TRIPPE: Yes I can, Commissioner. We have
18 proposed some legislation. We're working with the state of
19 Ohio on clean coal technology for an interest-free loan, a
20 short-term loan from the state of Ohio. That's currently
21 being negotiated right now.

22 We're in the process of working with some of the
23 representatives in Ohio on this issue, on getting federal
24 guarantees to support clean coal technology, carbon
25 sequestration and so on. So those initiatives have been

1 started.

2 It's in the early stages. We're working with
3 U.S. Representatives and the state to push that forward.

4 COMMISSIONER MOELLER: I'll be interested in how
5 that proceeds and wish you success. I'm curious as to the
6 entire panel. You've all alluded to the uncertain nature of
7 what we're going through, and that we've all felt over the
8 last few months.

9 I appreciate the question on "do no harm." In
10 addition to constantly following these issues, maybe taking
11 the next look at how things have changed, what's your hunch?
12 In two to three months, should we reconvene something like
13 this or longer?

14 Because the fear, of course, is that we have a
15 number of infrastructure projects in the works, but this
16 already has, in some cases, stopped them in their tracks.
17 Any thoughts on that would be appreciated.

18 MR. LEVY: There's rumors that the new
19 administration has some ideas on changes to incentive tax
20 credits for renewables. If any of those changes are made,
21 they'll take time to run through the system. So there
22 certainly should be enough time to see if any changes are
23 made, number one, and number two, if it has an effect.

24 There's also renewed activity in the market.
25 Markets tend to evolve, so I'm sure a lot of finance guys

1 are thinking in a little different ways around this problem.

2 So you know, certainly in three months, maybe six
3 months, the markets will either affirm it or creative
4 financial people will figure out ways to react to it. Maybe
5 the new administration will have some new rules that will
6 affect it.

7 MR. BOWERS: Commissioner Moeller, one of the
8 articles in the newspaper, or the Atlanta Constitution this
9 morning, is highlights of the Fed Board Chairman from
10 Atlanta speaking to the economic condition of the United
11 States and his comments were focused on the latter half of
12 this year, that we should see economic activity over the
13 United States.

14 I would just pose that merely as a monitoring
15 stick for you to track for the next few months what's
16 happening in the financial markets, as things start settling
17 down. Is that an appropriate time to see did the markets
18 bottom out? Is there time to just get a test of how
19 companies are viewing additional capital investments for the
20 future, and is this starting to move forward again?

21 MR. POLSKY: I just wanted to say obviously we
22 need some stimulus for the economy, and I just speak from
23 the renewable energy standpoint. To the extent that the
24 renewable industry can lead the country towards economic
25 recovery here, because of the creation of jobs and basically

1 redistribution of investment in infrastructure, if anything
2 might be --

3 What is the infrastructure? It's something that
4 you build and lasts forever, something that you build for 20
5 years, and may not be economical. From there on, it may not
6 be infrastructure. In order to really support this
7 infrastructure, as I mentioned, we need policies, and as far
8 as there are some federal policies.

9 But from the FERC standpoint, it's very important
10 transmission access. There are significant bottlenecks
11 everywhere in the country. ERCOT, for example, is not FERC
12 jurisdiction. But what happened with ERCOT, everybody got
13 interconnection, ability to connect and there's no place to
14 put power.

15 Some people in East Texas will pay a tremendous
16 amount and lot more for power and West Texas power, those
17 have negative prices. Just think how much losses to the
18 consumer per year, and nobody seems to address it.

19 We see similar bottlenecks now developing in
20 Illinois and other places, where there is a lot of wind and
21 people get interconnection, but there's no ability to move
22 power.

23 I think it's very important not just to connect,
24 but to be able to transmit, because if we have negative
25 prices, it costs consumers hundreds of millions of dollars a

1 year, and we don't get the benefit from really low cost
2 production.

3 This is just unacceptable. It directly affects
4 the consumer and it directly affects investment in
5 infrastructure.

6 MR. IANNO: Commissioner Moeller, I'd like to
7 have some tieback to Chairman Kelliher's question earlier.
8 One of the big lessons learned here was we're going to have
9 volatility.

10 The markets are going to be fickle. I don't
11 think we want to make any long term dollar decisions based
12 on where the markets are today, where they are two months
13 from now and what they looked like six months ago.

14 I think this industry, which is so important to
15 all of us, we have to make decisions based on the ability
16 for us to go out and finance the market. That's going to be
17 the biggest challenge going forward, is just trying to look
18 at that and trying to evaluate all those situations, because
19 the market has changed and liquidity, there's not going to
20 be as much leverage.

21 COMMISSIONER MOELLER: I see my time is about up.
22 I know that particularly in our jurisdiction, I'll be most
23 interested in how this impacts the ability to finance new
24 transmission throughout the country. Thank you, Mr.
25 Chairman.

1 CHAIRMAN KELLIHER: Thank you. Commissioner
2 Kelly.

3 COMMISSIONER KELLY: I want you all to know that
4 I appreciate the indepth testimony that you filed, and
5 that's been delivered here today. But we do have some time.

6 I was wondering if you would be willing to just
7 give us your conclusions right now. In other words,
8 summarize what the chief message is that you would like to
9 leave with us.

10 MR. IANNO: Just to repeat some of the things I
11 said before, I think we've been through a unprecedented time
12 of volatility. I think the markets are not going to return
13 to what we might consider as normal anytime soon.

14 Liquidity is gone from the system, leverage is
15 gone, and there's going to be a competition for capital
16 going forward. That being said, there's upwards of a
17 trillion dollars that we're going to spend in this sector in
18 the next ten to fifteen years.

19 Everyone on this panel here represents winners,
20 the companies that have overcome the financial markets and
21 have found a way to make their business model work,
22 depending on what the business model is.

23 But we do need clear guidelines going forward,
24 not changing guidelines that we know we can live with for a
25 long time. I think we'll all find ways to work under that,

1 to help push some of the policy issues. We know those
2 policy issues need to renewables.

3 I think they need to be ways to develop other
4 alternatives, whether it's nuclear or clean coal to push
5 forward and eventually I would look for the next policy to
6 be some plug-in hybrids going forward, because really that
7 would be the way that we would reduce our energy dependence
8 long term.

9 MR. BOWERS: Returns must reflect the reality of
10 higher costs. Anthony just represented the uncertainty
11 around regulatory policy, both in structured markets and the
12 traditional regulated market. That gives some idea to those
13 in the marketplace what the risk might be for the future.

14 MR. TRIPPE: Commissioner Moeller, if I might,
15 I'd like to address your comment about transmission just for
16 a second, because AMP Ohio, as well as public power, is
17 interested in financing new transmission. We're interested
18 in transmission access and transmission costs to our
19 members. We are concerned about the development of
20 transmission in the future.

21 Excuse me, Commissioner. In summary, though, I
22 think that the future here, the crisis in the financial
23 markets in my mind is a longer-term problem as opposed to a
24 short-term problem. I think some things are being done,
25 some things are being proposed that are going in the right

1 direction.

2 But we are concerned about the future ability of
3 all the electric utilities to be able to finance, given
4 these large utility projects as well as renewable projects.

5 MR. LEVY: I think I'll repeat what I said
6 earlier. The progress being made on organized markets is
7 huge, but it's early. It's going to take some time for the
8 stability in those markets to be developed, and I think some
9 of the experience we're seeing in the markets means that
10 there might be some adjustments or changes needed in those
11 markets, and the normal processes as they come through.

12 I think competitive procurement offers a way for
13 both regulated and non-regulated utilities to get access to
14 power, maybe necessarily financed by them and I think all
15 those options should be considered by all state commissions,
16 and should be encouraged by the FERC.

17 MR. POLSKY: Again, I just want to repeat what I
18 already said and other panelists have said. I think what
19 Commissioner Brown said, I think the key is energy policy.
20 I had an IPP business venture since '85. We had PURPA
21 policy; then PURPA disappeared. Then EWG appeared, then
22 disappeared again.

23 Then we have this whole overbuilding. Then IPPs
24 are not credible anymore. We have a change in that. We
25 need a national energy policy that really establishes for

1 everybody what are the rules of the game. We had, at least
2 in the renewables, we need federal standards, we need state
3 standards. We did some policy regarding transmission, so
4 people know how to play.

5 I think this financial crisis is not even Triple
6 B, which is the private companies, who are able to finance a
7 billion dollars' worth of projects. Then last year we
8 bought some corporate financing. Whatever we did, at least
9 what we did made sense.

10 If projects make sense, they are financeable,
11 even in a different climate. But what makes sense is
12 something that is not going to change tomorrow. We know
13 that. So once you know what your transmission is, you have
14 to move power in the market.

15 If you cannot move power, if you're constrained,
16 if you don't have policies on how to resolve those concerns,
17 it takes FERC ten years to resolve it, and it's just not
18 possible to do. So we need to create a policy so people
19 have also some time certainty when this policy and how
20 they're implemented.

21 I'm a University of Chicago graduate, so we argue
22 about the free market. We need a policy, but without having
23 policy, market's just not capable of dealing with this. I
24 think we'll have crisis after crisis.

25 MR. BROWN: Conclusion from the state regulatory

1 perspective, that balancing point between reliability and
2 cost is kind of off kilter right now. We don't know exactly
3 where the balancing point is. It's obvious that utilities
4 have to be able to borrow money to do what they need to do
5 to maintain safe and reliable service.

6 It's obvious that we don't want them to spend
7 excessive amounts of money to borrow that money. So
8 regulators are going to have to react to that. On the other
9 hand, we have to be concerned about what's been called gold-
10 plating. I can ensure reliability and safety, but at a
11 tremendous cost compared with the value of it.

12 The same thing could be going on here. We need
13 to assess the value of, for example, higher credit ratings,
14 etcetera, against the cost, and it's going to be a challenge
15 because of what Commissioner Moeller said. Nobody knows
16 whether this is a two month phenomenon or a lifetime
17 phenomenon.

18 If the world has fundamentally changed when it
19 comes to certain financial dynamics, we're all going to be
20 trying to test that over the next few months. I wish I had
21 a firm conclusion, but I think it's difficult to have one
22 right now.

23 COMMISSIONER KELLY: Thank you.

24 CHAIRMAN KELLIHER: Can I ask one question before
25 we turn to the staff, the fifth man? That's the one about

1 the ratings agencies. There's an expression that the
2 Supreme Court is not final because they're infallible, but
3 they're infallible because they're final.

4 Is the same true to some extent about the ratings
5 agencies? The national energy policy depends, to some
6 extent, on the accuracy and correctness of their decisions.
7 I know after 2001 there was a lot of quiet grumbling about
8 the ratings agencies. It was quiet for obvious reasons.

9 I guess at this point, I wish there was a voice-
10 altering device now on the screen somewhere.

11 (Laughter.)

12 CHAIRMAN KELLIHER: But how are the ratings
13 agencies doing generally? Do you think they're rating the
14 sector properly? I don't normally ask a question out of
15 sheer intellectual curiosity.

16 It's something usually related to a decision we
17 have to make. But this is one where we have a lot at stake,
18 the accuracy and correctness of the ratings agencies. I'm
19 just asking in general how they're doing.

20 COMMISSIONER KELLY: Maybe you want the screen.

21 MR. BROWN: I'll take a shot, because I'm not
22 rated.

23 (Laughter.)

24 MR. BROWN: One concern we've had about the
25 ratings agencies occasionally is that we think that the look

1 may be a little too simplistic. The ratings are not only
2 based on the number, the return on investment, that magic
3 number, but I think it's rated in very large part on the
4 risk that the individual entities face.

5 For example, a utility that's into a large
6 construction project may make more risk than a utility in
7 the organized market, where the risks are being taken by
8 companies like these. The same rate of return may not equal
9 the same credit rating.

10 I'm not saying rating agencies are that
11 simplistic, because they're not. But I'm not sure if they
12 always catch the complexity, and it's probably very
13 difficult because you're rating thousands of utilities
14 alone, when you consider water, gas and electric, to be able
15 to get into those complexities.

16 But sometimes there can be an oversimplification
17 of the ratings, in my opinion. My humble opinion, not that
18 of NARUC.

19 MR. IANNO: From the financial institutions who
20 render the utility companies, they certainly have done their
21 own credit work. I think the investors are doing more of
22 their own credit work, and less relying on the agencies.
23 Concentrating just on the agencies and how they are doing
24 with this sector, in general they have similar metrics that
25 they've used for a long time, and in general, they're pretty

1 accurate.

2 Many companies will argue that they're off by one
3 notch, but not systematically wrong. I'm not going to talk
4 about how they're rating financial institutions or
5 structured vehicles. But in this sector, I think investors
6 are generally in line with ratings, within one notch or so.

7 The thing we've done, though, is we've put too
8 much of an emphasis on the agencies, and things like ratings
9 triggers within credit agreements make it very challenging.
10 Because then, you're managing the business around what the
11 agencies are saying, as opposed to just having the agencies
12 assess what the risk is to the business.

13 Mr. Chair, if you can put that screen in front of
14 me, I'll make a comment.

15 (Laughter.)

16 MR. TRIPPE: On balance, I think the rating
17 agencies do a good job. However, I think AMP Ohio, our
18 projects are individually rated and I think that we have
19 seen some inconsistency with the three rating agencies, as
20 they analyze a project.

21 Having said that, I would echo these other
22 comments. We talk to our investors that buy our bonds and
23 we have been getting feedback over the past year or so, that
24 they aren't relying on those ratings like they used to.
25 They're doing their own rating analysis. They're asking us

1 for more information about our creditworthiness and
2 financial soundness, as opposed to relying on those ratings.

3 So I would make that comment. I do think they
4 were slow to act, for example, with AIG and the
5 Plumenbergers. When there's a crisis looming like that,
6 they could be more timely. Those are my comments.

7 CHAIRMAN KELLIHER: Why don't I now turn to the
8 staff? You all feel free to have 10 or 11 minutes, if
9 that's what you'd like.

10 MR. CANNON: I was kind of intrigued by Chairman
11 Brown's comment about prioritizing investments. I was
12 curious if we could get the reaction of the remainder of the
13 panel about how you would go about, if there is a priority
14 that you see as regulators or as companies out there more
15 concerned about transmission, more concerned about smart
16 growth and energy efficiency. There's a whole list there.

17 But I'm also interested in how do we go about
18 prioritizing. Any ideas?

19 MR. BOWERS: Shelton, let me highlight what
20 Southern Company really does, especially with capital
21 budgets. In 2008, 2009 and 2010 capital budgets, we have a
22 cap ex plan of approximately \$13.3 billion associated with
23 our traditional regulated utilities in Georgia, Alabama,
24 Mississippi and Florida.

25 Of that 13.3 billion, we have 3.9 billion

1 associated with environmental compliance cap ex. You have
2 to comply with environmental regulations, either the federal
3 or state requirements. There are state plans we have to
4 abide by.

5 The state of Georgia's pollutant rules, we have
6 that. You go down to approximately \$2.5 billion associated
7 with new generation cap ex, and then you have questions
8 associated with new generation cap ex and that
9 prioritization. It's replacing PPA capacity. That's going
10 away.

11 The start-up of evaluations and the perspective
12 of new generation engineering designs, and we're arguing
13 that time line. For us, of the \$2.5 billion, approximately
14 two billion of it is replacing PPA cap ex, and that goes
15 through a competitive bid process in Georgia, where the
16 self-bid option was selected as the most cost-effective
17 alternative.

18 Then you go to transmission and distribution. We
19 have \$4 billion of cap ex associated with that for that
20 period. You dissect that associated with the reliability
21 cap ex, maintenance cap ex and growth cap ex, and then you
22 prioritize how much growth are we really going to see in our
23 market.

24 There is flexibility associated with that in
25 prioritization. That's where I think most of the utilities

1 are seeing that they can reduce cap ex. The other issue,
2 commitment to SmartGrid activities, we have \$450 million
3 allocated to smart meters, AMI. We have over the next ten
4 years a billion dollars of home energy efficiency, \$100
5 million per year.

6 So those priorities go through that. But the
7 rule is the flexibility, what is required to make a network.
8 Of course, cap ex is related to maintenance of the existing
9 generation, and cap ex is associated with nuclear fuel as
10 well.

11 That will make up for some, if you will, of the
12 13.3 billion.

13 MR. LEVY: I think New York is an interesting
14 state, in which our utilities don't have generation. It's a
15 slightly different prioritization, but clearly prioritizing
16 really causes a hole in whether you believe energy
17 efficiency is a viable way of reducing demand.

18 But clearly anything to reduce demand should
19 probably have a pretty high priority. That then reduces the
20 amount of money you need to spend on transmission and
21 distribution and ultimately purchased power.

22 But there's some concern that we've seen a lot in
23 New England. We've got a lot of demand response and a lot
24 of energy efficiency. Some are worried if it doesn't show
25 up when it's needed, there will be some shortages and some

1 scarcity from electricity.

2 So I think there's a reliability issue that has
3 to get into prioritization. I also think there are some
4 things that are naturally doable by regulated utilities than
5 anything else that can be done through competitive markets,
6 whether it's generation or services that can be done outside
7 and not become a capital expense for the utility.

8 MR. CANNON: Mr. Levy, I was struck by a comment
9 you made, I think it was to the Chairman, of kind of what
10 you will not do, and that's not back off from supporting
11 competitive markets, in particular capacity markets.

12 But you made another comment about we need to
13 take some of the sensitivity out of these capacity markets.
14 Did I capture that? Could you elaborate?

15 MR. LEVY: I guess most capacity markets that
16 have been brought to FERC, whether it's FCM or PJM, all have
17 a scenario that doesn't take much megawatts to bring
18 capacity prices to zero or close to zero. In New England,
19 they're down to \$3.

20 I guess it was always contemplated as a
21 possibility, but it was never contemplated as a realistic
22 possibility. Zero capacity price is probably an unrealistic
23 signal to send to the market.

24 Basically it says if there's some future time
25 which we don't know, capacity is worth zero. I think we've

1 seen it certainly is not going to encourage people to build
2 new technologies.

3 What sort of floor price or minimum price or
4 transitional price to keep markets until they're stabilized
5 from hitting zero, or things that are just so low they're
6 meaningless, I think, is what I meant by that.

7 I do think capacity and process is managed right,
8 and some of the systems that are in place have lots of
9 built-in protections to make sure they work right. I think
10 we'll provide a steady stream of signals that are correct.

11 But while they're getting started, things are
12 straightening out in power pools and utilities are moving in
13 and out of power pools, they do tend to send spurious
14 signals. They might be too high; they might be too low, but
15 they're certainly not correct.

16 So some sort of dampening or floors or slowing
17 down or something like that, to make the shift a little less
18 volatile.

19 MR. CANNON: The last question I had, Mr. Trippe,
20 we've had any number of technical conferences and
21 discussions here at this table about long-term contracting,
22 and about the difficulties from both the customer
23 perspective, where we can't get the deal that we want, and
24 then from the generator perspective, we can't get the right
25 deal that we want.

1 It always seems like the buyers and sellers can't
2 come to agreement. Do you see any movement out there, from
3 your perspective, at AMP Ohio, in terms of the ability to go
4 out and negotiate longer-term capacity deals, just because
5 there is kind of this need out there from the generator
6 perspective to enter into longer-term contracts?

7 MR. TRIPPE: I think there is some ability to
8 enter into those longer-term contracts. At AMP Ohio, we
9 have a large capital expenditure program and our generating
10 projects are scheduled to come on-line in 2013 or 2014.

11 We don't have as much interest in going on, but
12 in analyzing the longer-term contract, for example, a 20
13 year PPA, we think that the longer you look at the PPA, the
14 higher the risk.

15 So when we looked at these, we try and analyze
16 that risk very long term, and of course that takes into
17 consideration the financial strength and the
18 creditworthiness of the counterparty that you're entering
19 into the contract with.

20 So in these volatile times, we've elected to stay
21 into a shorter contract period, as opposed to longer.

22 MR. MILLER: I'm torn between two questions, one
23 of which has to do with the analogies between long-term
24 contracts in the 1970's and regulators' viewpoints on those
25 long-term obligations change, and the effect it has on the

1 financial abilities of those companies.

2 But we've sort of spent a lot of time on that.
3 Let me just ask the question with regard to something that
4 we haven't heard about, and that is the size of the balance
5 sheet. Is it necessary, in your view, for there to be any
6 consolidation in the industry, to strengthen the balance
7 sheet?

8 Of course, this has implications for our other
9 panel as well, too, and so that the obligations taken on by
10 companies are easier to handle, or is that just something
11 that if you get some of the other things that you're talking
12 about, that that sort of consolidation, which has been
13 fitful in this industry, it's not necessary?

14 MR. IANNO: I'll start with that. Really, it
15 depends on the subsector you're talking about. If
16 consolidation does make a lot of sense, then I think that
17 consolidation among the utilities within the company makes
18 sense as well.

19 The issue with that is as capital has gotten more
20 constrained, investors want to invest in larger, more liquid
21 transactions. It's much more challenging for small
22 utilities to go out and raise \$100 million than it is for
23 Southern Company to go out and raise a \$500 million
24 benchmark security, which has more liquidity.

25 From an independent power standpoint, a renewable

1 standpoint, it's less of an issue. I think that Michael or
2 Bruce can structure projects, and those projects can be
3 financed on a one-off basis, and you can negotiate directly
4 with lenders.

5 But from a regulator's standpoint, it's more
6 important to have those larger, more liquid deals. I think
7 from an equity capital standpoint as well, companies, it can
8 be much more challenging for smaller utilities to go out and
9 raise equity capital than it is for market leaders, who have
10 once again more liquidity, more following incentives.

11 MR. BROWN: There's a lot of considerations.
12 Just from a financing viewpoint perhaps larger might be
13 better. But that experience hasn't borne itself out.
14 Smaller utilities have higher bond ratings than some of our
15 larger utilities.

16 But the other considerations that regulators have
17 to take in mind are a long way from the financing of cap ex
18 projects. It's hometown ownership of utilities, having the
19 utility located near a state, that relationship with
20 customers.

21 A lot of different regulatory bodies had a lot of
22 different opinions on that when these issues have come
23 before them. But it's certainly a consideration that
24 everybody takes into account. Larger isn't always better
25 when it comes to customer service and things like that.

1 MR. LEVY: Consolidation in general has a
2 connotation of mergers. Most of them have not been
3 particularly successful at creating stronger companies,
4 because there's a lot of debt with extra leverage. So one
5 that's already big, like Southern Company, is clearly going
6 to have an advantage.

7 If you took two or three small ones and allowed
8 them to merge with each other, by the time the merger would
9 finish I'm not sure they'd be as strong as the big one. So
10 consolidation is talked a lot about as a way to get bigger.
11 I'm not very sure about whether it would solve the problem.

12 CHAIRMAN KELLIHER: I think we should take a
13 break now. We're running a little bit behind, but why don't
14 we take a ten minute break and resume at 3:20, punctually.
15 I want to thank all the panelists for participating and for
16 their comments.

17 (Recess.)

18 CHAIRMAN KELLIHER: Why don't we resume and why
19 don't we start at the beginning? Why don't I recognize
20 Robert Ludlow, Vice President and Chief Financial Officer,
21 ISO New England.

22 MR. LUDLOW: Thank you, Mr. Chairman. Thank you
23 for the opportunity to address the Commission today on a
24 very important topic facing ISO and RTO markets today.

25 This afternoon, I'd like to cover briefly a

1 little bit of the history of the credit policies in New
2 England, the current situation, our position on some of the
3 current issues, recent activity with the participants and
4 share with you some of the concerns we've heard from the
5 shareholders or the stakeholders in New England.

6 One thing that's important to note is that the
7 ISO New England actually performs two clearing functions.
8 One is the market clearing activity. The other is a billing
9 and collection agent service that we provide for the
10 transmission owners.

11 Today, my comments will focus mainly on the
12 market clearing activity that we are required to perform.
13 The history of the policy is rooted back in 1997, prior to
14 the implementation of our interim markets. It was largely
15 modeled after the pro forma tariff language with regards to
16 the open access transmission tariffs.

17 The policy provided for both secured and
18 unsecured credit to meet the financial assurance
19 obligations, and there was a socialization scheme in the
20 event of an ultimate default. The interim markets for
21 energy were introduced in 1999. These were primarily
22 physical markets, and at that time, we had approximately 150
23 market participants who were clearing almost \$500 million on
24 an annual basis.

25 Rolling forward to today, the markets have

1 significantly advanced with the introduction of the standard
2 market design, the day ahead markets, the financial markets
3 for FTRs, and the pending implementation of LPQR.

4 The advent of these markets can more in varied
5 market participants. We saw more financial traders join the
6 market and response providers and users, and there's more in
7 the materials I provided to the Commission. It will give
8 you a breakdown of those changing demographics of market
9 participants.

10 Today, we have more than 400 participants
11 engaging in transactions in the New England markets.
12 Similarly, I've provided a slide and materials with regard
13 to the dollars. Where we started out clearing \$300 million
14 a year, we're now settling close to \$10 billion a year.

15 To put that in perspective, the peak week in the
16 summer clears about 300 million, which is equal to what the
17 total annual volume was ten years ago. It's important to
18 note that in clearing the markets, the ISO is not a
19 purchaser or a seller, and should not be considered a
20 counterparty extending credit.

21 The recent financial crisis demonstrates the
22 difficulty in evaluating who the counterparties are, and the
23 counterparty risks that they bring. There were several
24 recent near-misses with regard to the ability of people to
25 clear their transactions in our markets.

1 One of the things to note from the \$10 billion
2 number is that that represents close to 80 percent of the
3 total energy traded in New England. So our belief is that
4 this is a substantial portion of bilateral contracts that
5 are elected to be settled through the ISO markets, and the
6 continued use of unsecured credit poses a risk.

7 So the ISO's view is that it has an obligation to
8 protect the markets. One of the ways we protect the markets
9 and a key feature of markets is to have a good clearing
10 mechanism. So one of the things that we believe is that
11 it's no longer prudent to offer unsecured credit as a way of
12 managing participants' financial assurance obligations.

13 The unsecured credit in place increases the
14 amount of that credit risk. In New England, people could
15 qualify up to \$75 million, and again, those defaults
16 continue to be socialized.

17 Equally, if not more important, is the effect on
18 markets. So there's a question out there as to whether or
19 not the continued use of unsecured credit encourages
20 unmitigated risk-taking by people leveraging with the cost-
21 free transactions.

22 To date, we've taken many steps to try to
23 mitigate or reduce this risk. Back in 2004, we changed to a
24 weekly billing of settlement scheme. This significantly
25 reduced the amount of capital that was outstanding or

1 capital that was required to be posted, and encouraged a lot
2 more market participation to occur within New England.

3 With the stakeholders, we continue to look at
4 shortening that settlement cycle. We continue to engage
5 with them in conversations, to try to reduce the amount of
6 collateral that's necessary, as well as the amount of risk
7 that is exposed to the marketplace.

8 We've had over ten months of discussions with
9 regard to credit in New England. The last three months have
10 primarily focused on the continued use of unsecured credit.
11 Several of the stakeholders have expressed concerns with
12 regard to what is the cost of providing this additional
13 security, and is there an impact on overall liquidity. We
14 understand those concerns.

15 A third concern that was raised was whether or
16 not by having those bilateral contracts settled between the
17 parties, does that create any distortions in any of the
18 income allocation schemes that are embedded in the markets?
19 We continue to work with participants, knowing that that's
20 an unintended consequence of the change. But we'll work
21 together to solve for that.

22 With regard to the cost of liquidity,
23 unfortunately the liquidity crisis, as we heard from the
24 earlier panel, is already upon us. However, we believe that
25 further damage from drops in liquidity and therefore people

1 not clearing their transactions could exacerbate the
2 problems and put the markets themselves in jeopardy.

3 We also believe that the cost of eliminating the
4 unsecured credit in New England is relatively low for the
5 amount of collateral in place. I mentioned that we cleared
6 close to \$10 billion. Eighty percent of those transactions
7 are already secured. So we're really talking about that
8 remaining 20 percent, which on average can be approximately
9 \$200 million, based on the way the markets are performing
10 today.

11 Small participants are required to post
12 collateral. About 90 percent of non-municipal market
13 participants are the ones who make up that 80 percent that
14 are engaged in those transactions, or that are required to
15 post collateral.

16 We've taken many steps to ensure that
17 collateralization would be a serious barrier to entry. One
18 of the things we've noticed is that many deals are being won
19 by companies that are required to post collateral, so that
20 we know the ability to make deals and cover that cost is
21 available.

22 In conclusion, we understand that we're trying to
23 solve for an unquantifiable risk, and to date, we've been
24 able to avoid a major default. However, we believe that we
25 must move away from unsecured credit, one, given the

1 evolution in the size and the type of the markets, the
2 increased participation in these markets, and as we'll hear
3 from some of the other panelists, the best practices
4 embedded in a good credit organization that will always make
5 sure that market transactions are settled and cleared.
6 Thank you.

7 CHAIRMAN KELLIHER: Thank you very much. I'd
8 like to now recognize Mr. Robert Levin, Managing Director of
9 Energy Research for CME Group.

10 MR. LEVIN: Thank you, Commissioner. Members of
11 the Commission, thank you for inviting me. I haven't been
12 here in a while. Since the last time, I'd say there has
13 been a significant change with my organization, which
14 previously was only known as New York Mercantile Exchange or
15 NYMEX.

16 We still call it NYMEX, but in August of last
17 year NYMEX became part of the CME Group. As you noted in
18 your introduction of me, I now work with the CME Group. I
19 only have a few things to cover in my initial remarks. I
20 really look forward to the discussion and answering
21 questions. I want to make sure that I will be able to
22 answer any questions. I'll try to be as helpful as
23 possible.

24 A little background. NYMEX does have a long
25 history with electricity markets, in terms of restructuring

1 and deregulated markets going back to the mid-90's. We
2 started with physical delivery contracts back then. Early
3 in this decade, we did move to cash settlement markets. The
4 physical delivery ones we do not currently offer. There's
5 no reason why we might not offer them again.

6 Predominantly now, we see ourselves offering
7 products that are executed off exchange, then brought into
8 our clearinghouse. We have a lot of cross-margin with other
9 products including natural gas markets. Being part of the
10 CME Group, we're bigger and we like to think better.

11 In terms of our clearinghouse, typically these
12 days there's an estimate here, but over -- I don't want to
13 overstate it, but on a typical day, we now have about \$100
14 billion in collateral on hand. The daily flow is roughly \$5
15 billion. Of that 100 billion, roughly one-third emanates
16 from the NYMEX energy markets. As has been noted, there's
17 been a lot of volatility there.

18 That leads to requiring more collateral. The
19 guaranty fund is now \$1.7 billion. We've had a little
20 shorter history, speaking with and talking with some of the
21 physical market operators about offering credit
22 intermediation for them.

23 This is different than with futures. We have had
24 a series of meetings over the years, nothing very recently,
25 and presentations going back a few years, quite a few. A

1 couple of the ISOs proceeded somewhat through their own
2 processes, to examine the possibility of having some outside
3 clearing or financial clearing offered to them.

4 In the course of that, we performed some detailed
5 cost analyses. We actually had a very limited progress from
6 that. I can summarize why, and I don't do it critically,
7 just sort of identifying it. But as you're aware and as the
8 ISOs are aware, they're heavily stakeholder processes.

9 Many times, the stakeholders have significant
10 differences on how to proceed, and even then within those
11 communities, it was not always certain the decision-making
12 process. This was new territory they were looking at.
13 Sometimes it involved more than one committee.

14 I think in addition to that, we saw some
15 professional differences at times among staff. At that time
16 and it preceded some of the havoc that has hit a couple of
17 those markets more recently. There was not an overriding
18 concern on the part of many, and I'm not saying on the part
19 of all, but on the part of many, as to perhaps the necessity
20 of having this sort of outside assistance in clearing.

21 A few comments on risk management, perhaps from
22 our perspective, so we can integrate it with others, and
23 it's part of the overall discussion. Some of this, I think
24 everyone would agree, would be beneficial to the fiscal
25 markets.

1 One item, of course, is decreasing the settlement
2 period, because that decreases the amount of collateral you
3 need to collect. The shorter that settlement period, the
4 lower the collateral, and actually the more stable in
5 general, in our view, is management.

6 There are different programs which offer risk
7 management at a very high level. We focus on some aspects
8 of ours that people don't often focus on within our
9 clearinghouse. There's a diversified base of those who
10 literally offer the risk management. We have a group of
11 dozens of clearing members.

12 We think that is extremely valuable and has been
13 very effective, for a number of reasons, some of which are
14 good to talk about, at least theoretically. They're sound
15 ideas and I think they're correct as well.

16 When you have dozens of different companies, you
17 have competition within that base. The benefits of
18 competition are productive types of innovation, and it also
19 keeps the costs that they offer their customers at
20 competitive levels, and we think that's very valuable.

21 In the course of time in the markets that we have
22 to offer our services for, I would point out that we believe
23 we have a proven track record. A few of those instances
24 that I think are worth sharing at this moment, to remind
25 people of, we heard some references a little bit earlier of

1 some of these periods of time.

2 Earlier in this decade, the energy merchant class
3 suffered what I would refer to as a systemic risk, by
4 trading amongst themselves. A lot of them actually did go
5 out of business, but not all of them. At that time, we
6 offered new services. We started accommodating more
7 directly off-exchange executions, and the line of business
8 was new into our current offerings.

9 At that time, we thought it was just the NYMEX,
10 but we think the NYMEX had a lot to do with saving that
11 class of companies from completely disappearing. It's one
12 of the few times I've seen systemic risk and can say that it
13 happened.

14 In addition, I won't recite all of the instances,
15 but energy markets, as I think we all know can be very
16 volatile, and we've seen a lot of volatility, certainly in
17 2007 and 2008. But in the middle of the 1980's, there was a
18 lot of volatility, in the early 90's and in other periods.

19 I think throughout all that time, we've seen our
20 clearinghouse and that system, the structure I was referring
21 to before, perform very ably from our perspective, business
22 as usual. So we think it's been tested and performed
23 through the test very, very well and effectively. That's
24 one of the reasons we're very confident in it.

25 I look forward today to answering any questions.

1 I'm glad to go into greater detail on how we manage risk,
2 and how we approach it. But I just wanted to cover a few
3 things in my initial comments. Thank you.

4 CHAIRMAN KELLIHER: Thank you very much. I'd
5 like to now recognize Philip Leiber, Chief Financial Officer
6 and Treasurer of the California Independent System Operator.
7 Welcome.

8 MR. LEIBER: Good afternoon, Mr. Chairman,
9 members of the Commission. My name is Phil Leiber. I'm
10 Chief Financial Officer and Treasurer of the California
11 Independent System Operator.

12 The Cal ISO began operations in 1998 and is
13 headquartered in Folsom, and manages most of California's
14 high voltage electric grid of more than 25,000 circuit
15 miles. The ISO facilitates wholesale energy transmissions
16 for 100 participants.

17 It requires that buyers are either creditworthy
18 or post collateral to cover their outstanding obligations.
19 Creditworthy market participants may be granted a non-
20 secured credit limit of up to \$250 million, based on their
21 credit rating, size and other factors.

22 We've faced a number of credit challenges during
23 2008 and the Commission's attention to credit matters at
24 this time is appropriate. In December 2007, some defaults
25 in the PJM/FTR markets spurred us to tighten in 2008 our

1 credit policy for these products that was established the
2 year before.

3 While smaller companies defaulted in the PJM/FTR
4 market, we were also affected by the problems of larger
5 market participants, and we too had a number of near-misses
6 in 2008. A Bear Stearns subsidiary was a participant in the
7 California ISO market, as well as J.P. Morgan.

8 While there were no losses from their collapse,
9 there were some near-concerns. The Lehman Brothers collapse
10 in September also tested our concerns. Lehman Brothers had
11 minimal obligations in the California market. We did
12 require that they posted some credits and no losses were
13 incurred. However, losses were experienced at other RTOs.

14 We also asked whether we should reject letter of
15 credits from some of the prominent banks. We also had
16 market participants that were severely strained due to
17 bankruptcies of their major customers. We faced other
18 challenges in credit management. We are improving our
19 capabilities and will shorten settlement date to the second
20 business day trade date, rather than the current 38 business
21 days, with the introduction of congestion revenue rights.

22 We have the additional challenge of evaluating an
23 instrument that depends on future energy and congestion
24 prices. We use an approach that relies on historical
25 measures of volatility and auction prices, and also provides

1 a margin for error.

2 But the possibility of underestimating these
3 obligations remains. Another risk is that we permit an
4 apparently creditworthy party to incur obligations that he's
5 currently unable to pay. We rely on credit ratings,
6 financial statement data and other information. Our
7 experience has shown that credit rating information agencies
8 often don't move ratings downward as quickly as warranted.

9 To address this, we do use another third party
10 indicator. If that isn't available for many market
11 participants, we have an ability to consider other
12 quantitative factors such as risk management practices, that
13 are supposed to be considered by rating agencies in
14 establishing their ratings. Frankly, we have doubts that
15 we're in a position to do a better job than they do.

16 There are many other factors that complicated
17 credit management. Presently in the California ISO market,
18 the long payment cycle amplifies the importance of any
19 credit decisions we make, as there are some 80 days of
20 outstanding transactions.

21 We also lack enforcement tools that are effective
22 in some situations. We have the ability to curtail
23 scheduling rights for defaulting entities, but that's
24 problematic for load-serving entities that are also
25 providers of last resort.

1 The California ISO completed a stakeholder
2 process in 2008, to revise several aspects of its credit
3 policy. These changes include reducing the maximum
4 unsecured credit limit from 250 million to 150 million
5 dollars, and later in 2009, reducing the length of the cash
6 clearing cycle from an average of 80 days to 25 days. When
7 that's been accomplished, we'll reduce the unsecured credit
8 limit further.

9 We're also reducing the response time for many of
10 these proposed additional collateral from five to three
11 days, and recommending penalties on late payments and
12 collateral requests. Arriving at these proposals involved
13 some balancing interests of debtors and creditors.

14 Many creditors want a further tightening of the
15 credit standards, and they've been particularly concerned
16 about the long settlement cycle and the uncertainty, given
17 changes in the ISO market arriving with the transition to
18 MRTU and the end reduction of the mobile market.

19 They would like to see significant immediate
20 reductions in unsecured credit, frankly to as much as zero,
21 to eliminate unsecured credit altogether. They particularly
22 would like to see a change in the default allocation
23 currently in place at the ISO market, where only net
24 creditors bear the risk of any loss.

25 ISO and RTO credit policies are very similar in

1 many respects, and this is to be expected given the
2 Commission's oversight in the policy statements that have
3 been issued on credit in past years. We also have unsecured
4 credit limits for most entities, based on credit ratings, to
5 determine allowable percentage of net worth.

6 We have alternative approaches for special energy
7 types, such as government entity-owned utilities. We share
8 some common challenges, such as valuing congestion contracts
9 and what to do in the event of a default by a load-serving
10 entity that's also a provider of last resort.

11 Conversely, key differences in policies remain.
12 Some convergences are underway. There have been significant
13 differences in maximum unsecured credit limits, ranging from
14 250 million to as little as 25 million at present.

15 The length of the cash clearing cycle, which
16 ranges from about 20 days up to 80 days, and the use of
17 monthly bills. Credit requirements have also differed for
18 FTRs or CRRs, as we call them in the capital market,
19 particularly the valuation approaches and there is some
20 divergence on the issues of how losses are to be shared in
21 the event of a payment default.

22 There are some key issues that the Commission
23 will likely confront on credit in the near future. One is
24 whether ISOs and RTOs should continue to provide unsecured
25 credit, as I've made reference to.

1 This has been a keenly debated topic among
2 stakeholders during 2008. Many are promoting the model of
3 commodity exchanges, which do not provide unsecured credit.
4 More broadly, should the Commission promote further
5 convergence on other credit matters, including the
6 contentious topic of how losses should be allocated.

7 There may be benefits to a directive approach,
8 and there are instances where such benefits are less likely
9 to occur without central coordination. For example, I
10 recently asked that NCR auction dates be used over the life
11 of collateral deployments.

12 For those who have participate in multiple
13 markets, convergence happens actually to some extent
14 already. For RTOs, they're the first to confront certain
15 issues and develop policies. Others learn from their
16 experiences and try to improve on what's been done before.

17 This has certainly been the case for CRR and FTR
18 credit policies, but on other issues it may be difficult to
19 generate consensus through the governance process of each
20 entity, and a directive role may be appropriate. Thank you.

21 CHAIRMAN KELLIHER: Thank you very much. We now
22 recognize Mr. Morgan Davies, Director of Corporate Credit of
23 Calpine Corporation.

24 MR. DAVIES: Thank you, Mr. Chairman. I'd like
25 to thank the Commission for holding this technical

1 conference at this important time.

2 My name is Morgan Davies. I manage the credit
3 risk for Calpine Corporation, which is a leading independent
4 power generator with over 24,000 megawatts of clean cost-
5 effective, fuel-efficient generation in 16 states and
6 Canada.

7 Thank you for holding the technical conference at
8 this time. It's built on the good work of the 2004 policy
9 statement, and given the current challenges in the financial
10 and credit markets, visiting this topic is timely. Also,
11 four years have passed since the policy statement.

12 The majority of the comments I'm going to make
13 today are going to focus on areas of FERC and its policy
14 statement, including shortened settlements, looking beyond
15 the rating agencies and other methods of reducing the
16 neutralized default risk.

17 I will also discuss the following areas: The
18 current state of the markets, elimination or reduction of
19 unsecured credit and finally I'll conclude with some
20 suggestions for future FERC actions to improve the credit
21 risk access to markets in the areas of energy markets.

22 As you've heard throughout the day, the global
23 financial meltdown has been felt throughout the industry.
24 This has led to a risk of losses to be uplifted and
25 socialized to participants. The current price is strong

1 evidence that it is not business as usual.

2 To improve the confidence of the market, factors
3 to consider include various elements. ISO New England spoke
4 a lot about reducing the settlement period. That's a
5 biggest driver in reducing credit risk, as it reduces the
6 cash conversion cycle. The shorter the cycle, the less risk
7 of not performing.

8 There's a large body of empirical evidence
9 supporting an accelerated settlement from the securities
10 industry, the futures industry and the energy market. In
11 organizations such as NYMEX, they recognize the importance
12 of covering the settlement and cash settlement markets
13 daily.

14 This requires changes in the cost transactions in
15 the RTO markets. ISO New England is developing best credit
16 practices. For example, by reducing settlement periods of
17 approximately 50 plus days to approximately 15 days
18 initially, they've reduced the pool of credit risk by 67
19 percent and at the same time reduced collateral requirements
20 approximately 67 percent, from 77 million to 15 million.
21 These numbers can be found in the FERC policy statement.

22 The FERC policy statement recommends the change
23 of ISO New England to weekly billing. Subsequently, the
24 Midwest ISO, Southwest Power Pool have subsequently adopted
25 these. PJM has recently approved weekly billings, and New

1 York ISO is exploring reducing its monthly settlement cycle.

2 The California ISO Board recently approved
3 biweekly billing for MRTU. Calpine welcomes ISO's efforts
4 to reduce the settlement cycle. ISO's efforts to reduce
5 this is a positive step in the right direction, although the
6 Commission should assure that CAISO implements weekly
7 billings, and continues its efforts with stakeholders to
8 further shorten the settlement cycle, consistent with FERC's
9 policy statement.

10 To give you an example of ERCOT, which is not
11 FERC jurisdictional, I chaired the Creditworthiness
12 Committee for three years and reduced time to remove the
13 default to the retail energy provider and transmission
14 customers from 22 to nine days. ERCOT has reached that
15 component, and when staff recalculated the losses from
16 previous defaults for these changes they were reduced over
17 90 percent. For the four default reps, losses went from 5.8
18 million to \$164,000.

19 Accelerated settlements are an important
20 component of successful risk management, which is supported
21 by the Committee of Chief Rules Conferences, and accordingly
22 ISO RTOs should look at federal markets daily, if possible.
23 It's feasible for day ahead markets. There isn't an ISO
24 that has 85 percent of its markets include day ahead
25 markets.

1 The day ahead market is very similar to exchanges
2 that settle daily. Real-time markets are more challenging,
3 but as markets adopt smart metering technology, the quality
4 of load data should improve. In addition, they can use load
5 profiles to help with that in the wholesale market.

6 But for resources, ISOs have operational
7 information from the energy management system that allows
8 them to use real-time deviation and maximum integration in
9 with the credit system.

10 Another factor to consider is in 2004 policy
11 statement said measures should be adopted where practical to
12 identify the importance of market clearing energy industry
13 to industry, to use another example from FERC, when you
14 developed the protocol several years ago.

15 We recognized the importance of the development
16 of another market, and it provides for netting between all
17 CRRs, which are the FTRs, the day ahead market and the real-
18 time market.

19 The next factor to consider is to continue to
20 look beyond the rating agencies. Currently, the ISO RTOs
21 rely heavily on the rating agencies to determine the
22 creditworthiness of market participants. ISO RTOs should be
23 encouraged to look beyond the rating agencies, to assess the
24 credit quality consistent with the 2004 policy statement.

25 Recent events really highlight this, including

1 sudden downgrading in the case of entities deemed to be
2 strong credit risks. We need to look to market-driven
3 factors in assessing credit quality. The ISO RTOs would
4 continue to use the ratings, but they should use them in
5 conjunction with other tools.

6 They should look at market-driven information
7 such as credit default swaps, which you see a lot about in
8 the press these days, and other market-driven information.
9 They should consider using services that provide this type
10 of information, and should consider, as I said before, using
11 operational information from the financial systems to help
12 them manage the credit.

13 The next factor to consider is elimination or
14 reduction of unsecured credit. This is the hallmark of a
15 successful cleared market. They do not provide unsecured
16 credit. If you look at the North American power markets,
17 you can look at NEPOOL clearing, Powernex in France, AMCO in
18 Australia, SIMCO in Ireland, LEX in Britain.

19 They do not have unsecured credit. PJM has the
20 analysis, I believe it's on their website, that talks about
21 these. Within North America, you've got NYMEX. The same
22 thing, no unsecured credit. ISO also has a venture of NGX,
23 Natural Gas Exchange, which specifically clears gas in eight
24 locations in the United States and in Northern Canada, but
25 many more in Canada. Again, they do not provide unsecured

1 credit.

2 ISO New England is proposing eliminating
3 unsecured credit to most participants in many instances.
4 The issue of unsecured credit is contentious among
5 stakeholders. Some participants are concerned that it will
6 drive up their costs. Other participants see the value to
7 the overall market by reducing the risks of default.

8 Really, the key here is to reduce unsecured
9 credit in conjunction with the accelerated settlement.
10 Again, that's what we focused on in the last policy
11 statement, the 67 percent reduction.

12 The next factor to consider is market clearing.
13 Everything I've talked about here are actually to be found
14 in successful clearing models, market clearing, and has been
15 identified as a best practice.

16 In the 2002 white paper on credit risk
17 management, where the CCRO said "Far and away the greatest
18 potential for advancement of the industry in terms of credit
19 risk management, to improve liquidity and capital adequacy,
20 is through clearing."

21 In 2005, the CCRO published a white paper termed
22 "market clearing energy industry." They considered broad
23 outreach to many stakeholders, FERC, CFTC, most of the RTOs,
24 including the ones on the panel here today, and the NYMEX,
25 TCCC and other stakeholders.

1 Conclusions here. Shortening the settlement
2 period is the number one way to reduce credit risk. The
3 Commission should require ISO RTOs to move to weekly billing
4 by a date certain, and then continue discussions with
5 stakeholders to reduce the period even further.

6 Specifically, ISO should be encouraged to
7 bifurcate the daily market and settle that market daily.
8 The Commissions should also encourage all ISO/RTOs to move
9 towards eliminating unsecured credit by reducing the
10 unsecured credit limits and standardizing those limits
11 across ISO RTOs.

12 ISO RTOs should be required to address this issue
13 through the stakeholder process and report to the Commission
14 on progress made. That concludes my comments. Thank you,
15 Mr. Chairman.

16 CHAIRMAN KELLIHER: Thank you very much. We now
17 turn to Mr. J.C. Kneale, Director of Power Markets for the
18 Intercontinental Exchange. Welcome.

19 MR. KNEALE: Thank you, Commissioners. I
20 appreciate the opportunity to be here and speak before you
21 guys, and offer what is presumed to be some sort of expert
22 opinion.

23 There's been a lot of comments today discussing
24 credit and unsecured credit, settlement cycles, etcetera.
25 What I would like to do is expand a little bit on my

1 colleague, Bob Levin's comments about market clearing and
2 clearing the way that CME does it, and the way that ICE does
3 it.

4 In the community, I guess we would consider it
5 financial clearing. It's been in the operation for years
6 and years. I believe that a few people have mentioned the
7 defaults we had with Lehman and other counterparties late
8 last year.

9 One thing I would like to point out is through
10 this financial clearing model, I'm not aware of one dollar
11 lost by any other market participant that was using either
12 his company's services or my company's services.

13 So we firmly believe in the secured credit
14 market. We firmly believe in the accelerated billing cycle.
15 We manage all of our risk on a day-to-day basis. In fact,
16 just to get really picky, we have certain power companies,
17 certain power trading entities that is, that get upset when
18 we don't get their money back an hour earlier than what we
19 already do.

20 The issue with electricity obviously is that it
21 leads to expensive margins, relatively speaking. It can be
22 quite expensive to collateralize trading, and that
23 volatility is nowhere more dramatic than with spot prices in
24 general.

25 What we see in general is that trading say 50

1 megawatts of power on a spot transaction may have 50 percent
2 of the total cost of trading that same amount of power. But
3 for a month's worth of time, and again that's simply because
4 of volatility.

5 What we see, though, is through all this
6 financial turmoil, the power markets, specifically the
7 financial power markets, the cleared power markets, have
8 actually been fairly stable.

9 I'm not going to pretend that the volumes are
10 breaking records every day, but relative to other parts of
11 the country, where markets are less liquid, maybe they're
12 more bilateral, the financial markets have been quite well
13 off, particularly the Northeastern ISO markets and the
14 markets that are employed LMP.

15 The market in general, as you can see, has very
16 solid pricing points, and they're quite willing to transact
17 in the financial swap in those areas. ICE was the first to
18 offer OTC clearing functions for the market, back right
19 around the time Enron was collapsing.

20 We would note there that again, those companies
21 that were making use of the ICE model didn't lose a single
22 dime because of the Enron defaults. None of those
23 counterparties had unsecured credit with Enron because hey,
24 there wasn't a company out there that wouldn't take that
25 credit. Their attitude changed on Day 2.

1 Last year, ICE transacted over six billion
2 megawatt hours of electricity. Of that, around 85 percent
3 of it was financially cleared. We sent it on a daily basis.

4 What we see is that about four percent of that
5 market was physical markets, primarily on the West Coast. I
6 would expect that shortly following the transition, we'll
7 see that number be reduced by 50 percent or so, as that
8 market moves to more of a spot financially cleared market as
9 well.

10 ICE currently owns over 90 percent market share
11 in the clearing of electric power. In the spot markets, we
12 put that number closer to 100 percent. In certain markets,
13 there are challenges to promoting clearing, however. We're
14 constantly looking at new areas of the country, new markets,
15 where we can provide this risk remediation of power
16 products.

17 By the end of the second quarter, we believe
18 we'll add new areas for companies to reduce their unsecured
19 credit lines, reduce their exposure in more risky markets by
20 having the benefit of central clearing.

21 I'd just like to highlight a few key points of
22 our clearing model. One is that all trades done are
23 margined and collateralized. We've been pushing this model
24 for a long time.

25 We believe that as a higher percentage of these

1 deals do become clear and do become margined, it leads to
2 portfolio efficiencies, because we can show correlations
3 between NEPOOL and New York, and can offer credit offsets
4 that are long one position, short the other position.

5 In that case, we were only considering one swap
6 and one location. Of course, it can seem like placing
7 margins or providing credit or once credit was unsecured.
8 We'd all like it for free, but the bottom line is credit
9 isn't free and it's no more true today than it ever has
10 been.

11 One of the things that my colleague, Morgan
12 Davies highlighted, is that in the central clearing method,
13 upon settlement, which is typically done on a daily basis,
14 collateral is returned immediately. Once the ISO has
15 published the number, once the index is known, perhaps a day
16 is allowed for confirmation of that number as being final.
17 But then the bulk of margins are returned immediately.

18 We see that this is very efficient, especially
19 for some of these smaller financial-only players. I believe
20 ISO New England came into about 400 some-odd participants in
21 their market, and the vast majority of those are going to be
22 very capital-intensive players.

23 The quicker they can get their margins back,
24 whether they're unsecured or not, the more likely they are
25 to do that next trade, the more likely they are to provide

1 that next amount of efficiency for the market.

2 A major point of clearing in general is the
3 transparency. Every day, we are required for every contract
4 we list to publish price. It's our best guess at what that
5 price is based on market input during that day. That
6 changes from day to day. Because it does change, we collect
7 variation margin, to make sure that we're meeting the needs
8 of the systematic risk of the system.

9 One of the challenges we have seen with clearing,
10 and I believe we see this challenge again in the West, as
11 they move to an MRTU market, is that while the vast majority
12 of their forward markets have been trading through financial
13 swaps for a year or two now, still predominantly their spot
14 market is a physical bilateral, next day market.

15 It's our belief that once MRTU goes through, this
16 will become a highly efficient financial swap market. One
17 of the advantages will be the almost immediate return of
18 capital post-settlement. As my colleague mentioned, they
19 are currently looking at ways to reduce their settlement
20 cycle from 80 to 25 days.

21 That's very admirable. The concern of the
22 participants is that while 25 days is great, one day is a
23 lot better. That's not to say we're at that point today.

24 I compliment everybody for reducing that
25 settlement cycle. It's more of a comment that the quicker

1 we can get the capital and collateral back to the
2 marketplace, the more efficient they can make the market
3 tomorrow.

4 In summary, I would just like to again say thank
5 you for having us here. I look forward to any questions you
6 guys may have. Thank you.

7 CHAIRMAN KELLIHER: Thank you very much. I'd
8 like to now recognize Daniel Sarti, Credit Risk Management
9 for Arizona Public Service Company. Welcome.

10 MR. SARTI: Thank you. I'd first like to the
11 members of FERC, on behalf of myself and Arizona Public
12 Service, for allowing us to participate in this conference.
13 I have the unfortunate circumstance of being the last
14 presenter on the day, which means a lot of the contents have
15 already been presented.

16 However, it has forced me to cut substantial
17 portions of my presentation, which everyone will be happy to
18 hear. I hope to at least present some of the same concepts
19 in a slightly different perspective than some of the
20 panelists already have.

21 Through this presentation, I hope to provide you
22 with a front-line risk manager's perspective of contractual
23 credit and collateral requirements, on an electric utility
24 trading floor.

25 When considering the broader credit issues that

1 are affecting the electric power industry, it is helpful to
2 understand not just how contracts create credit risk, but
3 what credit and collateral provisions are typical in
4 purchased power contracts, the types of risks those
5 provisions are intended to address for both sellers, and the
6 role those provisions have in managing credit risk for
7 utilities and ultimately for our customers.

8 This will be particularly important, because
9 credit risks in our industry continue to grow. First, a
10 little background on our company. Arizona Public Service is
11 a vertically integrated electric utility serving over a
12 million retail customers throughout Arizona, as well as
13 almost 100 wholesale customers.

14 APS owns and controls 6,200 megawatts of
15 diversified generation resources. Our peak load this past
16 summer was over 7,000 megawatts, increasing to 8,000
17 megawatts including required reserves. From that
18 difference, you can see that APS relies heavily on purchases
19 to meet our native load requirements, and our need to buy
20 both energy and capacity from wholesale markets is
21 increasing.

22 Additionally, although we are a net buyer of
23 energy and capacity, we are frequently selling surplus power
24 to the wholesale markets. Unlike many utilities, we buy and
25 sell frequently in short-term and real-time markets to

1 optimize the dispatch of our generation.

2 We have contractual exposure as both a buyer and
3 a seller to approximately 100 counterparties at any given
4 time. As a result, we are keenly attuned to credit risks.

5 One of the standard platforms that APS uses for
6 bilateral transactions is the WSPP agreement, a standard
7 contract with terms and conditions that provide for any WSPP
8 member to transact with any other WSPP member using this
9 agreement. WSPP members are found throughout the country,
10 as the WSPP field agreement is used nationwide.

11 I want to talk a little about our contractual
12 provisions regarding the granting of credit and exchange of
13 collateral. I'll preface this by saying that I want to
14 concentrate specifically on the WSPP agreement, because I've
15 been asked to do so.

16 We do not necessarily limit ourselves to the use
17 of the WSPP agreement in energy transactions, and it's not
18 necessarily our preference to use WSPP. Most energy
19 commodity contracts have some provisions where they assess
20 the creditworthiness of the parties.

21 As a general rule, these credit provisions
22 require some amount of credit enhancement of financial
23 collateral to secure credit risk that is created by the
24 contracts. There are several common elements to contractual
25 provisions that allow collateral to be requested or posted.

1 The first of these elements is the triggering
2 event. This is a specific event or condition, whether
3 objective or subjective, that requires the party to provide
4 credit enhancement or post collateral. Once the party
5 reaches a triggering event, it is routinely required to
6 maintain adequate collateral to cover the entire contract.

7 Prior to exposure of the WSPP agreement, which is
8 commonly used for energy commodity transactions,
9 creditworthiness is addressed in Section 27. The provision
10 states that if a party has a reasonable basis for
11 questioning the other party's creditworthiness, financial
12 responsibility or performance viability may demand
13 reasonable assurances.

14 The contract creates a safe harbor, a list of
15 events which allow questioning of a party's performance,
16 including knowledge that the party or its guarantor are
17 failing to perform or defaulting on their contracts under
18 other contracts; the party has exceeded credit or trading
19 limits; a party is downgraded below investment grade or
20 below investment grade that is downgraded further; or they
21 have incurred substantial changes in market prices which
22 materially and adversely affect the party's ability to
23 perform.

24 The second common element of the contractual
25 credit provision is the form of collateral. Many contracts

1 list specific forms of collateral acceptable to each party.
2 The WSPP agreement provides reasonable assurances that
3 include a letter of credit, cash repayment, posting letter
4 of acceptable collateral, a guaranty agreement or some other
5 mutually agreeable method.

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1 To supplement, the WSPP provides a sample
2 collateral index that may be negotiated, that sets for the
3 conditions under which a party will be required to deliver
4 performance assurance.

5 This annex may establish collateral threshold
6 levels or open credit levels, corresponding to specific
7 credit ratings, and may also establish ratings triggers or
8 other objective standards, which would require adequate
9 collateral to cover the entire credit exposure.

10 The third common element in the credit provision,
11 is the amount of collateral. Contracts should specify the
12 amount and methodology used to compute the amount of
13 collateral required, and in bilateral wholesale energy
14 transactions, collateral is to be required only for the
15 amount of current exposure, including current receivable
16 exposure and current performance exposure.

17 For example, in the WSPP agreement, the WSPP
18 agreement limits the level of assurances to what the
19 performing party can reasonably expect to receive in
20 damages.

21 Managing exposure to credit risks, whether buying
22 or selling power, has long been important and is becoming
23 more important.

24 Today, there continues to be significantly
25 increased possibilities of corporate defaults. Such factors

1 have evidence of higher credit default swap premiums, higher
2 bond swap spreads, and the state of our equity markets also
3 amplifies the importance of managing credit risk, as there
4 is higher commodity price volatility.

5 Price volatility increases credit risk, as energy
6 contracts move further into the money or out of the money.
7 Also, price volatility increases liquidity risks, as parties
8 to either side of the transaction may have increased
9 contractual collateral requirements in order to securitize
10 higher dollar levels of performance risk.

11 I should point out that the focus of many of the
12 presentations so far, has been on escalating levels of
13 credit risk, but financial liquidity risk is, potentially,
14 an even more serious and imminent risk to a trading
15 operation.

16 The use of collateral has had the effect of
17 decreasing credit risk, but it has also had the commensurate
18 effect of increasing the financial liquidity requirements of
19 energy businesses. In order to provide collateral or other
20 credit enhancements, companies require access to large
21 amounts of readily-available financial liquidity, such as
22 cash or bank lines of credit.

23 The amount of financial liquidity required to
24 support contractual obligations, depends on the level of
25 credit risk created by the contract, as well as the specific

1 requirements in the credit provisions.

2 As a result of the current strain on the
3 financial markets, companies may find reduced access to
4 liquidity, impacting their ability to take on further
5 counterparty risk or granting of credit, thus, calls on new
6 transactions, may mean fewer transactions are consummated.

7 In conclusion, anytime an unsecured contractual
8 exposure is created, such as an energy commodity contract,
9 it is reasonable and prudent for a company to require that
10 collateral be posted, in the event its counterparty's
11 creditworthiness deteriorates.

12 There is no single perfect indicator of a
13 company's credit worthiness. As a result, contractual
14 credit worthiness provisions such as those in the WSPP
15 agreement, need to be sufficiently flexible to provide the
16 level of assurances needed for parties to enter into energy
17 commodity transactions.

18 These credit worthiness provisions are critical
19 to both parties in a typical energy contract, however, with
20 collateral protections, comes the potential for financial
21 liquidity risks. Contingent liquidity commitments must be
22 anticipated, since capital is a finite resource. It must be
23 budgeted and allocated across the organization.

24 It is important to establish an aggregate limit
25 for the acceptance of credit risks, and contingent liquidity

1 commitments. If the companies nearest the limit on
2 available financial liquidity, few transactions are
3 attractive enough to risk bankruptcy by creating a liquidity
4 crisis.

5 Recognition of these risks, as they currently
6 exist, may result in a decreased level of activity in the
7 wholesale power markets, at least for a period of time, but,
8 ultimately, strong contractual credit worthiness and
9 collateral provisions and sound risk management practices to
10 help mitigate credit risks, are essential in order to avoid
11 potential catastrophic losses that would impact both the
12 utility companies and their customers. Thank you.

13 CHAIRMAN KELLIHER: Thanks very much. I want to
14 thank all the panelists. I think you are actually in a
15 prime position to be the last speaker, actually. It's
16 probably a good opportunity.

17 We have about 50 minutes and there are five of
18 us, with you all being the fifth man. Why don't we just go
19 with ten-minute rounds? I'll start with a couple of
20 questions.

21 First of all, I want to ask Bob and J.C.. if you
22 were charge and you could make whatever changes you wanted
23 in RTO and ISO credit policies, or FERC credit policies, at
24 large, what changes would you all make, if you were all king
25 for a day, in charge of credit policies? What would you do,

1 realizing you're charged with the public policy?

2 MR. KNEALE: That's all you want?

3 (Laughter.)

4 CHAIRMAN KELLIHER: What specific changes? Is it
5 limiting or eliminating unsecured credit? Is it setting
6 uniform settlement periods? Is it some kind of consistency
7 or standardization of policies across RTOs and ISOs? Is
8 that positive? Is that essential?

9 MR. LEVIN: Without violating any of the
10 principles that may exist for them -- I apologize if I do --
11 I think a lot of things have been covered, but I think you
12 heard pretty consistently today, that reducing the
13 settlement period and having some understanding of why the
14 are reluctant to do it, for everything, there's some
15 uncertainty, and I think, to some extent, that the RTOs may
16 feel that they're tied, because there are certain types of
17 decisions from that perspective, that they can't do.

18 They can't be arbitrary. In our market, we can
19 make a risk management judgment, and we wouldn't call it
20 arbitrary.

21 When we did evaluate the circumstances for a
22 specific market, there was some information that was
23 available very directly, and there were some customers
24 where it was very clear that the information was not
25 available very quickly.

1 But it doesn't prevent you from making estimates
2 on a daily basis. They may not be fully accurate and you
3 may need to have higher collateral because of that.

4 Nonetheless, in our view, it didn't prevent them
5 from providing that type of risk management on a much
6 shorter timeframe. I fully understand why a CFO from an
7 RTO, would not take that upon himself, but you asked, from
8 that position.

9 Being king for a day is very attractive, but with
10 that to start with, I would suggest that.

11 MR. KNEALE: I don't want to pretend to be an
12 expert on the ISO business model. I know that they have
13 many more inputs and outputs than we in the clearing
14 business or exchange business could ever hope to have.

15 But I would like to echo what pretty much
16 everybody on this panel has said, which is, in an ideal
17 world, the settlement cycle is reduced to the smallest equal
18 period it can be. If it's an hour, gosh, that would be
19 great, but I think that getting everybody to a weekly cycle,
20 is an adequate goal.

21 It's going to be tough for some people, certainly
22 for those ISOs that are just finishing major technology
23 upgrades. But, over time, I think one of the things, from
24 an exchange perspective, from a market perspective, that
25 would be really helpful to see, would be some uniformity.

1 Certain ISOs have five-day policies to finalize
2 real-time prices. Some ISOs do it in two days; some do it -
3 - ERCOT is an example. They'll change a price up to 180
4 days sometimes.

5 Those types of things make it challenging to
6 offer the credit and risk amelioration that both Bob's
7 company and my company work to provide for the market.

8 To the extent that those are more standard and
9 the rules are more similar, the products are easier to offer
10 to the marketplace, because everybody understands them and
11 we can calculate their inherent systemic risk, a little
12 easier and just make more efficient use of capital, in
13 general.

14 CHAIRMAN KELLIHER: Thank you. Mr. Leiber, you
15 talked about convergences, and those were used in your
16 materials, convergence and credit policies among RTOs and
17 ISOs. Does "convergence" mean -- let's use the word,
18 "standardization" -- uniformity?

19 Does it mean narrowing the differences? Do you
20 think the ideal state is actually to be consistent credit
21 policy across RTOs and ISOs?

22 MR. LEIBER: Certainly, a narrowing is
23 appreciated by market participants. There are vastly
24 different rules, from one market to another.

25 Certainly, when there has been the opportunity to

1 develop best practices, it would not be a bad idea for
2 everyone to reach that level. For example, in setting
3 federal requirements around FTRs and CRRs, some of the early
4 adopters of those products, adopted a policy that I think,
5 over time, we've all seen, can be enhanced and improved.

6 To set a standard on day one, without the ability
7 to make those enhancements, would not be a good thing, but,
8 at some point, when the lessons have been learned, adopting
9 a uniform approach, may not be a bad way to go.

10 CHAIRMAN KELLIHER: I think there's recognition
11 that the RTOs and ISOs clearly are different than exchanges.
12 As a legal matter, they are not exchanges; they are
13 regulated by FERC; they're utilities.

14 They're unusual utilities and their products are
15 unusual, but also, their policies can't narrowly be based
16 solely on risk management, because there's also a diversity
17 of market participants and a diversity of products.

18 We want to see new products developed in some
19 cases, products that are proposed by market participants; in
20 other cases, products that are important for the management
21 of FERC policy or state policy.

22 So, entry is important, and credit policies can't
23 be drawn solely around risk management, period; they have to
24 represent a balance between the number of different public
25 policy goals, that being one of them, but also the desire to

1 have entry in these markets and offerings of these new
2 products.

3 With that, I think I'll turn to my colleagues.
4 Commissioner Moeller?

5 COMMISSIONER MOELLER: Thank you, Mr. Chairman,
6 and I thank my colleagues for their indulgence. I'm a
7 little under the weather, so I'm about at the end of my rope
8 here.

9 Thank you for the excellent testimony. I heard
10 unanimity on shortening settlement periods, generally
11 speaking, eliminating unsecured credit, standardizing
12 procedures amongst RTOs and ISOs. I'm wondering, would
13 anyone, for the sake of argument, defend the use of
14 unsecured credit at all, for an advantage of providing more
15 liquidity?

16 MR. SARTI: I would. What I tried to highlight
17 as part of my presentation, was that credit risk and
18 liquidity risk, are almost the inverse of each other. If
19 you reduce one, you almost inevitably increase the other
20 one.

21 I can think of examples where a municipality, for
22 instance, or a cooperative, their business model is not such
23 that they keep high levels of capital on their balance
24 sheets, and if they were forced to go into some sort of
25 clearing model where they would have to post collateral for

1 all exposure, particularly in a volatile period, they might
2 not have the capital necessary to answer those collateral
3 calls.

4 So, potentially, by doing that, you are excluding
5 certain market participants.

6 COMMISSIONER MOELLER: Mr. Ludlow?

7 MR. LUDLOW: Commissioner, this is Bob Ludlow
8 from ISO New England. One of the things that was suggested,
9 is not that you eliminate unsecured credit, but there's
10 still the ability for participants to extend credit between
11 each other.

12 What we're narrowly looking at, are the spot
13 market transactions and people being held accountable for
14 those positions in the spot market. If they choose to
15 settle financially through the RTO markets.

16 Then, we believe, an appropriate amount of
17 collateral should be put in place.

18 MR. LEVIN: I would echo that, as well.
19 Exchanges certainly understand the bilateral credit
20 extension types of markets, where the credit that gets
21 extended, may not be secured.

22 But where there is kind of, in fact, a group
23 sharing and mutualization of risk, I think that when you
24 extend unsecured credit, then your benefitting some of the
25 participants.

1 It will become manifest. I knew it would come
2 up, but credit is paid for. It will end up in the price,
3 one way or the other.

4 If you give somebody a lot of extra credit and
5 they can buy, the price may go higher because of it. That
6 may not be such a good thing.

7 When they can't pay, there may repercussions the
8 other way.

9 I also say that one thing that came up -- and I'm
10 not necessarily in complete disagreement with what was just
11 said a moment ago about munis, but I remember looking at
12 providing services and discussing it with a number of the
13 ISOs and RTOs, and it was certainly brought to our
14 attention, that munis are pretty good credit risks.

15 They have the power of taxation in raising money
16 in ways that others can't. When someone serves as a
17 clearing sponsor for them, a financial sponsor, they may be
18 more than willing to do that and help some of them adjust
19 their settlement.

20 They may get paid monthly -- let's be more
21 extreme -- or on a quarterly basis. They may need some sort
22 of financial institution that can regulate that and make it
23 more frequent.

24 But we shouldn't assume that they can't be
25 extended credit. It's just that the credit is between their

1 financial sponsor, but within the clearing mechanism,
2 though, the settlements are every day, and between the
3 clearing providers or sponsors within that mechanism, they
4 pay each other every day.

5 Eventually, their relationship with their
6 customers, between them and their customers, takes care of a
7 lot of the mutualized burdens.

8 MR. DAVIES: Commissioners, I mentioned in my
9 comments, too, that it's so important, as you reduce or
10 eliminate unsecured credit, to do that in conjunction with
11 the settlement cycle. That's the key to everything.

12 Bob Levin just spoke on his organization. They
13 use initial marginal variations to protect the market, but
14 in the examination of margin, if they're having a 20- or
15 100-day settlement cycle, their markets would not be liquid
16 and people would not participate in that market, because
17 they have a daily cash settlement, that there's so much
18 vitality in that market.

19 MR. KNEALE: Real quickly, I wanted to offer a
20 little bit of empirical evidence over the last two quarters.
21 It goes to comment a little bit on the reduction of
22 unsecured credit.

23 I'm certainly not advocating complete
24 obliteration of the unsecured credit model. I believe that
25 in our model, as far as a risk management model, it's the

1 best, but, certainly, from a liquidity standpoint, I think
2 that there is a hybrid that exists.

3 We even, in fact, built our exchange around
4 customers, on a transaction-by-transaction basis, to set
5 references for certain counterparties. They're quite happy
6 to accept, quote, "free credit."

7 One of the things I mentioned earlier, was that
8 we've seen the financially cleared market maintain some
9 modicum of efficiency, and really they are trading quite
10 well. Still, we are seeing the issues in liquidity in the
11 markets today, definitely in those markets that were
12 dominated by large market-makers, banks, et cetera, who
13 could extend credit to a lot of these companies in less
14 liquid areas -- the southeast, for sure, the Midwest, where
15 the market isn't quite to the liquidity standpoint to
16 support clearing, because of a price discovery, mark-to-
17 market reason.

18 As those banks and as those major market-makers
19 have had to rein in their own capital spending, their own
20 capital available for trading. We've seen those markets
21 take a little bit of a hit, so, certainly, the ISOs have to
22 be conscious of the fact that if they just cut off their
23 participants from unsecured credit, there is some short-term
24 risk that liquidity would be affected.

25 I would counter that by saying that there will be

1 market participants there to pick up the slack. There will
2 be the more credit-efficient, there will be the other market
3 mechanisms that can cover that. It takes time. It's not
4 going to happen overnight.

5 But, in general, we see the market as efficient,
6 and it will move to its efficient points.

7 COMMISSIONER MOELLER: Thank you for the
8 thoughtful answers, and the questions, they don't indicate a
9 bias, but they were to stimulate discussion. I appreciate
10 all of you coming, and, with your indulgence, I'll excuse
11 myself and view the rest of the conference when I have a
12 higher level of consciousness.

13 (Laughter.)

14 CHAIRMAN KELLIHER: Commissioner Kelly?

15 COMMISSIONER KELLY: Mr. Davies, you said that we
16 should think about reducing unsecured credit, in conjunction
17 with certain settlement periods. I think that most of you
18 agreed with that statement.

19 Do you know what the challenges are to reducing
20 settlement time?

21 MR. DAVIES: There are multiple challenges,
22 potentially some issues.

23 COMMISSIONER KELLY: Are there software issues?

24 MR. DAVIES: Software issues with the ISOs. Some
25 of the ISOs, I know, are able to accomodate accelerated

1 settlements.

2 COMMISSIONER KELLY: If they can't, they, over
3 time, could.

4 MR. DAVIES: Absolutely.

5 COMMISSIONER KELLY: But I assume it would
6 involve costs?

7 MR. DAVIES: Potentially, yes. Look at ISO New
8 England, where they went into billing from not free billing.
9 What costs were involved with that?

10 It was done in a period of quick timelines, in a
11 time that the Commission certified their filing at FERC, so
12 it was a fairly quick thing.

13 I know there was some discussions with Cal ISO.
14 It had to reduce its settlement cycle, too.

15 I made a comment about the day-ahead market being
16 the financially binding market, which acts like an exchange
17 market. I believe Phil can talk to it more, that the system
18 can handle that today.

19 As to the other ones, say, MISO or SPP, or PJM,
20 I'm not sure of their level of need, but, certainly, it's
21 true that the systems can presently handle further
22 acceleration of the settlement cycles.

23 COMMISSIONER KELLY: I'd like to follow up on
24 that, but do you believe that the ISO should have
25 uniformity, or how much uniformity do you think it should

1 have?

2 MR. DAVIES: I think they should work towards
3 uniformity. Within the recommendations, one of the
4 recommendations for state and federal regulations, is to
5 encourage the design and development of market products and
6 opportunities to settle among the various ISO/RTOs and
7 TRANSCOs.

8 You don't want to kill innovation. I think it's
9 important for the markets to have the ability to innovate.

10 But the Commission should be there to help push
11 in the right direction.

12 COMMISSIONER KELLY: Can I interrupt you, just
13 for clarity? Why would shortening the settlement period,
14 potentially adversely impact innovation?

15 MR. DAVIES: I'm not saying that. I'm saying
16 that there's a wealth of tools that can be used, different
17 ways to accelerate, to net across markets.

18 Bob Levin's here, and, I know that in ERCOT, back
19 when we were doing the nodal market design, there was a
20 proposal by ERCOT to outsource the day-ahead market to a
21 third party. NYMEX actually won that RFP, however, at the
22 time, the economists came back with a cost/benefit
23 recommendation and recommended deferment until the market
24 went nodal.

25 So there was an attempt at ERCOT at the time, to

1 bifurcate the day-ahead market and bring somebody in who had
2 relevant experience to manage that part of the marketplace.

3 COMMISSIONER KELLY: Thank you. So, Phil and
4 Bob, what are the challenges to shortening the settlement
5 period? I know that ISO New England has done it.

6 Do you anticipate shortening it further, or is it
7 as far as it can go? What was the cost involved?

8 MR. LUDLOW: Turning to the cost back in 2003,
9 when we initially accelerated the settlements, that's been
10 more material from a systems perspective, so it's relatively
11 modest, as far as the overall cost on making those systems
12 changes.

13 The challenges, going forward, are systems-
14 related, as well as process- and rule-related. There are
15 certain rules around what information is necessary to
16 finalize pricing in the markets, finalize admissions in the
17 market, tie it to meter-reading activities, as well as the
18 processes of the market participants, so they can understand
19 what the final sets of transactions were and initiate the
20 payments.

21 COMMISSIONER KELLY: So, once we have a smart
22 grid, no barriers.

23 (Laughter.)

24 MR. LUDLOW: None at all. We're looking at
25 shortening the grace periods that are out there, shortening

1 the billing times. We'll bill much closer to the dispatch
2 time, so I don't see it as a significant cost, as much as it
3 is a process and rules that we need to identify to allow us
4 to move that to continue the shortening.

5 COMMISSIONER KELLY: Thank you. Is the situation
6 in California, the same?

7 MR. LEIBER: The constraints that we face, have
8 been twofold: While the MRT project had been under
9 development, we had been in need of a new settlement system.
10 That will be deployed this March 31st.

11 When we transition to MRTU, with that new
12 settlement system, we do have the flexibility to vastly
13 accelerate the payment cycle.

14 COMMISSIONER KELLY: It's still going to be 25
15 days?

16 MR. LEIBER: It's still going to be 25 days,
17 initially, but we have the ability to further reduce it. We
18 did a lot of work with the stakeholders and heard what they
19 had to say.

20 The initial proposal was that we should go to
21 semimonthly. It's a significant reduction from where we're
22 at today.

23 It's not as far as we can potentially go. We
24 could move to weekly invoicing; we could further tighten the
25 timeframe, and we think those are all good things we should

1 look at further.

2 COMMISSIONER KELLY: If you were to move to take
3 those steps, who does that impose costs on and what kind of
4 costs would htat impose?

5 MR. LEIBER: One cost -- there's been some talk
6 about even going to daily settlements, and, of course, the
7 addiitional administrative costs involved with htat, both at
8 the ISO and at the market participants, might be going a
9 little further than is warranted, but, certainly, we'd be
10 investing and we think it's something worthwhile.

11 COMMISSIONER KELLY: Bob, you might not be able
12 to answer this question, but I think you said that 20
13 percent of the debt in the market, your market, is not
14 secured. And that totals about \$200 million.

15 MR. LUDLOW: That's correct; the total right now
16 is about a billion dollars of financial assurance
17 obligations, of which \$200 million is met through unsecured
18 credit.

19 COMMISSIONER KELLY: Are you able to say, in the
20 ideal world, how much smaller that should be? Ball park?

21 MR. LUDLOW: It's difficult to estimate, but I
22 believe a significant portion of that is supporting
23 bilateral transactions between participants that are opting
24 to clear through the market. If there's a significant
25 amount of that that can be shrunk by just those

1 counterparties taking the risks between themselves --

2 MR. LUDLOW: I understand that there's a
3 relationship, an inverse relationship between collateral
4 protection and liquidity. Is there always -- can you obtain
5 some additional collateral protection in our organized
6 markets, without impacting liquidity? Is there some
7 headroom there, before that relationship begins to be
8 impacted?

9 MR. DAVIES: I was going to use an example from
10 ERCOT. ERCOT had four retail energy providers before I was
11 chairing the Creditworthiness Group. There were changes.

12 We looked at making changes during the time of
13 transition, and there was a lot of talk that were ratcheting
14 up collateral requirements and that they perhaps have more
15 cover.

16 But, as I said before, we found this compression
17 of time to do things. I had staff go back and recast those.

18 As I said in my comments, it was \$528 million in losses and
19 it went down to \$164,000.

20 There have been protocol revisions. We went
21 through a lot of work with a lot of other groups there. We
22 have always put through -- 90 percent of the risk went out,
23 so the inverse relationship, Commissioner, there is, but if
24 you compress that settlement cycle, we might have the amount
25 of time to do something.

1 You can squeeze out almost all the risk of the
2 marketplace, and, again, that's why NYMEX -- look at the
3 website, look at the members, most of them are using it, and
4 some of them are members of the NYMEX. It provides market
5 incentives.

6 COMMISSIONER KELLY: If you squeeze the risk
7 down, it impacts the cost, how much?

8 MR. DAVIES: It depends on what that risk is.
9 There's no math on the payments, but it depends on the
10 default rate in the marketplace, the underlying prices of
11 natural gas, but it's the fuel stock on the margin in that
12 market.

13 All those variables go into it, but it also
14 includes the amount of time to settle and the amount of
15 resettlements in the marketplace. The longer the settlement
16 cycle is, the more risk it introduces into the marketplace.

17 In Cal ISO, I don't believe -- in their white
18 paper in 2005, they identified that the settlement cycle is
19 a source of risk for the marketplace.

20 COMMISSIONER KELLY: I want to give Bob a chance
21 to say something on that point, if you were going to.

22 MR. LUDLOW: The folks that have the unsecured
23 credit provisions, are, by definition, stronger credits in
24 the pool, so when I look at just the New England-centric
25 view of things and I read the financial statements of each

1 of these entities, while the financial crisis has had an
2 impact on them all, I was about to say that it would
3 generate a true liquidity crisis.

4 MR. LEVIN: I'm not here to push our method of
5 providing clearing, but I would point out that if the rule
6 applied, then you do get offsets, and collateral is offset,
7 and it could be offset.

8 Bob mentioned about a lot of financial
9 participants in the marketplace and probably in other ISOs
10 and RTOs where there is no offset provided between those
11 ISOs and the market, but there may well be offsetting and
12 risk-reducing positions, and to the extent there's
13 integration with the financial markets, commodity markets
14 will do the same.

15 COMMISSIONER KELLY: And you're saying that the
16 offset occurs, because the clearing mechanism reduces risk?

17 MR. LEVIN: Because it recognizes reductions in
18 risk across different markets, if, indeed, the position
19 warrants it. It does not recognize it, if it doesn't.

20 If you are combining two markets and they are
21 both electricity markets, that's probably not risk-reducing,
22 but if you're buying in one and selling in another, it very
23 well could be -- not always, but very well could be, as an
24 example.

25 COMMISSIONER KELLY: And you, in your model,

1 would be analyzing each of those situations.

2 MR. LEVIN: We would and we do, because we offer
3 products across a series of ISO markets, currently, and
4 within it, we're also offering them over different time
5 periods, so perhaps, if you're buying in July and selling in
6 August, to make it simple, then we would recognize something
7 there.

8 We would recognize that there are natural gas
9 products that were related, as well, so there's a whole
10 combination of things that recognize that risk.

11 I would say that when you reduce collateral under
12 those circumstances, we think that's stabilizing, because,
13 asking for too much collateral, we believe, is a
14 destabilizing factor.

15 It's not good, not to have enough collateral, but
16 it's also not good to have too much collateral.

17 COMMISSIONER KELLY: Because of the adverse
18 impact on liquidity?

19 MR. LEVIN: I think so, and the fact that if
20 someone -- you could force someone into a liquidation,
21 because they can't provide adequate liquidity. They don't
22 have a risky position. That's not good for the markets, and
23 that has been known to happen.

24 COMMISSIONER KELLY: Daniel?

25 MR. SARTI: I just wanted to make the point with

1 regard to accelerating the payment cycle. It actually is a
2 liquidity impact.

3 For instance, you're causing a company to pay out
4 funds before they otherwise would have and before they
5 potentially have been able to realize revenue that they
6 would have over that period, so, for instance, if I have a
7 credit card and I have a balance that's due in the next
8 month, the credit card company comes to me and says, pay
9 today.

10 Well, for me, that definitely has an impact on my
11 personal liquidity situation, and it's the same thing for a
12 company that's forced to file early. So I'm not necessarily
13 making a judgment that it's a bad thing, but as far as the
14 relationship, the inverse relationship between liquidity and
15 credit risk, I think it still applies, even with accelerated
16 payments.

17 COMMISSIONER KELLY: Thank you.

18 MR. KNEALE: One quick comment that I wanted to
19 make on that liquidity versus risk equation, one thing I
20 would say, is that they are tied a little deeper, because,
21 certainly, with new products, when we first start a product
22 -- and I'm sure this is probably similar -- we may actually
23 be overmarginalized, simply because liquidity is little. As
24 the liquidity picks up, because, inherently, because of the
25 high margins, it's still more a more efficient way to do

1 things.

2 You get transparency and all these other benefits.
3 We improve that liquidity and transparency, and we can
4 actually reduce the risk required, because we have better
5 price discovery, so to speak.

6 Just to expound on what Bob mentioned, the
7 portfolio idea is where we see the real benefits, whether
8 it's on the ISO level or on the exchange level.

9 When you look at having the whole world of
10 commodities offsetting each other, we can find those
11 relationships. That's our job, to find those offsets.

12 It may be the price of tea in China, versus sugar
13 in Canada. You'd be surprised where things show up.

14 That's not to say that we're going to offer that
15 risk anytime soon, but I know that at ICE, we look at thoses
16 on a very routine basis, because, again, we believe that the
17 more efficient we are, from a risk and collateral
18 perspective, the more efficient our customers and the market
19 can be, from a trading perspective.

20 COMMISSIONER KELLY: I don't know if I have any
21 time left, but I was going to ask a question about the
22 bilateral markets.

23 You mentioned in your remarks, that the WSPP
24 contract -- you use it, but sometimes you don't always use
25 it, and sometimes you would prefer not to use it.

1 Were you referencing the collateral provisions,
2 when you made that statement?

3 MR. SARTI: In our view, between the WSPP
4 agreement and any other bilateral trading agreement, if you
5 put the proper collateral indexes in place, there's really
6 not that much difference between them, from a credit
7 perspective.

8 That's more to make the point that, depending on
9 the counterparty we're dealing with and depending on the
10 term of the transaction, depending on the risk of the
11 profile of the transaction, we may want to clear it, for
12 instance, because we think there's a lot of risk in that
13 transaction.

14 So it really depends on the risk profile of the
15 company we're dealing with, and the transaction that we're
16 entering into.

17 COMMISSIONER KELLY: In your marketplace, how do
18 you evaluate the riskiness of your transactions? On a
19 contract-by-contract basis, or on a participant
20 relationship? How do you do that?

21 MR. SARTI: It depends. The typical things that
22 will affect the risk in the transaction, are the size of the
23 transaction, how many megawatts are you talking about, the
24 tenor of the transaction.

25 Clearly, if you're doing a ten-month deal versus a

1 one-month deal, there's a lot more risk associated with the
2 ten-month deal, because there's more opportunity for market
3 movement over that period, and there's a higher opportunity
4 for default in that period, as well.

5 COMMISSIONER KELLY: Do you determine the
6 protection that you need, the counterparties determine the
7 protection they need, and negotiate it on a contract-by-
8 contract basis?

9 MR. SARTI: We do it on a contract-by-contract
10 basis, but, typically, within a contract, we'll assess
11 certain parameters, so there's a certain amount of risk we
12 can take for a contract; there's a certain tenor of risk we
13 can take for a contract.

14 If anything exceeds the limit we have in that
15 contract, we may want to negotiate something else outside
16 the contract.

17 COMMISSIONER KELLY: Have the changes in the
18 financial markets over the last six months, the last year,
19 affected how you construct those provisions?

20 MR. SARTI: They haven't necessarily changed how
21 we construct the provisions. I'd say they have changed how
22 much credit we're willing to grant to some of our customers
23 on an unsecured basis.

24 But in terms of actually negotiating the
25 contracts themselves, to some extent, you know, we try to

1 set lower thresholds in some instances, to reduce the
2 overall level of risk, but, generally speaking, the
3 structure of the contracts has remained the same.

4 COMMISSIONER KELLY: Is there a role for FERC in
5 this area of bilateral contracting? Not that we want to get
6 involved in it, but I just want to know, from your
7 perspective, is there a role, or are we going to see
8 problems?

9 MR. SARTI: It seems to me that there is credit
10 risk in this industry, there's always been credit risk, and
11 that's been elevated lately, but to require a company,
12 necessarily, to have close to 100 percent collateral for
13 transactions, really depends on the profile of that company.
14 It depends on their liquidity profile; it depends on how
15 much risk they are willing to take.

16 Some better capitalized companies, may be willing
17 to take more risks than others. I would be hesitant to
18 mandate any change in terms of you must eliminate unsecured
19 credit levels or any judgments like that.

20 COMMISSIONER KELLY: Do you think the
21 counterparties are handling that well enough themselves?

22 MR. SARTI: You know, I think, for the most part,
23 they are. It's the responsibility of the counterparty to
24 assess how much risk they are willing to take.

25 I can say, for example, for us, we've dealt with

1 the same counterparties, we've dealt with the investment
2 banks, and the losses we've taken, really have been
3 immaterial, so we've managed fairly well to do that.

4 COMMISSIONER KELLY: That's good news. Thank
5 you. Thank you, Mr. Chairman.

6 CHAIRMAN KELLIHER: Commissioner Spitzer?

7 COMMISSIONER SPITZER: Thank you. There are some
8 benefits to being the last one; you get to summarize, and,
9 if I could, the complex issue is the one of the unsecured
10 credit, and that's been pretty well discussed, and there are
11 competing variables, and I would point out, J.C., you
12 mentioned that the policy considerations in an RTO context,
13 are different than in a clearing context, and that are
14 governmental, overarching.

15 I guess in that regard, it seems to me that the
16 two issues you have with regard to the unsecured credit,
17 are: One, this issue of new and innovative products.
18 You've got ancillary services markets springing up; you've
19 got demand response aggregators, and a swap of market
20 participants that didn't exist a few years ago, and who
21 knows what new products will emerge as we roll out new grid
22 technologies and the degree to which credit risk is one
23 variable and it's not the only variable.

24 How do we contemplate these new products, new
25 participants, and new markets, without having the credit

1 risk overwhelm the other competing interests?

2 I think you also recognize that RTO governance is
3 a different beast.

4 The second issue is the sea change. In late
5 2001, early 2002, there was a lot of alternatives to natural
6 gas. I was a state regulator, and the disappearance of
7 Enron caused quite a consternation among the entities we
8 regulated, asking the gas LDCs, as well as our utilities, to
9 hedge when there were no counterparties available, because
10 you had the 800-pound gorilla that disappeared.

11 That's almost a force majeure, precisely at the
12 time when the participation of those counterparties was
13 being promoted. We don't want to create a situation where
14 we've provoked a circumstance where we've driven a lot of
15 people out of the market by credit requirements.

16 Those are the two aspects of this credit issue
17 that I'd like to ask you to start commenting on.

18 MR. LUDLOW: What we've seen in New England, is
19 that those participants at that end of the spectrum that
20 we're talking about with new products and the new types of
21 participants, are the demand-response providers and the end
22 users.

23 There is a correlation between when we went to
24 the shorter settlement cycles, notwithstanding the continued
25 requirement that these entities, which are largely smaller

1 entities that don't have the high credit ratings and they
2 are required to post the collateral -- anyhow, we continued
3 to see entry into the market for these participants.

4 So we haven't seen the credit policy create a
5 situation where it's a barrier for them to come into the
6 market. They continue to push for the shorter settlement
7 cycles, so that that amount that they have to post, can be
8 reduced.

9 MR. LEVIN: I appreciate the Commissioner's
10 highlighting today, this issue of innovation. Some of the
11 smaller participants -- we are talking about the RTO
12 markets. I would bring your attention, though, to the fact
13 that in the past two years, we've brought on hundreds of
14 good products, so we've had quite a bit of innovation in our
15 own area.

16 It comes from the marketplace, and it's become
17 much easier for us in the futures business, in the regulated
18 commodities business, to do so. Sometimes the products that
19 are brought on, are targeting smaller entities, or else
20 smaller markets.

21 We've not jumped to the conclusion -- I probably
22 don't see quite the tradeoff between what we think is sound
23 credit risk management and innovation, and I would at least
24 highlight or point out to you, be careful that you don't
25 inadvertently get confused.

1 If you're extending to someone, a credit benefit,
2 that's okay; that could be a public policy, but be explicit
3 about it. I think that's fine to be explicit, rather than
4 perhaps concluded implicitly, something that came out of
5 innovation.

6 I don't think there's a tradeoff there. I do
7 think you run a risk, if you do not express it. You wish
8 you had better credit protection.

9 I'm sure the disappearance of Enron was related
10 to the volatility, among other things. When the parties
11 start to go under, it's usually something to that effect.

12 There's all sorts of reasons that parties are
13 seeking to be more active in less visible markets and in
14 markets where there's less discipline in things such as
15 credit, and they're not always positive, if they are due to
16 innovation.

17 COMMISSIONER SPITZER: You alluded, in your
18 response to Commissioner Kelly, to the response of over-
19 collateralizing, which was, arguably, an issue in the real
20 estate sector.

21 MR. LEVIN: Yes, but that wasn't what inspired me
22 to make that comment. We're sensitive to it in our own
23 industry, and it does come up.

24 There are improvements to be made, even in the
25 commodity business. There are some traditions of how we

1 margin options. Because of how they were traditionally
2 margin'd, there's recognition that it affected the price.

3 If you try to margin them, arguably, on a more
4 efficient basis, you'd affect the price and some traditions.
5 It's not a lot, but that's a well developed market where
6 that is, but we're sensitive that we don't want to force
7 someone into participating in a market activity, simply
8 because of collateral requirements that didn't recognize
9 their loss of any risks.

10 MR. LEIBER: I would not yet conclude that UCLs
11 should be eliminated. I respect New England's position on
12 this.

13 We may get there, but it's a discussion we want
14 to continue to have with our market participants. We
15 recognize that collateral does have a cost.

16 My view is that it may be underestimated, given
17 that suppliers have to fund these carrying costs. It's
18 quite likely that their cost of capital does exceed that of
19 the buyers. It is quite likely that those get incorporated
20 into energy costs and sometimes I think the buyers and the
21 people who would have to post collateral, may forget that
22 fact.

23 COMMISSIONER SPITZER: Mr. Sarti pointed out that
24 some of your participants have revenue streams that don't
25 coordinate with your collateral payments.

1 MR. LEIBER: If they are forced to post other
2 forms of collateral, there is a cost in that, and it's
3 certainly higher now than it was a year ago. We do
4 appreciate that.

5 We want to continue to have this discussion with
6 our participants, as to what the potential barriers to entry
7 are for smaller participants.

8 Most of the smaller participants are already
9 posting collateral and they've often pointed to a desire for
10 a level playing field.

11 MR. DAVIES: Quickly, just to bootstrap on the
12 comment on Enron, at least one of the things you saw there,
13 was, pre-Enron, there were a lot of contracts perhaps that
14 did not have a lot of terms. Subsequent to that, you saw
15 the EEI.

16 I think that with the current crisis going on,
17 you're going to see credit shocks, as Dan was talking about
18 before, people looking at banks and people who they never
19 otherwise thought would be a credit problem, taking up the
20 standards more beyond the rating agencies and more relevant
21 data.

22 But to go specifically to your question, I think
23 the same as Bob Levin; I don't think they're mutually
24 exclusive, but Bob Ludlow's point is that the -- I believe
25 that the volumes have increased, as they reduced the

1 settlement cycle, and I think that's an indication that
2 compressing the settlement cycle, actually increases
3 liquidity in the marketplace.

4 I think both NYMEX and ICE, can talk about the
5 volumes from year to year, that their volumes continue to
6 increase as more market participants are moving their fixed-
7 price exposure over to the exchanges. That's one of the
8 reasons you've seen all the new products developing on the
9 exchanges, and the number of products has grown incredibly
10 over the last few years.

11 The last point I mention, is, if ISOs have a
12 lengthy settlement cycle -- and Cal ISO is sensitive to
13 this. It's one of the reasons they're shortening it. It's
14 the impact it has on resources, as you move to a nodal
15 market.

16 In the nodal market, as you are aware, the intent
17 is to settle the physical market through the ISO. If you
18 have a resource and you're a generator and you've got
19 significant periods that your money is trapped and a
20 significant amount of credit risk, there may be an incentive
21 to try to do something to mitigate that risk, including
22 self-scheduling around the system, which would render
23 superfluous, the MRTU or the nodal market, in the first
24 place.

25 So, that's why we applaud Cal ISO for reducing

1 that. As we mentioned before, in their white paper in 2005,
2 they even identified that out-of-state resource
3 availability.

4 MR. KNEALE: Real quickly, I want to remind
5 everyone that there's a difference between RTO unsecured
6 credit and counterparty unsecured credit.

7 What may be good for an RTO and an ISO, may not
8 necessarily be a solution for the counterparty. I'm not
9 going to delve into that, but it's just something I think
10 that we all need to keep in mind.

11 As for innovation, I would echo the sentiments
12 farther down the table. It is possible to innovate with
13 collateral.

14 As we mentioned a few times, you know, clearing
15 in the OTC energy market, only began six or seven years ago.
16 I believe, as of today, we currently hold close to \$10
17 billion, just in the natural gas and electricity markets
18 with margins that historically that we've required.

19 While it is a new way of doing things, there's a
20 learning process, and I think this speaks a little bit to
21 the municipality issue that came up earlier. It's not so
22 much that they won't post; it's just that they've never had
23 to in the past, because, hey, they're government entities;
24 they've got pretty good credit.

25 But, at the same time, when the clearing members,

1 who are the credit intermediaries for central clearing, go
2 to those municipalities, they can offer them certain
3 discounts that perhaps another entity wouldn't get.

4 It is an education with them. There's a lot of
5 hand-holding, there's a lot of explaining the process, in
6 general.

7 Many of those customers have never traded a swap,
8 period. All they've ever known, is the megawatts need to
9 show up today.

10 One last point -- well, two points, excuse me --
11 whatever the decision is on unsecured credit, I would
12 caution everybody that if it leads to drastic reductions,
13 that we make sure we do it in a very deliberate manner.

14 One of the things we see most often, from a
15 liquidity perspective, is, when we have drastic changes in
16 risk or margin, we create margin calls. That can be very
17 unsettling for a customer and for the market, in general.

18 It does sometimes lead to a crisis of liquidity
19 in the near term, again, the new paradigm.

20 The second is, in this time, it's kind of a
21 paradox. We are looking at perhaps raising the credit
22 responsibilities of companies that potentially are already
23 hurting for collateral and credit.

24 It's almost as if what we really need to do, is
25 say, well, we've got a great plan, let's get everybody

1 healthy first, then we'll implement that plan. Then, of
2 course, we wouldn't need the plan to begin with, because
3 everybody would be healthy.

4 It's a very complex task that you guys have
5 before you in the market, in general, and I don't envy your
6 position, but thank you again for having us here to offer
7 our opinions.

8 MR. SARTI: I think J.C. summarized it really
9 well. I'd just point out some of the relationships,
10 increases in credit protection lead to increases in
11 liquidity risk, and we're talking about that now during a
12 period when capital is constrained.

13 There's also an increase in cost for
14 counterparties, as opposed -- an increase in cost that
15 inevitably leads to a decrease in market participation. I'm
16 sure the ISOs can give you the data on that, better than I
17 can, but it's a natural relationship.

18 A decrease in market participation, leads to a
19 decrease in market liquidity. It would seem that now is
20 probably not the time to require full collateralization,
21 given the markets that we're currently in.

22 COMMISSIONER SPITZER: Daniel, you've only been
23 with the company since 04, but, if you know, going back a
24 larger number of years in the bilateral markets, is the
25 credit risk or the performance risk over a 20-year period,

1 the larger problem? Which has been the more significant
2 problem?

3 MR. SARTI: Clearly, the performance risk.

4 CHAIRMAN KELLIHER: Thank you very much. Any
5 truly superb questions from you gentlemen?

6 (Laughter.)

7 MR. MILLER: I have one, just one question. It
8 poses a possible optimistic future, but one of the things
9 you're seeing, both in the financial markets and in the
10 energy markets, is the need for transparency on exchange,
11 moving as many transactions as possible, to exchanges.

12 Let's say that we took a very deliberative
13 approach and we said we had some sort of blue ribbon panel
14 where the CFOs would get together and come up with best
15 practices on reduced settlement timeframes and settlement
16 reduction over some period of time for unsecured credit.

17 And they basically agree at some date certain in
18 the future, presumably when the credit markets have settled
19 down, that they'd essentially standardize the settlement
20 process. Might we then -- I'll pose this to Bob and to J.C.
21 -- the development of you guys coming into the marketplace
22 and essentially financially, you know, creating the thing
23 that sort of financially binds the RTOs, that you're doing
24 financial settlements in transactions across the country,
25 you're netting fuel positions, you're netting RTO positions

1 here, versus RTO positions here, and essentially squeezing,
2 in addition to the settlement requirements, squeezing the
3 collateral requirements even further.

4 Is that reasonable, given the parameters I set
5 up? Is that a reasonable outcome?

6 MR. LEVIN: It's certainly potentially a
7 reasonable outcome. On the face of it, you can't cast it
8 aside and say it's unreasonable.

9 There may be some instances of this already
10 occurring. I don't want to be Pollyanna-ish here, but the
11 fact is, you do have exchange products executed, you have a
12 lot of very similar products based on the RTO prices that
13 are offered, and there are participants in those markets.

14 So, there are some participants that are maybe
15 not as active in the RTO market, who are offering financial
16 off-exchange instruments, to parties who are, and settling
17 some of that on the exchanges.

18 We are regulated a bit differently. It's not
19 important for this meeting today, but it could be at NYMEX
20 or some combination, and it could change in the future.

21 You may have seen some of that already arise, so
22 it's certainly realistic, and you just have to evaluate it,
23 getting back to what was helping cause this, introducing
24 greater standardization in some elements of this, or causing
25 harm.

1 It's the settlement period where the innovation
2 is, or is that more black and white, that assures the
3 soundly managed settlement period is better for all
4 concerned? That's, I guess, is one of those things I think
5 you predicated it, in particular, on that, but I understand
6 you had other things, in general, in mind, and that's really
7 the issue that you've come to figure out for yourselves.

8 I do wish you the best of luck with your blue
9 ribbon panel, because blue ribbon panels, just like every
10 panel in every group, have difficulty coming to consensus.

11 MR. KNEALE: I think what I would say, is, yes,
12 from a very Mt. Everest, top of the world view, in a perfect
13 world, some entity -- ICE, NYMEX, RTOs working together --
14 we know what our risk is.

15 The ISO/RTO knows what their risk is, and perhaps
16 there's a sharing of information model available. There is
17 a creative way to solve that issue.

18 Certainly, every day, we have spot transactions
19 for same-day power trades on ICE, or off-exchange, and
20 cleared through ICE, that are the direct results of virtual
21 and financial trades done at the RTOs. In a perfect world,
22 those customers would love to have those cross-
23 collateralized and the efficiencies from that.

24 As Bob pointed out, they have some 400
25 participants transacting in those FTR markets and financial

1 markets. I can tell that there is not 400 different
2 participants that transact on ICE or NYMEX every day in
3 those particular markets.

4 Many of them are very small, collateral-intense
5 operations, and they may be maximizing every single dollar
6 they have, to trade with the ISO. Were we to make some sort
7 of model that works for cross-collateralization, I think you
8 would see liquidity benefits pick up.

9 Again, what we kind of champion here -- certainly
10 everybody on this panel -- is, the more efficient we are
11 with our collateral, in general, the more efficient the
12 market is going to get.

13 There is one subtle difference, too. Remember
14 that in the spot market, we have a whole different problem
15 relative to the forward market.

16 CHAIRMAN KELLIHER: Thank you. I want to thank
17 all of the panelists for their help today, and I want to
18 thank the Staff for organizing this technical conference. I
19 think it was very helpful, and I thank my colleagues for
20 attending. Thank you.

21 (Whereupon, at 5:05 p.m., the technical
22 conference was concluded.)

23

24