BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

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IN THE MATTER OF:	:	Docket Number:
ELECTRIC CREDITWORTHINESS STANDARDS	:	AD04-8-000
	:	
CREDIT RELATED ISSUES FOR ELECTRIC	:	
TRANSMISSION PROVIDERS, INDEPENDENT	:	
SYSTEM OPERATORS, AND REGIONAL	:	
TRANSMISSION ORGANIZATONS	:	

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

Tuesday, July 13, 2004

The above-entitled matter came on for technical conference, pursuant to notice, at 9:30 a.m., Dave Perlman, presiding.

APPEARANCES:

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-- continued --

APPEARANCES CONTINUED:

ROBERT LEVIN

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P R O C E E D I N G S

(9:30 a.m.)

MR. PERLMAN: Good morning, again. My name is Dave Perlman, from the FERC Staff, from the Office of General Counsel.

I'd like to thank you all for coming down today to help us better understand the issues related to credit in the area of electric transmission service, and RTO and ISO markets, and other potential solutions to addressing these issues, beyond those that are in place today.

I'm joined by a number of Staff people here who have all been working on these issues. I won't go through the names, because you can read the name tags, but hopefully between the folks here at the table and the presenters, we can have a lively discussion, and, at the end of the day, we'll have an opportunity for public comment and for other issues to be raised as well.

So, let's hope that everybody gets to have their say, and we can have the issues fully aired.

What we're going to do today is have -- I believe it's four panels. The first panel is made up of the gentlemen who I will introduced in a minute, who are going to help us by not only having discussion with us, but more importantly, provide us with some information on how their companies implement the credit provisions of their OATT tariffs.

As you all know, the OATT tariffs are relatively vague and broad and leave it to the transmission provider, in general, to provide competent, professional credit standards and credit analysis of customers, with the opportunity for any problems to be brought to the Commission's attention.

The Commission has instituted a Notice of Proposed Rulemaking with respect to standardization and more transparency for gas transmission service, and that was one of the reasons that we thought we would look into the question with respect to electric transmission service, as well.

So, without much more ado, I'd like to get this panel started, and we can learn how Duke Energy, MidAmerican, and Arizona Public Service undertake their responsibilities under the OATT.

Today we're going to have Mr. Tommy Lee from Duke; Thomas Foster from MidAmerican; and Dan Sarti from Arizona Public Service, give us a little presentation and tutorial, I hope, on how they go about undertaking these responsibilities. With that, I'll ask Mr. Lee to get us started.

MR. LEE: Thanks. I certainly appreciate the opportunity to take part in this technical conference and to share our thoughts on credit-related issues for electric transmission providers, and to entertain any comments or questions you guys have.

In a summary position statement, I'll start with our slides. I don't know if it's turned on yet. There we go.

(Slides.)

MR. LEE: First, I'd like to start off by saying that Duke Energy Corporation is certainly committed to maximizing opportunities and access for all our existing and prospective transmission providers and customers. It's imperative that we get the customers. That's our first and foremost goal. We don't want to deny access and we want to find every way possible to provide them access in a competitive way.

Duke is certainly in support of continued utilization of the existing, and what we see as necessarily flexible OATT tariff language. Duke Energy Corporation utilizes a consistent, inhouse credit review process, which I will go into in a little more detail momentarily, to determine our creditworthiness of existing and prospective customers.

Now, we certainly believe that maintaining flexibility is an absolute necessity to effectively manage various balance sheet structures, unforeseen credit events and risk events, and different risk components of companies in an variety of industry sectors, even within the electricity industry.

Just a summary of our credit review process: Duke Energy Corp. performs periodic analysis of a counterparty's creditworthiness for existing and/or prospective customers. The frequency of those reviews that we perform are dependent upon exposure and/or the counterparty's internal risk rating, which I'll define in more detail in a moment.

We go through a rigorous process and undertake it to establish an internal risk rating for a legal entity in question who is seeking service. We underwrite that counterparty and provide what we call an unsecured threshold to that counterparty, based on our ratings analysis.

If the review warrants and unsecured threshold, then we'll receive an unsecured threshold; if it does not, we go to other measures to determine what, if any, security is required, and that is inclusive of finding out and determining whether or not parental support is needed in the form of a guarantee as a first call before we go after security.

Determination of that required security is then made, based on further review and/or direct negotiations with the counterparty. Most of the security is going to come in the form of, as you well know, letters of credit or cash, when it's deemed necessary.

Real quickly, just how we establish or internal risk rating: We rate the legal entity on a scale of one to eight. The rating generally -- and I specify generally -- maps to an S&P or Moody's Senior Unsecured Equivalent.

However, the counterparty's actual S&P or Moody's rating, if it has one, will not always match the internal risk rating determined by Duke, due to the potential for divergent views from, let's say, S&P or Moody's on items such as the financial structure and the risk of the financial structure for that particular legal entity, liquidity risk, access to capital, access to capital under stress events, market risk, obviously, regulatory risk, event risk. Certain events in the market may occur prior to S&P and/or Moody's reflecting that in their ratings through a downgrade, a credit-watch negative, outlook negative, whatever the case may be.

And then there is the flexibility needed to combine all of these elements and to make a prudent management decision. The chart on this slide, just so you know, shows how it generally maps in terms of our internal risk rating, Categories 1 thruogh 8. You can't see the 8, but it's below a double-C-plus or CA from Moody's, respectively.

Just in summary, why the need for flexibility? Well, we also rate or review non-rated companies, so an S&P or Moody's matrix is not going to always work.

We talked about all the different risks that are inherent in different businesses. In different regions, you have state regulatory risk that differs vastly from state to state and region to region.

You also have significant differences in the industry classifications, even within the electricity industry. You can go as broadly to say manufacturing services certainly have different financial profiles, risk profiles, et cetera.

Within our own industry, you have the balance sheet structure that's very different between a utility versus a cooperative or a municipality. Then you have the differences between the utility and the merchant player and the risks and various risks that they represent and they hold.

Once again, just reemphasize, state regulatory framework, reserve margins of utilities and these fuel procurement costs, volume of transactions they do, trading book, if they have one, portfolio of credit risks with their customers, all these things are requisite requirements and things that we review and that we need flexibility in, and that we believe it's impossible to fully standardize in an objective fashion.

As a summary, I guess, you know, our standardized methodology for evaluating creditworthiness, internally, works for us. It's consistent, but attempting to apply that universally in an objective way, is going to be very hard. It eliminates necessary flexibility for us to make prudent management decisions.

We think it may present additional otherwise manageable risks to the transmission providers, ourselves, in this instance.

Internal policy and governance within Duke Energy certainly ensures a consistent application of analysis across all existing and prospective customers, and we feel that that's something that works for us and should continue to work.

So, I'll turn it over to Tom, just to go through our presentations.

MR. PERLMAN: Actually, before we do that, Mr. Lee, would you mind going back to your slide that says "Establishing Internal Credit Risk Rating"?

MR. LEE: Uh-huh.

MR. PERLMAN: Can you give us a little more full explanation of how -- what you mean by these bullets on the left -- Financial Structure/Risk -- and how you go about evaluating those?

MR. LEE: I think that the best example I can give for the first bullet is the financial -- for financial structure and risk, is to compare a utility and the leverage on their balance sheet, and the capital structure on their balance sheet, with the municipality or a cooperative and the leverage and the ratios that come out of the balance sheet structure when you're analyzing it.

If you look at FFO to total debt, if you look at U.S. requirements for debt service coverage for a cooperative, it is vastly different, despite the rating, than it would be for a utility who has, let's say, a 50-percent debt-to-total-capital ratio.

That's the most obvious example I can see of where balance sheet structures are vastly different, but because of the regulatory framework, the potential structuring, et cetera, you're going to be comfortable with either of those credits, because you understand the other risks that those businesses present.

Liquidity risk --

MR. PERLMAN: Can you give us an example of an entity that, as a result of this analysis, would be considered risky, that has a financial structure that is a risk?

MR. LEE: Yes, certain of the -- I guess one of the examples I could give right off the bat would be certain of the merchant players who have experienced credit downgrade because of the risk inherent in their business, their portfolio trading book, excessive or deemed to be excessive leverage as a result of the way they finance themselves.

Without giving any names, there are a number of them out there that are in the high-risk, high-yield category, if you compare them to an S&P or Moody's equivalent, so that would be the example that I would give right off the bat.

The next couple of bullets, just to answer your question further, liquidity risks or access to capital; access to capital under stress is one of the things we look as -- you know, how big is their trading portfolio, to the extent that we have access to that information.

We do a series of analyses internally of stress and certain events of our trading book, and certainly look to do the same to see what the adverse credit event, coupled with an adverse market event, if there were a price spike or something like that for a merchant player, you know, how that would affect their creditworthiness. Do they have the liquidity they require to continue to operate and not be deemed to be a huge risk to us, where we would otherwise require security.

Regulatory Risk: Do you have a fuel clause? Can you pass through your fuel costs? Do you bear the risk of spiking gas costs that could have an adverse effect on your cashflow as a utility?

What do the state commissions provide for in terms of, you know, different cost of service return on capital, allowed return on capital, et cetera, et cetera.

Event risk could be an event in the market, a default on a particular PPA or contract, bankruptcy prior to a rating agency acting or something like that, and you see it and you have to deal with that risk, so you can imagine the number of event risks that could potentially occur, that we would like the flexibility to be able to manage ourselves on an objective criteria.

MR. PERLMAN: Finally, do you take all these and create some sort of numerical scoring or something like that to manage them?

MR. LEE: The internal risk rating is the numerical scoring. We have a credit model, and that's only one piece, I should say. We have a number of inputs that go into our internal risk rating, David -- a numerical credit score, based on a spreading tool we use.

We obviously look at the S&P and Moody's analysis, the regulatory environment, and we put that all into a model and come out and get the risk rating. P-7 is an actual financial spread scoring tool, which is different, based on the industry type or the company type we deal with, because, you know, if you ran a traditional score using the same ratios for a cooperative as you did for a utility, it wouldn't score as well, but we take that into consideration, based on the allowable coverages and the balance sheet structure that's inherent in, let's say, cooperatives' financial structure and capital structure.

MR. PERLMAN: Thank you. Why don't we move to Mr. Foster?

MR. FOSTER: Good morning. My name is Tom Foster, and I'm employed by MidAmerican Energy in the position of Director of Investments and Regulatory Finance and Analysis.

My task here today will be to briefly outline our credit practices that we are filing when addressing requests for transmission services. And the goal of those practices is, first of all, to sell transmission capacity and increase the utilization of MidAmerican's assets, but, secondly, to reasonably minimize the risk of default by counterparties on these transactions.

(Slides.)

MR. FOSTER: First of all, I'll just briefly talk about what kind of documentation is in the MidAmerican request. To implement our credit review procedures, MidAmerican will review and, if it's unable to obtain copies of the filing materials on its own, it will request copies of financial ratings reports covering the applicant's current financial condition and the senior bond ratings from each national rating organization; audited financials for the past three to five fiscal years, and unaudited, interim financial statements, monthly or quarterly for the most recent period available, if the annual financial statements are more than six months old.

MidAmerican may also obtain information from other public sources to supplement its credit review, including the applicant's websites, SEC filings, research reports prepared by fixed-income and/or equity analysts employed by various investment banks.

If the applicant does not have credit ratings from any national rating organization or does not have stand-alone financial statements, but is willing to provide a parental guarantee from an affiliated entity that does have such credit ratings and financial statements, MidAmerican will review that material.

While MidAmerican strongly prefers audited financial statements as a basis for credit review, consideration is given to unaudited financial statements, provided they are certified in writing to be true and correct by an appropriate official of the applicant.

How is this documentation then employed? The application for transmission service, which is available on MidAmerican's OASIS site, discloses that adequate assurance of payment is assumed if the senior debt of the applicant is rated investment grade by one of the national rating organizations.

However, MidAmerican recognizes that an applicant may not have credit ratings from any national rating organization, or may have credit ratings from one or more rating organizations that are below the level commonly referred to as investment grade.

In such a case, MidAmerican will assign an internal credit rating to an applicant. In assigning its internal credit rating, MidAmerican will seek to apply the same quantitative and qualitative measures referenced by the various national rating organizations in their published rating methodologies for comparable entities.

For example, MidAmerican will compute a variety of financial ratios for the applicant, including measures of financial leverage, debt service coverage, and profitability. The ratios computed by MidAmerican are then compared to a range of benchmark ratios established by the national rating organizations that are correlated with the credit ratings assigned by those entities.

Qualitative factors considered by MidAmerican include the applicant's history and nature of operations, competitive position, ownership structure, management quality, as well as the size, nature, and term of the services being sought from MidAmerican.

MidAmerican will not automatically determine that an applicant is not creditworthy, if it has a credit rating from one or more national rating organizations or a rating assigned by MidAmerican that's slightly below investment grade.

For such applicants, MidAmerican will consider the trend of key financial factors and may determine that an applicant is creditworthy, if its prospects appear favorable, or reasonably stable, relative to the size, nature, and term of the services being sought from MidAmerican.

Monitoring of the applicant's credit rating is an ongoing process. MidAmerican currently does not have a schedule for formally revisiting an applicant's rating. Ratings are revisited as conditions warrant.

If the applicant is not considered creditworthy, MidAmerican will request that collateral be posted. Acceptable collateral takes the from of an unconditional and irrevocable letter of credit drawn on a bank acceptable to MidAmerican.

In the interest of time, I won't elaborate on all of those terms and conditions, but they are on MidAmerican's

OASIS site, if you care to check those out. It might be worth mentioning, however, that default under a letter of credit is defined in the Open Access Transmission Tariff, and the rights and remedies of the parties are described therein.

Finally, a couple of other issue that I believe this panel was asked to address, so I thought I would throw those in here, if I may: It's MidAmerican's understanding that this panel was to touch on creditworthiness policies needed to preserve discretion and flexibility and what qualitative factors the transmission provider should have discretion to consider.

Just last month, Standard and Poor's published revised financial guidelines for the utility industry. In it's publication, S&P made the following statement, and I quote here, "Again, ratings analysis not driven solely by these financial ratios, nor has it ever been. In fact, the new financial guidelines that Standard and Poor's is incorporating for the specified rating categories, reinforce the analytical framework whereby other factors can outweigh the achievement of otherwise acceptable financial ratios.

These factors include: Effectiveness of liability and liquidity management; analysis of internal funding sources; return on invested capital; accuracy of projected performance versus actual results, as well as the trend; assessment of management's financial policies and attitude toward credit; and corporate governance practices," close quote.

I believe Moody's Investor Service also filed some comments in this docket, and reinforced or also spoke to the need for judgment in credit review, and that the process does not lend itself well to standardization.

There were also some comments filed in the docket, attempting to define transparency of the process. And, roughly, the definition, as I gathered from a couple of these comments, was that, given a set of financials, the process would be so well defined and structured that we would all get the same results.

But credit analysis just doesn't work that way, and I think Tommy Lee was pretty -- laid that out very well. Financials are only where you start the analysis.

You may have unfunded pension liabilities; you may have leases; you may have purchase power contracts; you may have firm point-to-point contracts or network contracts. All of these represent some type of financing that someone else has given to this applicant.

You may or may not want to consider those, but chances are, you need to look at that, and you may need to impute interest to their income statement; you may need to impute leverage to their balance sheet, and you need the flexibility to be able to do that.

The point here is that good credit analysis employs quantitative and qualitative factors in arriving at credit ratings. In fact, credit ratings are not driven solely by quantitative financial ratios; they never have been.

Furthermore, qualitative factors can outweigh the quantitative metrics. No matter how sophisticated your quantitative analysis, credit still comes down to the four Cs of credit: Character, collateral, capacity, and conditions.

The panelists were also asked what evidence there might be that their credit policies were nondiscriminatory. MidAmerican would submit that it believes its credit practices with respect to transmission services, are substantially similar to the credit practices employed generally by other transmission providers, and they are reasonable and in accordance with standard commercial practice.

Furthermore, MidAmerican is unaware that any applicant has ever questioned or complained about MidAmerican's credit practices. That concludes my prepared remarks.

MR. PERLMAN: Can I ask you, as I asked Mr. Lee, to give us a little more specificity on how you meld those objective and qualitative components when you consider the credit that you would offer an applicant for transmission service. Do you have some sort of mechanisms where you score them? Do you have a standardized process that you use internally, or is it more of an art than a science?

MR. FOSTER: Well, I hesitate to go so far as to say "art," and I'd like to say more science, but the honest -- the way the process works is, we do have or attempt to score people, similar to the Standard and Poor's ratings.

We're going to look at the same type of ratios, and try to look at the same kind of business positions and qualitative factors that S&P would look at. Similar to the way they look at things, we attempt to try and put people into different pigeonholes, as far as is that an A-credit; is that a triple-B credit; is that a double-B credit?

That analysis is difficult. It does take some abilities to be able to look at those financials, impute whatever else you think you need in there for off-balance-sheet financing, and then at the same time, feel comfortable that management has -- of the applicant -- management is cognizant of credit quality.

Many times, management is divided between are they worried about their bondholders; are they worried about their stockholders, and from a credit point of view, you want a management that's worried about its bondholders.

MR. PERLMAN: You also mentioned that one of the things you evaluated was whether their prospects appear to be favorable. I'm not quite sure what that means. Could you elaborate a bit?

MR. FOSTER: Well, sometimes there are fallen angels in the marketplace, and sometimes they start to get things turned around. Management does change; they come out of bankruptcy; they've restructured; debt has been set up in a way that they can handle the debt service.

So, while the history of the whole situation may look pretty bleak, the trend or the outlook may be favorable enough, given the type of services that they are requesting, that we can live with that credit.

MR. PERLMAN: Thanks, Mr. Foster. Why don't we move to Mr. Sarti, and he can tell us about Arizona's policies.

MR. SARTI: Great, thank you. As part of my presentation, I'm going to try to elaborate a little bit more on what you've already heard with regard to how we do financial analysis at APS.

We kind of separate our analysis into two main structures: One is the quantitative side of financial analysis, in which we look at information that's readily available on financial statements, so it's more of a numbers-based analysis where we can calculate ratios from.

The other type of analysis we do, like Tom and Tommy both referred to, is the qualitative side. It's more of sort of the fuzzy analysis, which is more up to the analyst's discretion, but we have built models to try and handle both.

On the quantitative side, I've broken it up at a high level, into four main categories. I include profitability, capital structure, cashflow, and financial flexibility. I'll go into these in a little bit more detail.

Profitability, really, that's just a measure of the success of the company, how profitable they are. A company that generates more profits has a greater ability to generate equity capital, both internally, and to generate capital externally.

Earnings potential ultimately is a reflection the firm's assets. How valuable are the firm's assets?

The ratios that I have included in the slides to measure profitability are return on equity and return on capital.

Capital structure: What we're really looking at in capital structure is leverage. How leveraged is the balance sheet? How much risk is involved in the balance sheet?

Analyzing debt goes beyond just what you see in the numbers on the balance sheet. Tom actually alluded to some of the same things I'm going to allude to -- non-capitalized leases, debt guarantees, purchase power contracts, unfunded pension liabilities. These are all debts that don't necessarily show up in the numbers, but that have to be derived from the notes in the financial statements, but are also important.

Cashflow: I think cashflow is probably one of the most important things we look at. It attests to the company's short-term ability to stay in business.

Profitability is really more of an accounting concept. Cash is cash. Cash is what you pay the bills with.

So, we put a special emphasis on cashflow. When we measure cashflow, we want to measure cashflow against whatever obligations the company has, so we're going to measure cashflow against fixed contractual obligations, capital expenditures, debt maturities, and shareholder dividends.

The ratios that I have put up there to measure cashflow are funds from operations to total debt, and EBITDA to interest payments.

Finally, there is financial flexibility, which I consider a component of cashflow; it's really external cashflow. It's cash that you can get from outside sources, rather than cash that's generated internally at the company.

So, for instance, if you are a publicly-traded company, can you issue more equity to raise cash? How has the equity performed?

If you have public debt, what's your capacity to issue more public debt to raise cash? Maybe you have bank facilities, you have a letter of credit facility. How much is that letter of credit facility worth? How much is left in the balance of that letter of credit facility? When does it expire?

So, those are some of the key things that we look at on the quantitative side. I would just add that depending on the counterparty you're looking at -- and Tommy Lee referred to this also -- if you're looking at a coop or a muni, for instance, their purpose is not to generate equity capital. That's not what they're in business for.

So, profitability potential, maybe you don't want to highlight that as much for a muni or a coop. Maybe in those situations, you want to put more rating on the cashflow and the financial flexibility, so, depending on what type of entity you're looking at, you're going to change your weightings and your measurements just a little bit.

So, we have different models for different types of entities.

Moving on to the qualitative side -- and some of this has already been referred to by both of the previous speakers -- regulation, how supportive is the regulatory environment? And this specific, of course, to, say, a utility, a muni, a coop. What's their ability, if need be, to raise rates to cover increased costs?

As much as a company tries to manage their risks, there are always going to be costs from unforseen events: If a plant goes down for a substantial period of time, if a distribution facility blows up, maybe a long-term PPA for a fuel supply contract has expired and now fuel prices are three times higher than they were before.

Somehow, those costs have to be recovered, and how supportive is the regulatory environment that they're in, when you define a way to quantify that?

Regional economic markets is the second bullet point that I've put up there, and there's two components to this, really: One is how diverse is the customer base that you're working with? And this is specifically important for munis and for coops that may deal with a smaller regional economic base.

So, other major industries that make up that economic base, what's the outlook for those industries? The other component to that is how much capacity is there, relative to demand, especially for merchant generators?

If they are in an environment where there's a lot of capacity, people have built a lot of plants, that's potentially going to put some pressure on their margins and profits. Conversely, are there transmission constraints? If you're operating in an environment where it's tough to get power in and out, that acts as a barrier to entry for other competitors, so maybe that's going to be a positive that has to be weighted.

Competitive position, this overlaps a little bit with regional economic markets. It's kind of the same thing in terms of other transmission constraints. That limits the amount of competition that can come into the market.

In the case of coops, typically there are service agreements between the coop and its members. And they can be for a certain period of time.

Oftentimes, if a member decides to break that service agreement, there's a penalty that has to be paid to the coop, so that's kind of a barrier to entry for those other generators who want to supply to that region.

Generating plant efficiency, specifically for merchant generators, that's very important, especially if they are operating in a very competitive environment. The heat rate, what's the heat rate on the plant?

A low-cost structure for merchants is going to be critical for them as a competitive generator.

Risk management operations, this something we put special emphasis on, due to the fact, as we all know, that the energy markets are volatile. It's important that companies that are participating in those markets have a dedicated risk management operation

I separate risk management into two main categories; that is, market risk and credit risk. Market risk is obviously how do you manage large open positions? How big an open position should you have, given the capitalization that you have on your balance sheet?

For a company that's not well capitalized, they shouldn't be taking a lot of risk. For a muni or a coop, you know, because their mission is not to built equity on the balance sheet, they shouldn't be taking large amounts of risk; they shouldn't be engaged in spec trading.

Credit risk: Is there a credit risk policy that's documented? How well is it enforced? Is there concentration risk among the counterparties in your portfolio? Do you margin with counterparties? If you do margin with counterparties, what capacity do you have, financially, to meet margin costs? That's something that S&P has focused a lot on recently.

Control systems is the other critical piece. You can have the greatest market risk department and the greatest credit risk department in the world, but if you can't collect your data, you can't get it on a timely basis, on an accurate basis, it's impossible to manage.

And, finally, the last category that I highlight is organizational support. And I've separated this into two main categories: One is core competency. For a utility, for instance, a utility is in the energy business, they're not going anywhere. That's their business.

An industrial, on the other hand, may be participating in the energy markets, but since that's not their core business, it's much easier for them to abandon that business and walk away from it.

Quality of management: How long has the management been with the company? What's their track record? Have they been other places in the past? What was the track record at those other places?

Those are the sorts of questions that you have to ask and they are just as important as the quantitative considerations. So, there has to be some sort of framework in place to measure these, but the measurements aren't something that you're going to be able to get directly from a financial statement.

You can't plug a number in from a financial statement for these criteria, so you have to come up with a model. And a certain amount of the analysis done on this is going to be up to the analyst. It's going to be based on his expertise and his opinion.

So, we model these the best we can, but to answer the question earlier of is it art or science, we try to make it as scientific as possible, but there's always going to be room in there for analyst opinion.

MR. PERLMAN: Just a couple of clarifying questions to finish this up: The one thing you didn't mention was ratings.

MR. SARTI: Yes, that's a good point. We do these analyses, regardless of whether there's a rating or not. If there is a rating, obviously that helps us a lot, and if -- our analysis structure is primarily ratings-driven, so a company that has an A-rating from S&P, is more than likely going to be approved under our system.

We obviously do the same analysis for every counterparty, so if we see something in one of these aspects that we don't like and maybe the company is in the cusp -- maybe they're a triple-B-minus -- we would reserve the right to maybe knock them down, based on something we see.

But we are primarily ratings-driven, so we do consider them.

MR. PERLMAN: Does that mean it's theoretically possible that you could be investment grade, vis a vis ratings, and still have a credit problem with Arizona Public

Service requiring collateral?

MR. SARTI: It is possible. It's unlikely, but there is the possibility, yes.

MR. PERLMAN: Let me ask one question of the panel, and then I'll turn it over to my colleagues.

What I have heard is that there's a lot of judgment and qualitative components that go into these analyses that help you make your judgments with respect to the credit that you afford your applicants for transmission service.

And I guess my question is, how transparent do you make your process to them? Is it something that they can go to your website and see? Is it something that can be objectively ascertained, to the degree possible that you can do that, without having to delve through your process or live through your process to know about? Can we start with Mr. Lee?

MR. LEE: Currently, Duke Energy does not post its credit process to a website, to OASIS or otherwise. We are fairly transparent in our conversations and communications with our customers and prospective customers in terms of what is required, and that is communicated to them on regular basis, so it's fairly transparent from that perspective. That's the simple answer.

MR. PERLMAN: Would you have a problem posting something on the website that would give some granularity to what the OATT says?

MR. LEE: I think Duke's thought on that would be that it would be dependent on the level of detail that needed to be posted, but, theoretically, no.

MR. PERLMAN: Mr. Foster?

MR. FOSTER: Well, almost an echo, I guess, with what Mr. Lee just said. We do not have something that is laid out for someone else to look at, however, it is certainly well explained, I think, to any applicant, and to the extent that they want to ask questions, it's explained to their satisfaction.

We keep discussions open, but as I alluded to earlier, it is a situation where we do try to have essentially an S&P sort of backdrop behind this that most applicants are already familiar with, so that when we start to enter into that discussion, it starts to click very quickly, okay, these are the key components and these things will also be considered, and it goes generally very smoothly.

I think that it's pretty well explained to individuals when they are willing to come and ask.

MR. PERLMAN: And would you have a problem writing up two or three pages on your process and posting it on your website?

MR. FOSTER: Well, one, credit quality has not necessarily been a problem in our neck of the woods, fortunately. I think that if we're going to go there, we want to stay reasonably generalized in the process that's going to take place, be careful about the specifics that you want to try to tie somebody down to, because events happen.

You could go to a lot of trouble and a lot of hearings and a lot of effort to come up with some standardized template for everyone, and then just as S&P changed here in the beginning of June, the whole template changes on you, and you didn't know that one was coming.

MR. PERLMAN: But, just to be clear, I'm not suggesting we do it.

(Laughter.)

MR. PERLMAN: And obligate you to it. Your process, would you make your own process more transparent and post something about that process?

MR. FOSTER: We would attempt to put something there that generally explains the basic framework of how we approach it.

MR. SARTI: I would generally echo the comments already made. I guess the one thing I would say regarding posting a methodology, we would probably do it if it was at a high level.

The problem with posting a specific methodology is, first, I don't know if there's enough paper to print it all on, given how many different scenarios there are and how many different variables we take into account.

But the problem also is that the industry changes, the industry changes constantly, and sometimes we change the models; sometimes we change the weightings, based on the way the industry is going.

So, in terms of posting something general, yes. And we have conversations with our counterparties, too, explaining our methodology to them. But, to get too specific, I don't think we'd necessarily want to do that.

MR. PERLMAN: Do you have a question, Mike?

MR. CHOO: I'd like to follow up with Mr. Sarti on the risk management operations, a clarifying question on that, and if Mr. Foster and Mr. Lee want to address that as well, that's fine.

You mentioned that you try to make some judgment on what risk management operations are. What kind of information do you use or do you have available to make that judgment? It seems like risk management is inherently a quantitative kind of assessment, but how do you get to that quantitative information?

MR. SARTI: The best way to do that, really, is in conversations that you have with counterparties. It's not something that you can get from the financial statements themselves, per se.

The way that I found to be most effective in doing that is, say, if you are margining with a counterparty and you're talking to them on the phone constantly, and their numbers are just drastically different from yours, well, then it appears that there's a problem that either they're not getting their data in a timely manner, of they're not getting it in an accurate manner.

Really, interacting with people on a daily basis, going through numbers with them, which we do in the industry all the time on the phone, that's really the best way to get a lot of your information on how well they are managing their risks.

MR. LEE: I would echo Dan's sentiments on that. It is really a qualitative analysis. There is, for some companies who have big or substantive risk operations, some disclosures in their financial statements, whether they release daily earnings at risk, DVAR, total credit exposure, how they report that, how much they're willing to report, also tells you how sophisticated their systems are.

But I would certainly say that Dan is correct in stating that we have a very active margin desk; we have a very active credit analytics team that is constant contact with the counterparties all the time.

We know each other within the industry. We know what kind of systems have been implemented in different companies. We talk about it all the time. We assess the risk that way.

It's very complicated to use what I just spoke of in terms of daily earnings at risk or DVAR methodologies, because the methodology to calculate those can be so different and disparate between different firms.

So it ultimately ends up being a qualitative analysis at the end of the day, of how well do they do it? How many times are we right with those guys when we're having margin disputes or whatnot?

MR. PERLMAN: Just to be clear, you're margining people for OATT transmission service?

MR. LEE: Not on an active margin basis. This is in specific reference to counterparties who have merchant operations when we are working with the margin desk on that side to margin the counterparty, who may also be seeking transmission service.

The margining --

MR. PERLMAN: You're talking about for your other business relationships with them, not for transmission service?

MR. LEE: That's correct.

MR. TIGER: Are there divisions within your companies between the credit policies for OATT service and your other business activities on the energy market side? It seems like some of the information that you're talking about that you would get, would be coming from those other activities, and I'm wondering if it's a one-way street coming into OATT, or if it --

MR. LEE: OATT and transmission credit requests within Duke and within different companies are structured differently, and there's also some code of conduct issues around that that we have to be extremely careful about.

We, as Duke, aggregate credit on a consolidated basis. There are only certain corporate individuals that can have that knowledge, and it's not shared with the transmission provider in terms of unregulated versus regulated, versus gas transmission or any other subsidy that a company may have.

There are specific practices of transmission. We have credit personnel that request allocations of credit for a counterparty, where we have that exposure on an enterprise-wide basis, in other words, we have exposure in another business unit, regulated or unregulated, so there are specific policy considerations, as well as firewalls, geographical separation and all the relevant things to deal with the potential code of conduct issues that we have, so it's a different process.

They do not get that information in terms of that analysis. That sits up in the corporate credit world for Duke.

Obviously -- and these guys can speak to it -- some folks separate their transmission credit from their unregulated credit, from their utility credit, from a generator perspective.

MR. FOSTER: Again, as Mr. Lee has laid out, we do have this separated between the energy side and the transmission side. We don't exchange Christmas cards and we don't talk to one another anymore.

At one time, we did, but those days are long gone. Any information that we might be seeking isn't going to come from an internal source. We're either going to get it externally, or from the applicant.

There just isn't any conversation between those two divisions.

MR. SARTI: I hate to keep using the word, echo, but I would echo those sentiments. We manage our credit exposure at the holding company level. We aggregate our exposure throughout the company, so that we have a good feel for what our risk is throughout the different subsidiaries.

So, the information that we get from these counterparties is housed at a central level, and we have code of conduct issues, too, in terms of sharing between subsidiaries, but the information is all housed at one source.

MS. PERL: This is for Mr. Foster and Mr. Lee. What I kept hearing in the presentation was flexibility, meaning flexibility on credit policies.

And that got me thinking. In your opinion, how would a standardized credit policy harm you or your business?

MR. FOSTER: The harm that I guess I'm concerned about is the ability to be able -- that if you're going to set up a very well defined, well structured policy, with, as I was alluding to earlier, this definition of transparency that we would all get the same answer, I would have to object to that in the sense that that just doesn't allow a credit analyst to really do their job to determine whether or not there are things going on that need to be taken into account in that analysis.

Till you structure and cast in stone, that a time coverage will be calculated in the following manner and incorporate the following terms, is to -- it doesn't allow you to take into consideration, all of the things that may happen in an evolving marketplace.

And it just defies, to me, an ability to try and structure. This is just not one of those things that is easily structured. I'm sorry.

MR. LEE: Kelly, I'd like to clarify your question, if I may, first, before I answer it. You said that we preach flexibility in credit policy. I'd like to clarify that by saying our policy is fixed.

Within that policy, we publish established guidelines for corporate credit policy. Those guidelines and the methodology we use to assess counterparties within the confines of that policy, are what we are requiring the flexibility to assess.

And so with that being said, to answer your question of how does it harm your business, I agree with Tom. I would also say that it harms our business in a standardized methodology, which I think you're referring to, where you would set out objective criteria, objective ratios, no flexibility, potentially, for management assessment of additional risk events such as those that we've discussed today, you lose the ability to act, you lose the ability to react to market events on a timely basis, because of your inability to be flexible in making determinations outside the confines of an established methodology. And that's where we see the significant risk.

MR. PERLMAN: Can I ask Mr. Foster a question? Was one of your responses to Kelly that it would be a bad thing if the credit analysis was driven, such that each of you would either fail or pass the same applicant with the same credit structure? You would rather have Duke pass them, MidAmerican fail them, and Arizona ask them for more data. That was the impression that I heard of what you said, so if I got that right, let me know; if I got it wrong, clarify.

MR. FOSTER: Well, number one, the structure isn't only going to prevent someone from being disapproved; it might prevent someone from having better quality credit than what they might have possibly have had under some structure that we might come up with.

I've lost my train of thought. You were, exactly, asking?

MR. PERLMAN: I guess, is it your view that there should be such discretion that each transmission provider could come out with different conclusions with respect to similar credit criteria for a transmission service request?

MR. FOSTER: In the end, there should be flexibility that that, in fact, could happen. I can talk to S&P and Moody's -- and not to belabor the point to much here, but they are very skilled in how they are going to analyze MidAmerican's financials.

And they know all the footnotes. They know where everything is. They are highly skilled analysts, as well as some folks that we have in our shop that are highly skilled analysts.

The three of us won't come up with the same answer. Moody's will be different from S&P, which will be different from MidAmerican, for MidAmerican's financials.

Everyone will add a little more for maybe an uncapitalized lease, maybe a little less. Some might say there's a pension problem; some might say there's not. Maybe individually, these things don't mean much; maybe aggregated together, they do.

Every analyst just has a different feeling about how much of an adjustment they're going to make, if any, and I would expect that, in fact, there may well be divergent opinions, and that's not necessarily bad.

MR. PERLMAN: We're talking about OATT service, and I would think that compared to other types of business risks, if you're dealing with entities like utilities or munis or coops who exist to provide service, and they need to use transmission, even the risk of bankruptcy is not such a terrible thing, because the can get the status of an administrative contract and that sort of thing in bankruptcy because it's -- unless they are going to be liquidating and ceasing to be an electric utility or turn off all the lights on the customers, the transmission provider is going to get paid, and maybe even better in bankruptcy than when they were teetering on the edge.

So, is there a different type of credit analysis that you should undertake for entities like that in this type of environment, even with the risk and specter of bankruptcy?

MR. LEE: I think that to answer your question directly, David, yes, we undertake a different analysis for those companies today. We look at the risks of bankruptcy, we look at the risks of native load serving and the likelihood that a contract would be assumed, post-petition in bankruptcy, to go to that example.

However, event risk event risk. It's binary; it occurs or it doesn't occur. You have to protect yourself from that event risk. You don't know what the outcome is going to be.

You do want the ability to, you know, provide access to another transmission customer in the event of a default, and the uncertainty surrounding the process in bankruptcy, to use your example.

We do utilize a different process. I mean, part of the risk analysis, the qualitative analysis, as Dan referred to it, is assessment of the regulatory risk, the bankruptcy risk, of the necessity for the particular contracts that they have, et cetera, et cetera, and the ongoing need for transmission service to satisfy those contracts.

So, that risk assessment is taken into consideration as part of the financial analysis and the creditworthiness scoring that we do.

MR. FOSTER: As we had alluded to earlier, fortunately in our neck of the woods, things are pretty good from a credit perspective. There are some exceptions, I guess, but generally speaking, most parties are in good shape.

Just as much as when I look at someone for credit quality, MidAmerican is an exporter of power and so there's going to be -- MidAmerican is going to be looked at by others, as well. So, to the extent that all of that is working well, I guess, together, I think the system is generally well functioning in the Midwest.independent

MR. SARTI: I guess to answer your question, I guess you're referring specifically to the case of a utility, a coop, a muni? We're also looking at folks here, a merchant generator who is using transmission service, that merchant generator, if it filed for bankruptcy, may just go away. There may be an exposure there.

And with regard to even the utility and the coop and the muni and no exposure, I guess if preferred status, preferred creditor status is sought in one, then perhaps that's true, but maybe that's a better question for a lawyer. I don't know that that, necessarily, is going to be the outcome.

MR. PERLMAN: Well, with the credit people deferring to the lawyers, which I'm very impressed to hear, I'd like to thank this panel and move on to the next panel. If I can ask you all to stay around, there may be issues raised that you may want to comment on during the next panel, so if we could just change out seats and then we'll take a break for lunch after the next panel. Thank you.

(Recess.)

MR. PERLMAN: Let's take our seats again and see if we can get started with Panel 2.

(Pause.)

Okay, we're going to further discuss the OATT tariff and the credit standards and implementation under that tariff with this panel.

On this panel, we not only have transmission providers, but we have customers, so we'll find out whether what we just heard is working as well as was advertized.

We also have some transmission providers on this panel who can tell us whether their processes are similar. I know that we have at least one transmission provider that has included more specificity in the OATT than the broad standards that the Commission put out in Order 888.

With that being said, we'll just go down the presentations as noted in the agenda, and start with Tricia Harrod from Aquila, who I guess will address this issue from the perspective of a transmission customer. So, thank you, Tricia.

MS. HARROD: My name is Tricia Harrod. I am actually the Vice President of Credit Risk Management for Aquila. And Aquila, in listening to a lot of the transmission owners talk about their policies, a lot of the policies are the same.

Aquila's policies for the credit scoring pretty much take into the two types, quantitative and qualitative measures. One of things that I would say to that is that there are some things that you can take into consideration that you may not have the correct information on.

I mean, it's very hard in the credit industry to be able to know what my risk book looks like. I mean, how are you going to stress my book and what are you going to know, what my risk management policies are. Do you know what my true operations or my credit systems are, you know, how I track things.

So, in order to evaluate that and put that part of the scoring, I think it's very hard information that's not necessarily disclosed to be able to put that in there. So, a lot of times, I think your -- you know, you may be evaluating something that you may not truly know what the situation is.

And so when we go into standards -- Aquila feels that when -- you know, a lot of ours -- our comments were surrounded -- we wanted standards. And when we say "standards," we don't typically say that one size fits all. We know that there are a lot of things that you have to be able to take into consideration.

We're not supportive, just looking at rating agencies' credit ratings, because we feel like there's a lot of other market participants that don't have rating agency ratings, and so there should be a systematic way to be able to use the scoring models, a way that a lot of the transmission owners are using.

They should be able to take into consideration, whether or not I can go to regulatory on increased rates, or if I have a law suit pending against me that could possibly put me into bankruptcy, they need to be able to take those considerations, but it's just that we need to be careful that the things that they are taking into consideration when determining my creditworthiness, is truly something that they can factor and have the facts and be able to quantify.

So, we do support some type of standards or guidelines to be able to support what are the requirements for you determining whether or not I'm creditworthy. One of the things that I would point to is that Aquila's been very involved with the RTOs for MISO in setting the credit policy and trying to make it transparent, make it nondiscriminatory.

We're going to score. We have a different scoring model for an investor-owned utility, versus a coop, versus just a straight merchant or even a financial institution. But you still have those scoring models that are out there. They will be part of the business practice, and the policy is very specific on what it takes to be creditworthy.

So, when Aquila has their support against standards, those are the types of standards that we're looking at.

I have been doing credit for over 15 years in this industry, and I do know that you've got to -- credit professionals have to be in the market. They have to know what's going on, because there's things that are happening every day that those financial statements are stale dated.

They happen every three months, and they come out three or four months after they've come out, so you can't look at old data, just old data; you've also got to look at the future stuff, but you've also got to be able, whatever you're looking at -- you should be able to be transparent with what you're looking at, because the problem that Aquila has come up with is, like, you're below investment grade, so you're not creditworthy, even though I'm the utility, even though I'm the one supplying to the end users, the moms and pops and they have to have that electricity or they have to have the gas, it's still, you know -- I'm being treated like a merchant company, which I was a merchant company at one time, and even now that we're pretty much a seven-state domestic utility, you still have the same merchant credit policies.

I think that in Aquila as well -- most corporations have one credit policy. They don't necessarily have a credit policy for the OATT or a credit policy for the interstate pipelines. They typically have a global, because you have to look at your risk globally, and you have to look at credit globally, because what you'll find out, if someone like Enron goes down, then you would possibly have exposure to, you know, three or four of their subs and three or four of your subs, and if you don't manage it in a global perspective, it could be very costly.

So, our main position is that, you know, right now in the OATT where it says "reasonable credit review procedures and standard commercial practices." The problem that we have is, there's nothing that's transparent on what those are.

And this industry has never really been one that just has straight-out standards, and you can point to it and say we know that this is what they're going to do.

There are some transmission owners that look at your credit rating and if you're not investment grade, you don't get credit. They don't look at all of these other things.

So, the things that I've heard today as far as looking at all these other scoring models and taking these other things into consideration, I think that's positive. I don't think the rating agencies have always been right.

In fact, in the last three or four years, they've been wrong quite a few times. So, I don't think that it should be just looking at one rating. I do think that the scoring model methodology is a good way to go, but I do think that you can make it transparent and you can make it where I know what it takes to get creditworthy again.

You know, right now, we're not creditworthy, but one day, we hope to be creditworthy, and I want to know what that matrix is. What is it? Am I going to get to a triple-B-minus and you tell me, oh, well, you know, you've got all of these other things going, so, really, it's a triple-B-flat?

We're just asking, you know, to have some kind of standards where we know what field we're operating in.

MR. PERLMAN: Thank you, Ms. Harrod. I guess I have one followup, just to make sure I understood what you said. Are you finding when you are seeking transmission service, that the type of analysis that was discussed by the earlier panel, is less likely to occur; it's more likely to be just a question of whether you have an investment-grade rating or not?

MS. HARROD: I think that's so in some areas, but Aquila -- I can't speak for the industry as a whole, because Aquila is very unique in the transmission areas that we're in. They are very limited. It's Missouri, Kansas, and Colorado.

So, a lot of our transmission, if we need transmission, will go through MAPP, and so we're not necessarily dealing with the individual companies, so it's -- a lot of it are just policies on doing any kind of transactions with different utility companies, whether or not it's transmission or whether or not it's power.

And it's my understanding that most utilities have said they really don't change the policy when they are looking at just straight-out electricity sales or transmission; it's all the same policy. So, most of my referral is going to that overall credit policy as a whole.

MR. PERLMAN: Thank you. Let's move on to Robert Klein of Pacificorp. Mr. Klein?

MR. KLEIN: Thanks. I'm Bob Klein, and I've got group risk responsibility for my Company. Thank you for providing Pacificorp the opportunity to offer a view on how FERC should approach credit issues for service provided by non-independent transmission providers.

Pacificorp operates one of the largest investor-owned open access transmission systems in the United States and is among the largest participants in western wholesale electric power markets. It's with this balanced perspective that I offer the following comments:

Pacificorp supports FERC's efforts to examine utility creditworthy practices. We can understand why entities wanting transmission access, would want easy credit, but entities that own and offer transmission service cannot afford to make risky decisions that endanger customers' rights and system reliability.

FERC is right to be concerned that improper credit requirements may impair transmission access, market liquidity, and price transparency.

Non-independent transmission providers can and should provide all customers with an objective and transparent credit evaluation program, applied in a fair and nondiscriminatory manner.

This is in the best of interest of the market and its consumers. But if discriminatory credit practices are being employed by any non-independent transmission providers to foreclose market access by competitive entities -- and I am not aware of this as a concern in the West -- then appropriate remedies exist, short of turning to national standardization.

OATT-based policies and procedures may appear beneficial, but the resultant loss of informed credit flexibility may reduce, rather than promote third-party transmission access as a rigid tariff amendment process will inevitably lead to standards set stringently in the interest of prudence.

Further, we know that effective credit risk management works, and we've got the scars to prove that ineffective credit risk management doesn't. In 1998, prior to the implementation of more robust credit standards currently used by most major energy trading participants, the barriers to entry in this market were minimal.

Following the significant movements in electricity prices in May and June of 1998, two counterparties with major market positions failed. These failures cost Pacificorp and an affiliate more than $25 million.

Pacificorp then implemented a comprehensive credit risk management program and consequently experienced minimal financial losses as a result of both the California market collapse of 2000 and the Enron bankruptcy of 2001.

Low historical actual default rates show that credit risk management is working, not that risks to transmission providers are overstated. Pacificorp would respectfully disagree that the threat of transmission customer default is minimal, and that transmission customers and others are being required to over-collateralize their obligations.

Pacificorp continually seeks credit solutions that allow it to transact with various classes of market participants, while effectively mitigating credit risk.

Turning to alleged barriers to entry, we see no legitimate reason for FERC to prescriptively change the current approach, non-independent transmission providers used to determine credit quality. Credit ratings provided to entities by the rating agencies are not generic, but rather database and highly customized for each rating agency customer.

Such ratings are a fair and effective means of measuring the credit risk of entities. The historical evidence is that rating are slow to adjust downward on negative events, and, as such, do not produce excessive collateral requirements. Facilitating broader access to the valuable transmission grid by non-creditworthy participants, creates unfair risks for utility customers and utility shareholders.

In closing, Pacificorp urges FERC to remain focused on ensuring proper transparency and comparability, not credit policy, uniformity, or rigidity. FERC should consider requiring publications of credit policies on utility OASIS sites, and that wholesale customers and commissions be formally notified when these policies are modified.

In our view, doing so will be preferable to imposing additional OATT requirements, which we believe would be counterproductive and should be avoided. Universal standardization is a bad solution in search of a problem that, at most, may be relatively region-specific or at least not as systemic as critics maintain.

Pacificorp firmly believes that greater market participation and protection of the interests of customers and the system can be achieved by employing, fair, nondiscriminatory, yet flexible practices that match credit requirements to the changing circumstances facing individual counterparties.

So, thanks for the chance to contribute our perspective, and I look forward to your questions.

MR. PERLMAN: I have just one clarifying question. It sounded like what you were saying is very similar to what Ms. Harrod was saying, and that is that at your firm, you look at credit singularly, not with respect to whether there are transmission customer or an energy counterparty? Did I hear that correctly?

MR. KLEIN: May I give a small story? We look at -- we evaluate our credit risks in the context of our overall risks. Pacificorp is part of a larger company.

The larger company has allocated a certain amount of risk capital to its business for many kinds of risks -- legal risks, regulatory risks, but the major risks are market risks and credit risks and operational risks.

So, we're exposed the market, to the extent that market prices might change when we need to either fill our position by buying, or dispose of excess energy by selling. We don't know what the price is going to be in the future.

We can hedge that risk by dealing with counterparties, selling forward or buying forward. We're then exposed to counterparty or credit risk, or we could build a plant and we're subject to operational risk.

So that entire basket is a certain risk capital that our Board has allocated to the Company that is partitioned among market risk and credit risk and operational risk.

So, within that, yes, all of our credit risk is aggregated at the corporate level into a total bundle of risk capital that we allocate towards counterparties. And that's a fixed amount.

So, the issue is, when that amount gets stressed, what does that do to our credit policy, because, on behalf of our ratepayers and behalf of our shareholders, it's imprudent to expose the Company to excessive counterparty risk, no matter what the counterparty.

MR. PERLMAN: Thank you. Can we move now to Mr. Gary Mazo of Progress Energy?

MR. MAZO: Good morning. My name is Gary Mazo. I'm the Credit Manager for Progress Energy Service Company's Commodity Credit Issues. I'm speaking today on behalf of Progress Energy, Carolinas, and Progress Energy, Florida, which are also known as Carolina Power and Light and Florida Power Corporation.

The pro forma OATT has acceptable credit provisions relating to customers that are a good credit risk, however, in our view, has inadequate protection against customers who do not have good credit profiles or whose creditworthiness changes have changed since they first applied for transmission service.

In addition, the OATT provisions do not establish clear creditworthiness standards and do not specify all the available types of credit security that should be considered.

Carolina Power and Light previously modified the pro forma OATT in 1997, and at that time, included specific credit standards. However, due to changes in the credit status of many entities in the industry, Progress Energy concluded that it needed to improve its credit security provisions of its OATT.

The Company filed its OATT modifications in February of 2003, and ultimately received approval for the credit provisions in August of 2003. Progress developed credit security provisions that we believe ensure financial security for the Company, while providing transparent and flexible creditworthiness standards for its customers.

We consulted with our largest customers before making the OATT modifications. One result of the consultation was the development of provisions for customers who do not have commercial credit ratings such as municipalities and rural electric coops that would allow them to demonstrate creditworthiness without the rating.

Additionally, Progress adopted security alternatives for customers who did not meet the credit standards.

Progress Energy followed four principles in developing the new provisions: First, the provisions must protect the Company against credit risk with respect to its transmission customers, including risks resulting from changes in creditworthiness during the course of the transaction.

Second, the provisions must be sufficiently flexible to ensure that all customers, traditional utilities, municipalities, cooperatives, privately-held companies, independent generators and marketers, are eligible to obtain transmission service without either placing the Company at risk or imposing unnecessary financial burdens on the customers.

Third, the process of evaluating creditworthiness must be transparent and objective, so there is no basis for objection that the provisions are being applied in a discriminatory manner.

Fourth, the provisions must be sufficiently simple and clear that they are not a barrier to obtaining transmission service and do not require the Company or the customer to devote substantial resources to understanding and implementing them.

While we believe the provisions that we developed meet these criteria, we are reviewing the impacts of the creditworthiness provisions now that they have been in place for a year. Areas that we're reviewing are, you know, what is the appropriate credit threshold that we should use?

Our previous OATT set the limit at single-B, which I think most of us would agree is probably not appropriate. Our current level is at a triple-B-flat, which I think even some participants here would think that's too high.

So, we are looking at what is the right level to ensure that the Company is protected. Also, we're looking at whether different levels of service require different credit security. If someone is only buying $20,000 worth of transmission service, I may be more comfortable wit the lesser creditworthiness to do that.

But, you know, one of the problems you run into as you try to standardize, it takes that flexibility away. So we are looking at that to see what we can do in our OATT.

In closing, Progress does not believe that a one-size-fits-all approach is appropriate for credit security provisions. Instead, a flexible, transparent, objective, and clear set of standards should be developed that protect the transmission provider, and without unduly burdening its customers. Thank you.

MR. PERLMAN: Thank you. Let's move on to some customers. I'm going to try your name, and I apologize if I don't get it right. Mr. Rajeshwar Rao is here representing the Indiana Municipal Power Agency. Mr. Rao?

MR. RAO: I appreciate that very much. My name is Rajeshwar Rao. I'm President of Indiana Municipal Power Agency. This morning, I'm also representing some of the transmission-dependent utilities in the nationwide --

I appreciate your giving us this opportunity to present our side of the views. From the IMPA's, side, we have transmission ownership in MISO and also we have some load in PJM area that's coming to AEP.

So, we have two different problems coming up, you know, the policies made in the MISO are going to contradict policies made in PJM, unless there is really a standardized policy, it's going to conflict from each of the -- I'll be explaining that in a few minutes.

The -- going back into the non-ISO municipalities. We started looking into some of the standardized policies that affect the municipalities, and we concluded that it's got to be flexible, you've got to understand the nature of the municipalities, and I do appreciate the different speakers from Panel 1 coming back and recognizing the fact that the municipalities and coops are different, their financials look different, so they are treated differently for paying out the bills.

Some of the flexible policies we're looking at toward coming from Gary Mazo's presentation, normally we don't support all the IOUs from the municipality side, but when we looked at this one, we thought it's got a fair and objective and has recognized the --

That way, we concluded that Carolina Power and Light and Florida Power Corp., Progress Energy report recently mentioned, do deal with municipalities fairly, and we do support that.

Coming to ISO and -- side, we have major problems. That's what I was talking about, the MISO and PJM side of the issues.

Before going into that one, kind of let me explain what is a municipal joint action agency, because of the people, they know municipalities, they know coops, but really they don't know what is a joint action agency, who they are.

What happened over the last 25 or 30 years time period, several municipalities in each state formed joint action agencies that combined their cities together and formed an agency, and that agency acquired the resources, acquired the generation sometimes and the transmission and started providing wholesale power supply to the cities.

In Indiana we saw municipalities, and we have ownership in generation and we have ownership in transmission, but we don't distribute. We take it to the municipalities.

But the municipalities got what we call wholesale agreement signed with the joint action agencies and under that wholesale contract, we saw we had requirements. So, we are responsible for their generation and transmission side.

And we take those transmission -- the wholesale contracts and use the collateral to get some debt. That way we issued significant amount of the bonds.

From IMPA side, for example, we have issued more than $400 million worth of bonds as of outstanding today, and we procure ownership of some transmission and generation.

When we work the bond market and issue the bonds, we had a bond resolution. Under the bond resolution, we are pledging to the bondholders that we will pay your debt.

But in the bond resolution, there's a list of priorities how we pay the bills. Under the priorities, we pay operation and maintenance expenses first, and then we pay the debt service. Part of the operational and maintenance expenses, that comes the transmission charges what we're paying.

So, we already had a priority to pay transmission charges before even we pay the bond holders? We are a not-for-profit organization, so we don't make profit, and if somebody is looking into our profit ratios, it doesn't do well.

But you if you look into IMPA ratings, we are A-1 and A-plus and most joint action agencies are pretty good nice ratings from S&P and Moody's and Fitch, whichever you look at.

However, when somebody comes back and says that your ratios, we don't fit in, that's very -- we've got to be careful of how to -- these joint action agencies.

To give you specifics on the conflicts what we're seeing, one is MISO came back and said they want to make sure that they have the first security to pay their bills before we pay anything. Our bond resolution says that we cannot do for security, and because under the bond resolution we're already paying priority anyhow, but you cannot make it for security unless we go back to all the $500 million worth of bonds who have bought it, and individually ask them to change, which is almost impossible.

The second part of the equation is, PJM side, we have half the load in PJM, half the load in MISO. If I give first security to MISO, and the same thing PJM asks, everybody wants it for security. There's no way you can make everyone for security. It's got to be the priority and then we'll stop there.

The second part of the question is, MISO, they didn't want to net. PJM says netting is okay. There's a experience, and PJM says it works well. MISO says, well, probably there is a problems with somebody advising them that in the bankruptcy case, may not be holding good.

In MISO, we are the transmission owner and in spite of that, we feel that's not fair. It's got to be a uniform policy that should be there, and we prefer, we like what's happening in the PJM side.

In summary, municipalities and also rural electrics, they are different type of entities, and they have pretty good bond ratings from rating agencies, and they are doing well. They should be treated differently with flexibility, but, again, I do support some sort of transparency in analyzing if they are going to penalize someone.

MR. PERLMAN: Just to clarify, it sounds like the TAPS members were supportive of a tariff provision that would be something like the Carolina Power and Light that would at least have that level of specificity in the tariff. Did I understand you correctly?

MR. RAO: Yes, yes. TAPS members and IMPA, we support that one, yes.

MR. PERLMAN: Thank you. Mr. Michael Thomas of Calpine, who is a fan of credit ratings, as I understand.

MR. THOMAS: Thank you. I'm Michael Thomas with Calpine Corporation. I'm Senior Vice President and Corporate Treasurer, responsible for all credit allocation and credit decisions across the Company.

I'm the independent power producer, the merchant guy in the equation, the one that everyone thinks is the weak link in the equation. Ironically, Calpine is really a physical asset player. We've got 25,000 megawatts across North America today, with approximately another 5,000 megawatts under construction. We invest real capital every single day into assets that are ultimately hundreds of millions of dollars of capital contributions that we make into our investments that ultimately benefit the grid and the system as a whole.

Investment grade is the threshold here of being accepted as creditworthy. All the comments here on qualitative assessments and approaches and standards, I really take exception to, given what is really, I think, a generic approach, looking almost solely at rating agencies.

And to the extent you do not meet that threshold of credit acceptance by the rating agency, you don't qualify. And the outcome of not qualifying is posting it cash, and whether that's in the form of a letter of credit or a surety bond or even cash, they are all the same; it's capital at the end of the day; it's liquidity being taken from the counterparty that's ultimately backstopping some form of risk that somebody is concerned with.

Cash is really the only answer, given the current set of rules. The pro forma OATT states that the transmission provider may require reasonable credit review procedures in accordance with standard commercial practices.

In my mind, that's extremely vague, and, to be honest, in my eight years with Calpine, I still have no idea what that truly means or obligates a regulated body to undertake with respect to a prudent review process. I think we're looking at the word, standard, being a very difficult word to understand, whether you're speaking to specific metrics that everyone must meet on a stand-alone basis, or whether standards really means a process that one must undertake to really understand risk and assess risk, and to understand not only what is a default trigger, but ultimately what that default trigger means with respect to damages.

At the end of the day, the concern is damages, in my mind. What are you exposed to, to the extent a counterparty does not perform? And those are ultimately monetary concerns that people have a rightful concern to be credit-wary of.

That said, though, I think that is not a part of the process whatsoever. The process, as it exists today, is truly rating agencies.

And a rating agency looks at a public bond. It looks at something that is a rate obligation, that is something for Calpine Corporation, that is our corporate bonds, it is something that may exist for a project financing, it is something that may exist for a lease financing.

But, by no means does it speak to the risks that the transmission provider ultimately has at the end of the day. By no means does that analysis really speak to the risks of what that default really means to the specific asset underlying that transmission obligation as to what damages will be ultimately incurred and what value that should really have.

What is the payable piece of the equation? What is the re-marketing piece of the equation? What are the uniqueness with respect to the commercial transaction that ultimately exists within that agreement?

Those are things that take place on the commodity side every day, counterparties commercially agreeing, negotiating, trading margin numbers. As folks have said earlier today, it's getting pretty darn close with margin numbers every single day in processing this information.

Those are commercially standard practices that I think we go through every day on the non-regulated side. I personally, again, do not believe that same process exists on the regulated side.

It is a criteria that has an absolute threshold of investment grade, and, again, if not, you post cash.

We invest, I said, hundreds of millions of dollars into the underlying asset, and I ask you to stop and think about what that really means with respect to the risk the transmission provider has.

At the end of the day, Calpine Corporation may default. At the end of the day, one of our financings may default, but what does that really mean to the transmission provider? What risks is he really exposed to from an exposure or dollar damages standpoint?

And at the end of the day, in my view, that is a very minimal risk, to the extent you've got high quality, state-of-the-art, sub-7,000 heat rate assets in the marketplace. You can run any sensitivity you want as to what the ultimate value of that asset is, but at the end of the day, that asset is captive to those wires.

And unless it's going to perform on what is ultimately an unsecured payable obligation, it is basically not going to be economically viable. And that is a foolish decision, to the extent you've invested hundreds of millions of dollars into that asset. Whether that's Calpine Corporation as the sponsor today, whether that's the Bankruptcy Court in someone's hypothetical scenario, whether that's a lender foreclosing and taking over, my view is that that is one of the highest forms of payable obligations that will ultimately need to be cured at the end of the day.

That is not part of the process. The qualitative aspects you hear that some of these folks say they go through, I don't see it. If you went through the qualitative approach, I think you'd get down to the physical asset.

The physical asset ultimately provides tremendous benefits to the system, whether it's in voltage support or reactive power. None of that factors in. None of our contribution or what the asset represents at the end of the day, really means much in the decision as to whether we are creditworthy or not.

The rating agencies speak nothing to what that asset really represents from a payable standpoint, and what it's obligations are to any type of vendor. It speaks to what a default trigger may be on a piece of debt.

In addition, I don't think this assessment really assess that the natural business risks are that the transmission provider really signed up for. He has inherent risks that he had agreed to that are ultimately covered in his rate base, to some extent, and to the extent some of those risks are proportionally covered in the rate base, that's risk that has already been mitigated, and, to some extent, should be appreciated or absorbed into the overall credit calculation or credit risk equation. That does not take place today.

When we speak to transparency, I think I'd just like to know what the set of rules are, what I have to do to walk down that path to substantiate that I'm creditworthy. If it's a qualitative exercise, is that meaning that we sit down and we walk through the specifics of our assets, the specifics of the location of the asset, the merits as to whether financing exists or does not exist on that asset.

What are the true credit merits of the asset?

Nobody wants to speak to that. You speak to Standard and Poor's and Moody's.

With no disrespect, I was investment grade for 35 days in October of 2001. When you go through the rating analysis to cross to investment grade, I spent six months with each of the rating agencies, going through every facet of our business.

Post 9/11, we were ultimately upgraded to what I believe is one of the most difficult thresholds you can be upgraded to, investment grade.

Thirty days later, the rating agency says we are no longer investment grade, and not that it's a notch down, based on the changing market risk we have, but multiple notches. That's exponential risk that should speak very strongly as to the quality of what the rating represents in the first place.

Today, we're a single-B-flat rating by Standard and Poor's. That's called a corporate rating. The corporate rating ultimately has this great theory in it called the bogeyman theory in bankruptcy, I believe.

You unsecured bonds are basically notched down, based on whether your secured bonds are ultimately notched up, and there's no real stand-alone assessment as to any stand-alone financing, I believe, as to what it's true merits are.

You default to the corporate rating, and then you notch up or down based on that. That, I believe, is a very limiting factor in the audience's ability to really understand risk assessment.

And in my mind, those are things that I think need to be improved from a standardized process, which says there is a criteria that you may be investment grade, and if you meet it, you qualify.

If not, what are the other conditions or efforts or approaches we go through to substantiate whether or not we're creditworthy? At the end of the day, if we're not creditworthy, what is the transparency as to the reasoning behind why we're not creditworthy?

We post cash every day for what we do. We're very sensitive to credit, but, on the other hand, I think people really need to appreciate what the magnitude of that capital represents from a liquidity standpoint and a liquidity standpoint to the market as a whole, vis a vis what the underlying risks really represent.

Calpine has provided comments that, in summary, have asked for standardized credit procedures within our industry. We'd like to ensure that market participants can net exposure across markets, much like we do on the commodity side. It is very efficient; it improves liquidity tremendously.

We'd like to foster development of a more efficient clearing market to more efficiently manage credit risk, and we'd like to push to shorten billing cycles so that you can mitigate the payable side of the equation.

Folks may argue that that's an administrative burden. We do it every day on the commodity side of the equation.

The regulated guy should have the same responsibilities to step up to the plate on processing to ultimately deal with what he's concerned with -- risk -- to ultimately be able to manage that better, and if that shortens billing cycles, well, so be it. Step up to the plate, invest in the systems. Thank you.

MR. PERLMAN: Can I ask one clarifying question? My impression of what you said is that you have not seen this set of qualitative components to determine whether you're creditworthy.

Is it that the quality of components are not there in the OATT provider world, or that you just disagree with how they implement them?

MR. THOMAS: I don't think there's a negotiation around that whatsoever. I've not participated in many discussions that wanted to say who's Calpine Corporation? Who's Calpine Energy Services, our sort of trading vehicle? And where is the underlying plant in the equation as a whole.

I think if you were to go through those sorts of discussions, I think that the outcome would be a better appreciation as to what the true risks were, what the damages associated with those risks are, and what the appropriate measure for capital should be in those situations.

But that's a process. That's a commercially standard activity that takes place in any non-regulated negotiation. It does not take place on the regulated side, in my mind.

MR. PERLMAN: Thank you. Let's move to Tom Zaremba of the National Rural Electric Cooperative Association. Mr. Zaremba?

MR. ZAREMBA: Yes, thanks very much. We've previously submitted comments on behalf of NRECA, and I have some prepared remarks which I've filed and put in the back. But I'd like to touch on some of the issues quickly.

One is, the cooperative utility world is to some extent on both sides of the fence on this issue. The majority of electric cooperatives are transmission-dependent utilities and are seeking transmission service, however, there are also a number of generation and transmission cooperatives which are similar to the municipal joint power agencies in that they are wholesale providers of generation and transmission services to their distribution cooperative members.

So, some cooperatives are transmission providers and have their own OATTs, although the majority of cooperative utilities, as a group, over 900 of the members of NRECA are TDUs and are dependent and seek transmission service from other providers.

Cooperatives are different. Without going into the details, which are already in the comments, some of the key factors are because cooperatives are not-for-profit service organizations, they serve their member consumers. They are not to make a profit, and for shareholders, they generally avoid market bets, because the idea is not to meet short-term profit cycles, but to meet the long-term service needs of their members.

And, as a result, they have a very stable credit history, generally. They have stable revenues, but they have lesser levels of financial liquidity, because that's the nature and the structure of their legal organizations.

Like municipal utilities, they generally are debt-dependent for their capital financing, which means that they are worried about their secured lenders, or in the phraseology of one of the earlier presenters, they worry about the equivalent of the bondholders, rather than the returns of their shareholders, primarily.

So, from a credit circumstance, they tend to be conservative businesses. But because they have relatively smaller levels of financial liquidity, the cooperatives are very concerned about changing credit requirements in the industry and the risks that credit requirements will be changeable themselves.

As a number of the presenters have talked about, there is the need to preserve flexibility, that the credit requirements we have today may not be sufficient to meet the credit needs they perceive tomorrow from the standpoint of a cooperative, but those translate into credit requirements that say if you're deemed to be creditworthy for today, that's fine, but if your credit circumstances are deemed to be changed tomorrow, we may need a significant letter of credit posted on two or three business days' notice in order for you to keep on participating in the same transmission service in which you are dependent.

So, the preservation of flexibility and qualitative factors for credit provide flexibility to the transmission provider, to the credit grantor, so to speak, but they pose real risks to the credit grantee, the service obtainer, because if those credit requirements can change quickly or change in an opaque way without the customer knowing why their credit is all of a sudden being changed --

And when the implications are, by the way, you need $20 million in a letter of credit from a commercial regional money center bank in three days, that may not be feasible for cooperatives to do. It's just not an easy circumstance for them to come out and go to the liquid capital markets and obtain that kind of credit support on a two- or three-business-day cycle.

And it poses the risk of basically making the cooperatives unable to meaningfully participate in some of the transmission services which are supposed to be part of the open access that the FERC is trying to create.

Other issues which pose significant risk to cooperatives are, besides a changeable credit analysis, which is not understandable to them, are credit scorings which are not sensitive to the cooperative financial structure.

It's heartening to hear the first presenters, who obviously are aware of cooperatives, say that they have flexibility for the cooperative customers in their areas, and I assume that may be very well the case. However, not all OATT providers have demonstrated that same flexibility, and in many cases, it seems to be a black box in terms of the credit.

You apply, you get -- you're told what your credit requirements or collateral requirements may be, and then it's basically a telephone process or request for further information to find out as to why you turned out in a particular fashion.

We believe that it would be much preferable to have, not necessarily standardized, but transparent credit requirements, transparent credit procedures so that transmission service obtainers will know in advance, what's going to be required of them, how often that information needs to be updated, in what form it can be furnished, so there's less risk for surprise.

An example has previously been referred to of some examples of OATTs that have looked at different types of providers. NRECA believes that the example used by Progress Energy and Carolina Power and Light OATT provides a good example of a flexible OATT credit requirement that recognizes that cooperatives are different types of service providers and have standards oriented to cooperatives, directly.

I'm not here to necessarily endorse one particular type of credit requirements or standards, but that is one which does take into account, cooperatives, and seems to be oriented to their financial circumstances and their debt covenants.

I think I've covered most of the issues that I wanted to talk about directly to you. I have other issues noted in my remarks that I have made available today, so if you have any further questions, I'd be happy to answer them.

MR. PERLMAN: Thank you. I'll start with a question and then turn it over to my colleagues.

The one thing that I'm getting from the first panel and this panel, in particular, is a desire on the part of the customers for transparency and clarity with respect to the types of things that are taken into account when the credit review is undertaken, and if there are qualitative things beyond ratings, what they are and how they are done, at least to some degree.

And I'm not sure whether there's a desire to have standards from this Commission as to how that should be. But at least with respect to the transparency, what would you recommend, if anything, that the Commission do to impose requirements for transparency or to suggest to transmission providers to provide such transparency to their customers? I'll take an answer from anybody who wants to address it.

MR. ZAREMBA: I guess, first off, we would like to see that there are credit requirements that should be part of a filing and should be able to be subject to Commission review, so that they are not simply a part of a generalized business practice, which can be changed without an opportunity for comment and input from the persons who are obtaining service.

MR. RAO: I think I agree with that one. There doesn't have to be a standard policy, but at the same time, you know, we are half of the transmission owners, so I got my interest to make sure that somebody, but the time they change the policy and file something six months, in the meantime, you lost the transmission revenues, so we don't want that thing to happen, either.

So, there has to be a policy made and it must be transparent, but at the same time, customers need to know if there's a change of something happening, so that way they can come back and do it, so that the business can go on as expected. At the same time, the customer needs to know that the provider changes, what was the reason.

That may be dispute resolution process to make sure that process is right or wrong, but the ultimate result is we have to make sure that the transmission party who's taking, paying the money, as long as there is assurance that that money is coming in, that protects the transmission owners.

At the same time, as a transmission-dependent utility, my second part of me, I want to make sure that if something changes, I need to know right then and there so that I can do something.

MR. THOMAS: I would just say, from a transparency standpoint, some of the tariffs, they are written such that if you're not -- if you are rated but not investment grade, you do not qualify to the extent that there is secondary or more qualitative or additional credit considerations that should be put in place.

I think there needs to be more definition as to if you are not investment grade, or if you do not have a rating, what that process really obligates the transmission provider to undertake from a credit review standpoint, that is, commercially standard and reasonable to get to ultimately an outcome that becomes transparent as to why you qualified or did not qualify.

And I think that is something that just lacks -- there's no process that I see that actually exists for that. And at the end of the day, I'm not trying to cry sour grapes as to our plight on credit, but I think that at the end of the day, there needs to be an appreciation for, if everyone is going to use the words, credit and risk analysis, a real effort to undertake that activity and a responsibility by the transmission provider to do what are normal course activities in the commercial world.

MR. KLEIN: Yes, I think I didn't hear this morning, anyone that used ratings exclusively to make their credit determination. I think the FERC should focus on staying at the policy level, initially, and encouraging the transmission providers to publish their policies according to clear guidelines, and to the extent that those policies change, to require the transmission provider to notify their customers of that change.

I think that the circumstances of the transmission provider can change. They may be entering into some sort of financial difficulty or choppy waters, or they may have to change their own requirements, and certainly this could mitigate against rigid standards.

MS. HARROD: What Aquila would like to see is to be able to have some kind of policy or some kind of standard or guideline that actually specifies what a transmission owner is going to go through in order to determine whether or not I'm creditworthy.

We'd like to also have consistency, so if you have some transmission owners that say you're not investment grade, I don't do anything else, and then you have some that says I'm going to take all these quantitative analyses into effect and take all these other components of the analysis that's going to determine if you're going to get credit or not, then, you know, we would support that if there was some consistency between the transmission owners on how they're going to do that, and when there is some consistency, then it's very transparent so we know exactly what the requirements are to go down that route.

COMMISSIONER BROWNELL: Mr. Thomas, I have a question. When you have a contract under the OATT for one of your facilities, that may be higher rated than you have corporately. It's a project, perhaps, that has a PPA, for instance, that was above investment grade.

Are you saying that it's your experience that transmission providers are looking past that at your corporate rating, and, therefore, ascribing a subinvestment grade to those flows, essentially, and therefore asking for collateral? Or do you have it structured such that the trading is going through a subinvestment grade entity?

MR. THOMAS: We only have one financing that's investment grade, and investment grade has to do with bankruptcy remoteness of that vehicle which was put in place from a financing standpoint. All of the rest of our financings are subinvestment grade, again, based on the criteria that the agencies apply towards really their standards on ratings.

We, again, do not have an asset that is, I would say, investment grade qualifying stand-alone to go through just the basic preapproval process.

I think what we lack is the ability to get down to what is ultimately a multi-hundred million dollar physical asset that is no different than some of the utility risks that folks take, no different than ultimately the franchise that a muni or a coop has, but the generator is, to some extent, outside that box and not given any consideration as to what the real asset represents from a credit value standpoint.

MR. PERLMAN: I think what he's asking, or at least the way I heard the question was, if you had a generator that was profitable or had a long-term contract associated with it that was profitable, is that evaluated when there's as determination as to how creditworthy that generator's transmission service should be?

MR. THOMAS: It should be, but --

MR. PERLMAN: Or do they just look at your ratings?

MR. THOMAS: To the extent it was a stand-alone financing, yes, I would say it would go through that, but to the extent that you've got -- we've got portfolio financing where we've to some extent structured our own problems, if you will, but through that structuring is, say, our Calpine construction finance financing. It's a $2.5 billion financing with multiple cogen assets across the U.S.

They've got steam host arrangements, they've got energy sales arrangements, but they've got, to people's comments, pretty substantial debt levels. Substantial debt levels is a relative term, though.

They're probably less than $200 a KW per debt on assets that are ultimately $600 a KW in construction costs.

So, yes, there's debt, it ultimately doesn't get down to the physical asset from where the contract may reside, but I don't think that deteriorates from what the credit value of what that enterprise really represents.

The lender, at the end of the day, how is he going to default on that transmission contract to the extent you had to foreclose on that? He needs to still make it a valuable asset to either have his own economic recovery or ability to sell that asset.

He's got to cure that payable. That's never part of the process as to really what that represents and who is incented to make sure that what are both either wires problems or obligations or pipes problems and obligations, that those ultimately determine the viability of the asset.

So, in my mind, they are going to be probably the highest priority approved. Secondly, there's waterfall arrangements. As folks have said earlier with respect to their financings, where operating expenses are paid, many times the transmission guy is on the top tier of the waterfall that ultimately is the first bucket paid.

None of that goes through a qualitative analysis as to where you rank on a payable standpoint. Secondly, I'd add that lenders, I think, are receptive to what may be a recognition agreement, recognizing that contract that's a subsidiary obligation that the lender would step up to from a performance standpoint.

Those are things, from a qualitative standpoint that I think are doable and ultimately get the transmission provider to a very credit efficient point.

MR. CHOO: Mr. Thomas, I'd like to follow up on this, what you said with you, and then maybe invite the translation providers to respond, as well.

To the extent that you have encountered these issues, what kind of discussions have you had with translation providers, and what progress, if any, have you made with different ones of them?

MR. THOMAS: Well, I'd say every provider is unique. There's differing set of people. There's differing personal relationships. There's differing corporate objectives or appreciations or disagreements, and those, ultimately, I think fall into credit at the end of the day.

There are many markets where I think we've got receptive counterparties that have some reasonableness in wanting to go through what are assessments of risk and where, in the org structure, the asset or the contract resides, and what the underlying credit may represent there.

But I don't think that's a standard criteria across the board that obligates all transmission providers to undertake a similar assessment, and I think that's the problem. You do not have consistency as to what the rules represent and what the expectations on our side are with respect to the ante to get into the game.

MR. CHOO: Mr. Klein, Mr. Mazo and the three gentlemen who were here at the first panel, would any of you care to respond to how you might deal with these kinds of granular credit questions?

MR. KLEIN: Well, clearly, non-discrimination and transparency are important, and I think everyone here supports that.

The issue is restricting or forcing the transmission provider into providing credit capacity that's beyond its ability to do financially.

You know, for example, if a transaction is collateralized with a large asset, what is the transmission provider going to do with that large asset?

Is it going to sell it at a discount? You know, perhaps it cost $600 a kilowatt to construct. Perhaps its market value is 400. Perhaps it has IRP and RFP rules that prevent it from doing anything but something that its commissions have previously approved.

So the rules that would have to be written are horribly complex, horribly state specific, and horribly restrictant. So the guideline aspect, the transparency aspect, the non-discrimination aspect, we all strongly support at a policy level, not at a process level.

MR. MAZO: I guess with our tier, since we have, you know, specifically laid out what our standards are, I think, you know, to an extent, you know, while it is non-discriminatory, does tie our hands because we've stated in there what it takes to qualify for credit. So that's one thing that we want to look at, you know, by doing that. I mean it's almost probably made it harder for a Calpine to get access to our territory in which, you know, it's not our intent to keep anybody out, but the thing with standardization that you have to worry about, like standardizing it and putting the tariff in, then you got to live to it.

MR. TIGER: I have a question for Mr. Klein.

You had mentioned that the changes to the corporate -- to the transmission provider's status might mean that it needed -- or you implied might need to enhance its own collateral from counterparties.

It's sort of got to the question of are you bifurcating the service you're providing as a transmission provider from any other elements?

You're folding things up to a corporate level. You're looking at global risk.

Do you view there is a potential that because you have risks in the non-transmission portion of your business with counterparties, or you have risks coming to the transmission activities from non-regulated activities you may be taking?

Is there -- how do you prevent or do you see there is a potential for those to flow into sort of cutting back on risk capital in the regulated transmission provision?

MR. KLEIN: Administratively and commercially, those areas are completely separate, as was mentioned this morning. The people that do the transactions and the people that evaluate the transactions are separate.

Where it comes together, again, as it was described this morning, is at a corporate level in terms of the overall credit exposure to a counterpart that the organization is able prudently to wear the risks that it's willing to wear.

So the credit is not allocated amongst the divisions on the basis of anything arbitrary. It's strictly a function of the individual transaction.

But, again, having said that, there comes a point when any corporation is restricted by the amount of exposure it can have to any other corporation through the application of concentration limits and other limits that basically limit its risk to one significant event.

MR. PERLMAN: I'm not sure I understand that. Are you saying that if you had a training operation in the corporation and they took on a big transaction in some other region of the country from where you are in the transmission system, and that ate up a lot of credit capacity, and maybe it was a risky transaction, but it was highly profitable,

that may cause the transmission portion of the company to
cut back on the amount of credit that they can afford, that
same counterparty, for regulated transmission service?
Did I hear you say that?
MR. KLEIN: The concentration risks for exposure
to a single counterparty could impact forward decisions, not
retroactive decisions.
But it would not be prudent for a company to
expose itself to some extremely significant risk, groupwide
or companywide, to one single counterparty because it's a
very large event risk.
If that counterparty did default, the
shareholders and the ratepayers would suffer.
MR. PERLMAN: Well, isn't there -- shouldn't you
be treating the regulated transmission business as a
standalone business that doesn't affect the credit that you
could grant a counterparty because some other profit making,
deregulated part of the company has exposure to that entity
somewhere else?
Should this commission think that's appropriate?
MR. KLEIN: Those decisions are separate when the
company considers individual transactions, but at a group
level, there is a consideration for overall credit exposure.
MR. PERLMAN: Doesn't that get manifested

prospectively?

I mean when the group says, "We've used up all our credit with this guy doing this profitable transaction in," I don't know, "in Florida, and now, here we are in the west," and he wants transmission service.

Well, you know, the group isn't going to give him any more credit. Is that what happens?

MR. KLEIN: That is not -- that is not what happens. The issue is on unsupported credit on a group basis for transactions which carry significant risk.

MR. PERLMAN: So what does happen?

MR. KLEIN: What happens is the decisions are made independently by the division. The regulated division makes one set of decisions.

The commercial part of the regulated decisions are separate from the transmission part of the regulated decisions.

It is the overall credit capacity is a limit for the corporation, and that does affect the amount of business it does in total.

MR. CHOO: Maybe another way to ask the question is this: Let's say the transaction in an unrelated area uses up a lot of credit capital. So, as a result of that, the transmission unit ends up with a lower credit tab, if you will. And, as a result of that, you then go to all your transmission customer and say, "Because of our constraint -- a new constraint, now we have to raise your credit requirement across the board," and, therefore, restrict more transmission to its customers from coming on.

MR. KLEIN: That has not happened. We have not been in that situation.

Our corporation is extremely credit worthy itself. It has a very strong balance sheet.

I could imagine a situation with a utility that had a problem where one might get a different outcome. That has no happened with our company.

MR. PERLMAN: It looks like Mr. Lee would like to have his two cents.

MR. LEE: Yeah. This is all. This is Tommy Lee, again, with Duke Energy.

I just wanted to make a comment about our practices as it relates to potential preference issues with regard to allocation of unsecured thresholds across the phone.

If a counterparty does have unsecured threshold, which has been eaten up, and keep in mind, Duke has never had this circumstance occur, but we do have processes in place to deal with it, whereby, let's say, on the unregulated side, all the unsecured capacity that we had for that counterparty was eaten up, and then transmission access was sought by that same counterparty, we would clearly go through a reallocation of that unsecured threshold to deal with that situation so that no preference issues could arise as a result of that.

MR. PERLMAN: Thank you.

Kelly, did you have a question?

MS. HARROD:

MR. PERLMAN: Thank you.

Kelly, did you have a question?

MS. PERL: Yes. This is primarily for Ms. Harrod and Mr. Thomas.

Now, it would seem to -- what you seem to be saying was a bit of dynamism in credit review would help, and we had a spectacular collapse in 2001, and there seems to be a recovery.

And what I ask you, would a more frequent review help you, or is it just the nature of the recovery that is not so fast is a collapse that is a problem?

MS. HARROD: I think, one, the recovery has not come as fast, but it's getting there. It's getting better every day as we go through.

The biggest thing that Aquila deals with is that we still have a lot of issues that we're sort of working around, but in the past, as soon as the rating agencies downgraded us, no one really took anything else into consideration, and it's not just the transmission, but just the market as a whole.

And so, when it comes to transmission, grant you, the main place that we're active in would be in Timiso or into Map or some of those. It's not necessarily the individual.

But we do go to some individual transmission owners that are in our territory, and it's -- the biggest concern that we've had is going through all that we went through, there was a lot of disparity between companies. Every company required something different.

Some would ask for collateral for one amount. Some would ask for collateral for ten times as much for the exact same type of exposure.

And so, as we went through what we went through over the last couple of years, it would be very good for us, as a company, to understand what the requirements are to participate in this market, what our cash flow requirements are going to be, because we are posting cash for all of our activity and our transactions, whether or not it's in the RTO's or wherever it's at.

And so that is the main thing that we are supportive of, and as we're trying to go forward, we want to know what those requirements are and we want to know what the cash requirements are, which are what we would demonstrate in a lot of our comments that we made is we want it to be associated with our exposure.

What exposure are we -- what credit exposure are we bringing to your system?

And if we have to be secured post cash, it should be for that service. It should be for no more, no less because once I post cash, and at that point, I'm probably the strongest credit you've got on that system.

So as we continue to go forward, you know, it's getting better, but, you know, we anticipate that as you go over the next two years, the industry is going to change a little bit more. I don't think it's going to stay the same.

And as we go into the next two years and the market does recover, and you get more market participants and you get more activity and more liquidity that we're all working and striving to get, that we all know what the game rules are.

MR. THOMAS: I'd argue that the events over the last two years certainly are warranting of, you know, additional credit review and considerations and a real risk assessment that, previously, two years ago, may not have existed to the extent it does today.

Your word of dynamism, I think, is an interesting choice for credit because I don't see a lot of dynamism in credit at all. I think dynamism is something that should be more prevalent in the activity, and whether it needs to be more timely, I think we're willing to do whatever it takes to meet with people and to provide the data that's required to ultimately substantiate both the financial and the qualitative merits of what our counterparty and our transaction represents.

And, to the extent we go through that process and there's fairness involved, then, hopefully, non-discriminatory activity and equitable treatment, I have to end up agreeing with where the chips fall from that.

But I don't think the process exists where that actual sort of negotiation or discussion actually takes place at all.

MR. PERLMAN: Do we have any other questions?

MS. FISHER: I have a question.

MR. PERLMAN: Jolanka, go ahead.

MS. FISHER: My impression from the first panel was that the process was sort of a qualitative, collaborative process, and then the impression in this is, is it an art or is it a science?

And my impression from this panel is more it occurs elsewhere, and there is not really any collaboration, and we can get these sort of credit determinations that sort of fall on us out of a black box.

Is there a characterization -- is it really that it's both, depending on the transmission provider, or is it always a collaborative process, but there's very little clarity behind what's going on on the transmission provider's part?

MR. LEE: I can just say, from our point of view, it's very collaborative. Some of the counterparts at this table or the counterparts this morning, we know well and have long discussions with them on the scope deals, bilateral transactions.

I can't really say for the myriad of small transactions that it's that collaborative or not because of the volume of transactions, but, certainly, for the larger transactions, it is and always has been.

MR. RAO: On the TAPS group and negotiations with the Progress Energy, that was very collaborative and they understood what we were talking and we understood what their needs were, and they came up with a process where it was very good. So it is a collaborative and the principalities and also coops, in their particular negotiations. They dealt with that -- initiating that agreement.

MS. FISHER: Is it always that way or is it just with particular transmission providers?

MR. RAO: I'm not sure always because, quite often, if you look at the nationwide, municipalities and coops always intervene in IOU rate cases, and we argue, I'm positive, and Progress Energy might differ, too, but this was a good one. This is a nice example.

MR. ZAREMBA: And from the standpoint of cooperatives, because cooperatives are not generally new entrants in most of the areas. The IOUs that they're dealing with, I've known about them for a long time, and so they're -- they already have an idea what the coops do and their financial circumstances, and there may already be an operating relationship.

Where there have been more problems with opaqueness, frankly, is with ISOs and RTOs which announce new credit requirements, and basically, are not familiar, in many cases, with the individual cooperatives or with cooperatives in general, and where, you know, there's new -- it's kind of like saying, "Well, you may have dealt with other transmission providers before, but we're different. We have new credit requirements, and so here's where our requirements are going to be. You're now welcome to apply, but it's not been, by any means, initially clear, starting off with as to how are cooperatives going to be treated, and whether or not those standards would be, quote, unquote, fair."

Now, things have improved a great deal, as cooperatives have been dealing with a number of the RTOs and ISOs, and is, I say, more of a collaborative process. But that varies considerably from what part of the country -- which part of the country you're talking about.

MS. HARROD: I would also say that we have worked with -- it goes back to consistency. There are -- we've worked with some transmission owners that have -- you know, they've asked some of these other questions.

But there have been many -- or say many -- or several other transmission owners, that they haven't those extra questions. They haven't asked, "What does your trade book look like?" They haven't asked, "What are your risk management processes." They haven't asked all those other little pieces.

They're typically looking at rating agencies, so the main thing with the transmission owners, I think there's no consistency. I think there is a lot of work with some, and it goes back to your relationships and, you know, where they're positioned in your region, and things like that, and how much they know about you, but there are some that that's not the case.

MR. PERLMAN: I just have one last question. Ed, did you have a question?

MR. MURRELL: Yeah. Mr. Mazo and Mr. Klein, part of what I'm hearing today is there is flexibility in the system, but it sounds like the flexibility is used primarily to evaluate people that are close to the line, and decide whether or not they should be moved down, as opposed to people who are just underneath the line and given some consideration about living out.

Am I understanding that correctly?

MR. MAZO: When we do our financial analysis, I mean we have very similar processes with Duke and what some other panelists have talked about when we look at ratings, we look at financial models.

And we do look at things, and if our models are coming out above what a rating agency would be, we'd look at that.

You know, and we're also -- you know, we're looking at the other things in the industry that everybody else has mentioned. So I mean it's not always downward. It's less likely that it's upward, but it can happen.

MR. MURRELL: When is the last time you remember upgrading somebody that wasn't at the investment grade level?

MR. MAZO: I can't recall.

MR. LEE: I think it's not that the utility, including the transmission portion of the utility, is basically a community organization. It's pretty close to the stakeholders in its major service territories.

And, quite often, the entrepreneurial elements in a service territory, for example, Pacificorp is in Utah and

Wyoming and Oregon, Washington, predominantly.

There are people who want to connect to the system that are clearly entrepreneurial, don't have published, audited financial statements, and yet are key to the community. It would eventually influence the utilities picture in that community or in that state.

And I can think of several entities which I'd be glad to discuss privately that were far, far from investment grade, that the company worked very hard with to find ways of collateralizing or ways of securing the obligation to the utility, so both the consumer could do business, and yet the rate payer was protected in the event of default, mostly small generators, 60 watt, 40 watt, megawatt generators that needed access to the system, the company worked with aggressively to connect.

MR. MAZO: Just one clarification. We do have several customers who do not have ratings at all, that are financial analysis imputes in investment grade type rating, too. So, you know, we do give transmission service to people without, you know, without ratings, if we have financial statements and in our models that computes a rating.

MR. PERLMAN: Well, thank you very much. It's been a very informative panel, and we'll reconvene at 12:45 for the RTO panel. Thank you.

(Whereupon, a lunch recess was taken at 11:50 a.m., to reconvene at 12:50 p.m.)

(Time noted: 12:50 p.m.)

AFTERNOON SESSION

MR. PERLMAN: Can we find our seats, please, and we can get started?

(Pause)

MR. PERLMAN: Good afternoon. I hope everyone enjoyed their luncheon choices at the FERC.

There are less people in the audience. I don't know if that's because you all came down and sit at the panel or they're recovering from lunch, but this panel is about RTOs and ISOs and the credit issues that arise in that environment.

I thought it was interesting this morning that we heard about levels of qualitative review and the type of analysis that's done at the OATT mortgage, which seems to me to have less credit risk inherent in them because it's just transmission component.

And I'm not sure -- maybe we'll hear that the RTO credit analysis has the same level of detail and scope. We may or may not.

I'm going to limit my remarks to that because we have a lot to talk about and a lot of people to hear from, so, again, with that being said, let's start with the folks that we have as listed in the agenda, and on that front, we'll start with Ken Davis, and he's here representing the

New York ISO today.

MR. DAVIS: Thank you, Mr. Perlman.

First, I'd like to say that the New York ISO commends the Commission and staff for convening this important conference on a very important subject, and we thank you very much for the opportunity to participate.

There are, if you look at the agenda for the entire day, many sorts of market participants present and participating from different parts of the country, operating in different markets, that are, themselves, at different stages of development. So I'd like to begin by briefly describing, very generally, where the New York ISO resides in this universe.

We think it's fair to say that the creditworthiness regime at the NYISO has developed and moved well beyond the pro forma OATT references. After many months, many, many months of concerted work with our market participants, and after many filings with the Commission, we now have in place a rather comprehensive set of customer creditworthiness standards and procedures that, taken together, address many of the issues on today's agenda.

We are comfortable in saying that, overall, they represent a set of specific, transparent procedures, made up of objective, quantitative analytics that provide a flexible set of compliance alternatives to market participants.

This package that's set forth in detailed attachments to our tariffs represents not only months of work through our open government's process, but it also represents the negotiated collective market participant assessment as to the appropriate balance of the cost of credit security, on the one hand, and the cost of mutualized market loss, on the other.

We've heard a lot today, and I'm sure we're going to hear more this afternoon, about that balance, how much in the way of credit security should an individual participant be required to pay for, and how much mutualized market loss should the community of market participants take on for themselves as a group.

Again, we think because of the process used to arrive at the final package, we think that the balance, at least in the case of the New York control area, is represented by the result of the governance process, again, a collective decision by the market participants.

Should, in fact, the Commission actually decide to proceed with the formal rulemaking on this subject, we would, therefore, ask that this past work be recognized, and that something like an independent entity standard be used to evaluate detailed ISO or RTO credit regimes already in place, as they are in New York.

Now, what we have in place, though detailed and though representative of a lot of market participant input and NYISO staff work, it is certainly not static, and I wouldn't suggest for a moment that we view it as complete or incapable of refinement or improvement.

We are, in fact, always talking with and working with market participants through a number of subcommittees and committees to further refine and try to improve the efficiencies and effectiveness of the current system. We're always working to identify and prioritize the next change to the credit regime.

We currently, for example, have active projects underway that include things like shortening the settlement cycle by getting more quickly to a final bill, reducing the true up correction and review stage of the cycle.

We have another initiative underway to work on improved metering and improved inputs, and we're also in discussions with NECC, and have had discussions with NYMEX about the potential benefits of third-party clearing, as they may be brought to a market like the NYISO, to further shorten the settlement cycle, reduce collateral requirements and improve the interrelationships between the NYISO administered markets and the bilateral markets in the New York control area.

So we've come a long way, have a good deal in place, and are constantly working to further improve it.

Thank you.

MR. PERLMAN: At this point, I'd just like to mentioned that we've been joined by Commissioner Brown-Hruska of the CFTC, and I believe some CFTC staff members, so thank you for joining us.

We'll turn it now to Scott Miller of PJM, and I'll remind the people making presentations, if you could make your presentations brief, but informative. We have a lot of people to have discussion with, so -- and a limited amount of time. So, with that, Scott.

MR. MILLER: All right. Thanks, and let me just say, at the outset, I'm Scott Miller, Executive Director for market applications at PJM.

As some people may know, I am not a credit professional amongst a sea of credit professionals. I am, however, I guess, playing one on FERC TV right now.

But the reason that I am here is, I think, more than anything, is to demonstrate the seriousness with which PJM is trying to deal with the credit issue, as well as the liquidity issue that that imposes on the bilateral market.

But, first, let me briefly go through a few outstanding items with regard to our credit exposure and our credit policy, and then briefly get to what it is that we're doing because I think it's very similar to what some of the other ISOs and RTOs are doing.

We are, of course, a provider of transmission service that we operate on a profit neutral basis. I mean, technically speaking, we're a for-profit entity, but we operate on a profit-neutral basis.

The cost of credit, of course, is borne by each individual member, but if there is any default, that's socialized across the membership, and that, of course, is an issue of why we constantly review our credit policy.

And we balance our policies with the protection of the membership with the costs associated with that protection, and, of course, that's something that I think we all share.

But our primary risk is one that relates to receivables. Because we operate a short-term market only, our exposure is really in terms of the receivables that deal with this particular short-term market or our short-term markets.

The bills are sent monthly on the fifth business day, and they're settled on the 20th of the month, but in terms of provider of a last resort, there is considerable exposure, credit exposure, that could last up to 60 days, and we recognize that this is an issue.

Our credit policy is similar to what was just talked about, with New York, is developed through a stakeholder process, and it's often a long stakeholder process.

We've been through a couple of revisions to our credit policy since we had a couple of small defaults in 2001, I believe they were, and -- but even those changes in terms of credit policy were, by necessity, difficult because it is a collaborative process.

The four main parts of our credit policy and practices are probably very similar to everyone else's. There's a credit requirement, an unsecured credit allowance, credit monitoring and special credit requirements with regard to certain different entities.

I won't go into all of these items, but I will end because of the need for time on what the near-term activities are that we have been doing.

We have pursued initiatives with our members on things such as accelerated settlements. However, it's been made clear to us by a number of our members that accelerated settlements are not something that they want to pursue, and it would likely not meet the sort of super majority outcome that we would need through the stakeholder process.

Many entities are on a monthly cash flow basis and they don't want to incur the expenses that would go with changing that to allow for a more accelerated settlement approach.

We have what we are now pursuing with our members, a optional accelerated settlement, whereby those that wish to pay earlier than the monthly basis may be able to do that, and, therefore, we can allocate the payments on a pro rata basis to the net suppliers. That's something that has received more acceptance in our processes, but it's something we're also looking at.

But, more importantly, I think we're looking at something that, if it bears out scrutiny, may have even better results for the market in terms of liquidity and in terms of removing default risks for our members, while also increasing the likelihood of folks transacting in the over-the-counter and bilateral market, and that's with the third-party clearing option.

We have spoken over the past few years with NYMEX Energy clear. We're currently in discussions with NECC. In fact, we're subjecting that to some serious review that we will, if it passes the review, will take to our Board, and ultimately, to our stakeholders.

But it is, again, something that we're actively interested in because we think that the markets could stand to have more transactions in the longer term than is currently the case.

I'll end by one statistic. We are taking great pride in the fact that, until recently, most of the transactions that occurred in PJM were either self-supply or bilateral. That is still the case, but barely.

A few years ago, 15% of the transactions in the PJM area were spot, that meaning in our physical markets. That has grown to 40%, and we believe that that is a direct result of the current credit environment whereby people are more highly incented to transact in the RTO short-term markets, even bilateral markets, even those transactions that are naturally bilateral, rather than doing them with traditional counterparty representation.

We would like for the PJM markets to return to more residual levels of the market that we saw before. We would like to be able -- for people to transact in the long term in the forward markets more, and we hope, by looking at third-party clearing options, we may be able to get to some sort of solution in that regard.

Thank you.

MR. PERLMAN: Thank you.

Mr. Ludlow of New England ISO.

MR. LUDLOW: Hi. I'm Bob Ludlow, Chief Financial Officer for ISO New England, and I appreciate the opportunity to speak at the conference.

I'm going to stick to a description of the near-term policies and practices that we're employing in New England.

We're just a couple of days away from

implementing what we call "weekly billing," which is shortening that settlement cycle from the monthly cycle that both New York and PJM had discussed, where the hourly markets will be settled on a weekly basis, and then, once a month, for the week that falls when the monthly settlements are due, those monthly settlements will be included on that weekly bill.

The benefits that we saw in going this way is that it was going to reduce the collateral requirements that were outstanding, as well as the default risk that was outstanding, and I'll quantify those in a moment.

The way we calculate the amount of financial assurance that's still required is that we have a two-part test that we use, which is, basically, applying a factor to some historical values that we know have existed from previous bills or previous activity.

We look at what is currently due from a participant, right up through the last settlement period, which still, in today's market structure, is about six days behind. So, even though we're on a weekly billing basis, your exposure that continues to exist out there is about 15 days, but as compared to the 50 days that was previously out there, it was a tremendous improvement.

To meet financial assurance requirements, participants are allowed, if they have a credit rating, there is certain formulas that are used, identifying straight off the credit rating, to a percentage of their tangible net worth.

There is a different paradigm that's used for the municipal entities, recognizing from earlier discussions, their differences between how they're capitalized versus other entities in the marketplace.

Similarly, for those entities that are rated that do get the credit, we do backstop that with credit insurance. So there is an $80,000,000 policy limit that supports the rated entities that are receiving the free credit.

When we analyze the benefits of going to the weekly billing, we saw that the amount of exposure that was reduced by going from the 50 days down to the 15 days was approximately $100,000,000 of default risk that was removed by shortening that settlement cycle.

Similarly, we were able to reduce the financial assurance that was required from about $340,000,000, down to about $189,000,000 level, based on October 2003 activity. So it was a significant benefit for the marketplace.

The other benefits of weekly billing is that we can get the quicker suspension, if people aren't paying their bills on time. We monitor people's positions on a daily basis, and notices will go out immediately if anyone is in default.

So, under credit limits and we would still maintain the current forms of collateral which were cash, letter of credit, and a corporate guarantee.

As far as the process issues, there weren't many to change to go to weekly billing. Participants needed to accelerate their bill authorization and wire authorization processes, but the fundamental settlement process did not change, so there was very little activity that had to be done on a participant part.

And as far as on the ISO side, there were some modest software changes that were needed. No changes to the underlying market rules, and we did implement a separate line of credit to cover diminimus short pays and no pays, so that we can clear 100% of the market each week.

The next steps that we're looking at are similar to New York and PJM, and what we believe is the clearinghouse concept. It has the benefits of removing default risk from the marketplace, continue to lower the collateral requirements, due to the shorter clearing cycles.

The ability to also net across markets and across commodities would also be a tremendous benefit to reducing the overall capital tied up in this marketplace, and these changes would be much more difficult than the move to weekly billing, and it would probably involve some market rule changes, as well.

That concludes my comments.

MR. PERLMAN: Thank you. Let's move to Alan Yoho from the California ISO.

MR. YOHO: Yes. My name is Alan Yoho. I calculate and manage the credit requirements for the California ISO.

First off, I want to say that the California ISO appreciates the Commission's initiative in this very important area, and right now, we are currently reviewing our credit policies. And I believe that the Commission can provide guidance in this area.

The comments that I'm going to make are regarding what we would like to see if there was a move toward standardization, and also, some of the issues that we're currently having to deal with as we review our credit policies.

First of all, the issues are very complex and we have divergent interests among the market participants, which makes coming up with the standard policy particularly difficult.

Some of the things that we would like to see, if there was standardization, is common information and disclosure reporting requirements, a method of developing caps of unsecured credit for the individual participants, but also taking into consideration each ISO's ability or willingness to engage in credit scoring activities.

We've had settlement and payment and clearing across the industry, should possibly be standardized, as well, and also, definitions for defaults, such as failure of a participant to meet the credit reporting requirements, failure to pay or settle on time, failure to meet creditworthiness requirements and failure to post required collateral.

Also, we'd like to see timelines for default, what occurs when a participant does default, and how the person then would be suspended from the market.

We would also like to see the Commission should specify how these issues are to be enforced.

We thought that the gas credit noper provides excellent criteria, to start with. However, the magnitude of the credit issues in the electricity industry far exceeds what we saw in the gas industry. We believe that this industry needs its own credit policies.

What we have seen as far as negative impacts, possibly from our current credit requirements, are the following.

We have an either/or approach to credit management. Entities that have approved credit ratings receive unlimited market transaction credits, and those entities with approved credit ratings are required to post security.

We do recognize that certain entities that have not met our standards have indicated that they believe their financial position warranted unsecured credit and as far as tariff is not permitted at this time.

Also, we have -- we recognize we have a long payment calendar between 60 and 90 days, and this actually increases the credit requirements for participants, as compared to shorter payment cycles for the other ISOs.

We have recently undertaken an initiative to shorten our payment calendar, and that it is progressing as we speak, and we'd like to see that that initiative actually bring us on line with the other ISOs.

Also, certain participants have indicated that they have limited participation in our markets because of concerns that the market may not be adequately secured. This sentiments exist although the California ISO markets have been adequately secured since the 2000, 2001 crisis ended.

The California ISO believes that the Commission is the appropriate entity to determine how the balance should be struck between net buyers who want to minimize their credit costs, and sellers, who want to market to be fully secured.

We believe that the shortening of the settlement period is the most important step that we can take right now to minimize exposure to credit risk, and right now, we allow for net obligations to be on the basis for all market participants.

On the issue of minimization of various entries, we believe that providing for a range of collateral posting options would be appropriate. Providing accurate estimates of liability is also appropriate, and reducing the payment timeline.

The last thing that -- well, a couple of other things that I want to address, but this one is default of load serving entity designated as a provider of last resort.

We believe that this issue is one of our greatest challenges, and we believe that the state and local regulatory energies should ensure that default providers remain creditworthy so that the default cannot occur, and, again, this is one of the most complex issues that we have to deal with.

On the issue of credit clearing, we believe and we support the efforts to develop credit clearing solutions that may be usable by ISOs and RTOs.

Thank you.

MR. PERLMAN: Thank you. I want to just clarify one question.

From your comments, I understood the Cal ISO to be in favor of or recommend that the Commission standardize a number of things across RTOs and ISOs. Did I understand that correctly?

MR. YOHO: That is correct.

MR. PERLMAN: Thank you.

With that, let's move from the RTOs and ISOs to some of the market participants, and now, Thorne Dickinson with Energy East, which is a group of regulated T&D companies in the northeast.

MR. DICKINSON: Which is what I was going to say.

MR. PERLMAN: Okay.

MR. DICKINSON: Thanks for the opportunity to speak, also.

Two of our operating companies, NYSEG and RG&E, do a significant amount of energy purchasing for the purposes of meeting our retail energy requirements in upstate New York.

And, as a result, we've been very involved in the development of credit policy in New York, and as anybody that can -- has been part of a process of developing credit policy can tell you, it's a very long and painful process, and partly because there is a lot of different market participants, each that has divergent views.

And, obviously, some market participants, regardless of how creditworthy I am, may want no collateral because that, you know, enhances their default, you know, their risk position. So, you know, I think that is one of the challenges that the ISOs face in kind of managing this policy, going forward.

I think in the whole time in which we developed the policy and worked with the ISO, there are examples of things that worked well. There are also examples where either the original approach that the ISO had laid out or the results of the market participant dialogue, and, again, getting back to this point about divergent views, led to a result that I think was less than optimal.

And this is where I think FERC can play a key role to assure that the results of those market participant dialogues, in the form of credit policy, and really, in the basic principles that are in place for that credit policy, assure that both the ISO and the market participant process results in a fair and appropriate credit policy.

And maybe just to highlight a little bit that, I think one example from our perspective, and this was talked about a couple of times so far in the conference, is, obviously, we're a load serving entity with provider of last resort responsibility, just mentioned by Alan.

Our perspective is that because we have substantial assets in the state, because we have continuing service obligations, even under the event of bankruptcy, that we're going to have a higher likelihood of payment than another counterparty that has exactly the same probability of default and has the same exact credit rating that we do.

And, from our perspective, the credit criteria that should be applied should be fair and should assure that every market participant or every market segment has appropriate risks that they bear.

That doesn't mean that all those are the same, and what we saw happen in the market participant process again, because I think these divergent views that happened, is we went from the first draft of the policy where a regulated TO that had an investment grade rating, had unsecured collateral unlimited.

That got changed to kind of a dual matrix where anybody that was a regulated TO had a certain amount of unsecured collateral, and then all other market participants.

And, again, market participants had a dialogue that that was unfair and that, you know, that everybody should have the same standard.

Our feeling, again, is that there are reasons why there are differences and why the fact of the role that we play in the state justifies that.

So I guess the point that I want to make is that there are certain things that I think FERC can do again to look over the process, to assure that there are some basic principles in place, that when these policies come up from the ISO, they can look towards them.

I think, having said that, and in the presentation I handed out, there's a few more things that I think that I point to that, in the interest of time -- and I'll let you look at those.

But, having said that, the ISO, right now, is in the process of reaching out, I think, in a much more complete way than they have since they have implemented the policy, partly from your encouragement. And, you know, we're hopeful that they listened to some of the concerns of the market participants, that we have towards kind of improving the current credit policy, and some of the problems that we think exist with that, to creating, again, a credit policy that we think is fair and efficient other all market participants.

MR. PERLMAN: Thank you.

To Billy Dixon from BP-Amoco.

MR. DIXON: Good afternoon. My name is Billy Dixon. I'm the Chief Credit Officer for BP Energy Company.

BP Energy Company is the largest marketer of natural gas in the U.S. and the fifth largest power marketer in the U.S.

I would like to thank the Commission for taking an interest in these areas regarding credit and for sponsoring this technical conference, and for taking such a strong interest in the development of efficient power markets.

I'd also like to start my comments by saying that these are my personal opinions and do not necessarily represent the opinions of my employer, BP Energy Company.

There is an often quoted saying that there's no such thing as a free lunch. Somebody always pays for the lunch, and in the case of the current structure of RTO and ISO credit requirements, the creditworthy members are paying, and unfortunately, we don't even know exactly how much the bill is.

So the problem, from BP's perspective, is that we're a very financially strong company and we're very unlikely to default, but we don't know exactly what our risk is going to be if a member defaults because the RTOs and ISOs are not even calculating exactly how much risk each particular market participant is creating when they enter the real time and day ahead markets.

We think that that's an unfair and unduly discriminatory system. We need a system and we support a system of clearing for the real time and day ahead markets because the clearing model has been shown, over a long period of time, to be a very sustainable model.

What they do in a clearing model is they calculate what the potential risk is if a default occurs, and then they require every market participant to adequately back those obligations usually with collateral of cash or letters of credit.

So I recommend that the FERC consider reconstructing the RTO and ISO markets so that you separate the financial and physical components of power transactions.

The RTOs and the ISOs came from a system where they were very good at physical electrical system reliability, so they were brought up in the old world where they controlled the grid and did a very excellent job of doing that. And I would suggest they continue that role of insuring electric system reliability.

But they are not experts at credit risk management and settlements, financial settlements. The clearinghouses and other private participants have developed systems and capabilities to adequately control the credit risk management of a particular market and to handle financial settlements.

If there were more market participants participating in these markets, there would be financial players who currently do not participate in physical markets, like hedge funds and banks. They would be interested in participating in markets where there was a good structure that was -- where they could trade in market power that was financially settled.

Increased market liquidity would lower transaction costs. Lowering transaction costs are a good benefit for consumers. Consumers ultimately benefit from lower transaction costs by receiving a lower price for the power that they have.

Unfortunately, the unique nature of power markets does create a certain problem when trying to go to a clearinghouse model, and that is, unlike other markets, the lights must always remain on. So even if someone defaults, their retail load must always get power the very next minute after their aggregator or retail electric provider or utility defaults on their obligations to pay.

So it's not a simple matter to convert to a clearinghouse type model, but what I would suggest is that what we need to go to this type of model is we need additional state regulations. We need public utility commissions from the states to promulgate regulations which provide the just and reasonable cost incurred by the clearinghouse or the provider of last resort in covering these costs related to default by a defaulting member, or borne by the consumers, and will be repaid to the clearinghouse.

In fact, I think without that type of backstop for a clearinghouse model, I don't think the clearinghouse can work because the members themselves cannot put up enough collateral to back that type of -- excuse me -- to back that type of default risk.

Another potential structure would be the load of a defaulting member would automatically revert to the RTO and the ISO upon a member's default, and then state tariffs could provide the RTO or ISO is entitled to 100% recovery of its just and reasonable cost during the transition period from the default and the transfer of the load of the customers to another solvent clearinghouse member.

This structure would prevent any disruption to affect the consumers, and would also prevent any financial loss to the remaining members of the clearinghouse.

My vision or goal would be to create a long-term and sustainable wholesale power market, and I think financial clearinghouses are needed for the real time power markets, operated by the RTOs and ISOs to achieve this result. And I think, with that, more market participants would participate in these transactions increasing liquidity, lowering costs and creating a sustainable marketplace.

And I want to thank you for the opportunity to present my personal opinions on this subject.

MR. PERLMAN: Thank you.

Let's move to Mr. Daniel Doyle of the Midwest Standalone Transmission Companies. Mr. Doyle.

MR. DOYLE: Good afternoon. Is this on? I think so. The light's on. Okay.

My name is Dan weapon Doyle. I'm Vice President, Chief Financial Officer of American Transmission Company, located in Wisconsin.

I'm here representing the Midwest Standalone Transmission Companies, which are a consortium of separate transmission only companies that operate and belong to the MISO RTO.

We are transmission only companies. We own, operate and construct transmission, and we are not market participants in the sense that we engage in energy transactions, etc.

I'd like to break my comments up into two general categories. One is sort of the broader aspect of why we're here, and I refer to the Commission's notice for this technical conference. It was basically to consider the question of whether we ought to engage in generic rulemaking around the issues of creditworthiness.

We believe that the answer to that question is, yes, and I think that's borne out by the complexity of the matter, as we've heard today, and will continue to hear through the rest of the day.

But we'd like to offer a couple of suggestions in terms of the direction of such a proceeding.

Number one, we think that the Commission's goal ought to be to come up with guidelines and parameters and general criteria for creditworthiness primarily due to the fact that we have a very, very fractionalized market at this point in time in the electric industry. We have RTOs. We have ISOs. All operate with different rules and systems.

We've got separate companies that are acting as transmission providers outside of RTOs, and it's a very complicated environment.

Layering on the complexity, and I'll be specific with MISO, we're in the process of looking at day two markets, which will totally change the market transactions that we'll be engaging in, FTRs, virtual energy. The list goes on.

Each one of those transaction classifications will bring with it its own potential creditworthiness issues.

Secondly, we are looking at, under separate document, different pricing strategies, whether it be, you know, the classic license plate, postage stamp, highway, byway, or other congestion or flow-based models.

Those pricing strategies will have an impact on the current cash flow and billing structures, and all of that ought to be considered in tandem so we don't develop a strategy that doesn't address where we're heading in the future.

We believe that the overall policy issue or the central policy issue is, quite frankly, a balance of two separate issues. In the context of developing a liquid marketplace, I think the first balance is how do we establish reasonable creditworthiness standards for individual market participants with who's going to pay for the default?

In MISO, defaults are socialized or mutualized -- choose your word. I don't think we ought to be, nor do the MSATs agree that we ought to take on a situation in that mutualization of default risk, an inordinate level of moral hazard on the greater population to take on those who may not bring adequate levels of creditworthiness to the marketplace.

The second issue is one -- I've read the comments, not word for word, of most of the participants, and there's a lot of talk about barriers to entry on the demand side.

Is creditworthiness being used as a competitive weapon, if you will?

I think that's an appropriate issue to address, and it's a necessary issue to address, but I think you have to flip the coin and look at the other side.

If you put too much credit risk on the suppliers in the equation, you can create a barrier to participation in the marketplace, and that the second balance which needs to be addressed.

Liquidity works on both sides. If you don't have enough demand and there's too much supply, you can have not enough supply and too much demand, and that question has to be dealt with, as well.

Finally, we believe that the focus ought to really be on the process of adjudicating and administering creditworthiness. In a fractionalized market, a fair, non-discriminatory process is not likely to result in equal or similar credit extension to all entities. There are going to be differences.

The goal ought to be that the processes we select result in equal and similar credit extension to market participants that have similar fact patterns. In other words, the process shouldn't create a great standard deviation out the back end. That will potentially reassure us that we got the appropriate balances on barriers to entry and sharing of moral hazard risks.

In terms of some of the specific points that I'd like to address, there's a fairly significant debate going on inside MISO back the netting of various transaction categories in terms of aggregating credit extension and collateral and security and the like. The perspective that I would like to bring is a standalone transmission company perspective.

If you commingle transmission service revenue, which for American Transmission Company, that's all we do. We sell transmission and we get that revenue.

If you commingle that revenue stream in with FDR transactions, congestion transactions, energy transactions, virtual transactions, and you end up with a system whereby collateral may not be, or creditworthiness administration may not be adequate to cover us, we end up becoming more risky by joining an RPO. And we don't think that, as a standalone transmission company, that ought to be the case.

Furthermore, the issue -- I am not a lawyer and I'm not going to play lawyer here. There is an issue that's being bantered about around bankruptcy and whether this whole netting question impacts on the ability to retain certain bankruptcy preferences for utilities in bankruptcy situations.

I've talked to several attorneys. The issue is really a breaking new ground issue, given the formation of

RTOs, etc., and I think it's one that needs to be appropriately vetted because if we can retain an access to prevent default in an avenue for recovery, we basically answer a part of the question, part of question seven, I believe. You raise how can we mitigate credit risk?

Well, keep open avenues of recovery, and you do that.

Notwithstanding the issue of increasing risk by joining an RTO for standalone transmission companies as it relates to transmission service revenue, we're taking the position, at this point, of not netting until we resolve the bankruptcy issues and figure out what we really need to do here and what way we have.

For example, in the day two market for MISO, you might have an energy transmission that creates congestion, that then gets offset by an FTR. We believe those are linked and ought to be potentially netted.

The final issue that I have for you is one of transparency. We've been working with MISO. MISO is our agent for billing and collection, and we are not able to see any of the credit administration criteria for our customers. We believe that we ought to be able to see those, and would ask the Commission to look at that issue more closely.

Thank you.

MR. PERLMAN: Thank you.

Let's move to Patrick McCullar from Delaware Municipal Electric Corporation.

MR. McCULLAR: Good afternoon, and thank you, David.

I'm Pat McCullar. I'm President of the Delaware Municipal Electric Corporation, a joint action agency serving nine municipal distribution utilities in the State of Delaware.

I also represent the PJM Public Power Coalition, which is a group of PJM members that are cooperative and municipal load serving entities.

I appreciate the opportunity to present comments to the Commissioners and the staff, as they consider appropriate standards and guidelines for industry-wide credit policies.

As an overarching statement, the cooperative and municipal load serving entities that I represent at PJM are generally satisfied with the approach PJM is taking, the credit policies for market participants.

The PJM credit policies have typically been flexible and willing to recognize the differences in corporate structures of members and market participants.

While we have, from time to time, needed to raise our concerns to PJM and point out some illogical or inequitable policies regarding municipals and cooperatives, PJM has always listened and make appropriate adjustments.

As ISOs, RTOs and jurisdictional transmission providers consider their ongoing credit policies, they should cooperatively seek to implement consistent and predictable rules, and they must recognize and provide for the diversity and corporate forms of the organizations that participate in their wholesale electric and transmission service markets.

Rated cooperatives and municipal organizations typically can be credit scored directly from the current and ongoing ratings agency reports in much the same manner as investor owned utilities. However, smaller, non-rated municipals and cooperatives should be specifically credit scored according to their unique financial attributes, and not forced into the for profit corporate rating model where they do not belong.

While it may not be necessary for the Commission to promulgate industry-wide rules, the Commission should take steps to address any unreasonable differences among the practices adopted by various ISOs and RTOs or that the Division Chief is making or specific treatment of unreasonable practices.

I would like to suggest some concepts to consider. Socialization of credit risk is not in the interest of financially sound market participants. Credit policies should be crafted to protect financially sound, low-risk market participants from defaults caused by entities that are not financially able to meet their obligations in the market.

Two, accelerated market settlements are not universally needed, but may be a good alternative to collateral postings that may be required for some entities who cannot otherwise meet their credit requirements.

Optional accelerated settlements for low-rated entities increase the protections for all market participants, while not unduly increasing the operational and cash flow burdens of high-rated entities.

Three, security and collateral requirements should be evaluated on a net obligation basis, meaning charges and revenues in different markets operated by the same service provider are netted against each other.

It makes little sense to require security to be provided for the gross amount of congestion charges billed by an ISO when those congestion charges will be largely offset by ISO payments to the same customer for financial transmission rights.

Similarly, transmission access charges should be offset by credits for customer owned facilities.

And, four, it is critical that service providers recognize the cost impact of any credit enhancement rules and balance cost against the effect.

While credit enhancements are absolutely needed for market participants that do not exhibit creditworthiness to protect service providers and other market participants, universal application of these credit enhancements to all market participants will only inhibit the liquidity of competitive markets.

Thank you for this opportunity to make comments.

MR. PERLMAN: Thank you.

With that, let's move to our next speaker, Francis Pullaro of Strategic Energy.

MR. PULLARO: Good afternoon. My name is Francis Pullaro. I represent Strategic Energy. It's a load serving entity, serving load at retail in nine states.

I would like to thank you for the opportunity to discuss solutions that will eliminate unnecessary collateral costs companies like mine face in being in RTOs or ISOs.

My presentation today serves to inform you of one cost reducing and risk reducing proposal offered by Strategic Energy for the New York market.

After years of discussion by market participants at the New York independent system operator, the NYISO still cannot settle flexible internal bilateral energy contracts, using less costly and less risky net settlement employed in its adjacent markets.

In PJM, we know the software system as E schedules. Unlike PJM, NYISO's scheduling system prevents market participants from using a flexible internal bilateral in which the buyer receives the contracted price for energy and the supplier is free to pay the market price for energy or to self supply.

Instead, the NYISO sees LSCs as meeting its entire load obligation through the day ahead market. NYISO calculates then the LSC's collateral requirements on the day it had purchases, but without using schedules to subtract or net the bilateral transactions.

Excuse me. The NYISO's inability to not settle firm, liquidated damages contracts or firm LD causes LSCs to post collateral with the NYISO, even if they have a counterparty willing to accept the LSC's load obligation.

Currently, the only contracts accepted by the NYISO for settlement are unit specific contracts, which are risky and inflexible compared to a firm LD, because it has a single unit as a resource.

A firm LD contract allows an LSC to purchase power from a portfolio of resources. The NYISO's nonacceptance of a physical, bilateral for settlement purposes forces a risk averse ESCO, as we're known in NYISO, to use a contract price -- excuse me -- to use a contract for differences, or CFD, to substitute the contract price for the spot market price.

Under net settlement, like in PJM, less cash will move through the NYISO, and the market participants will all realize a lowering of risk. Additionally, net settlement provides some incentives for LSCs to purchase long-term bilateral contracts from wholesale suppliers in order to lower their collateral costs.

Long-term contracting is a stated goal of the Commission. It's designed to increase market liquidity, provide safeguards against short-term market power, and sends the right price signals to generators who are looking to build.

As of the spring of 2004, the inability of the NYISO to perform net settlement of bilateral contracts resulted in Strategic Energy's cost of collateral for wholesale purchasers to serve one megalo hour of load in New York, being almost four times greater than the next nearest market, and that's NEPOOL.

Strategic Energy has collateral in New York in an amount almost eight times greater than any other market where it provides power supply. In all other markets, net settlement enables counterparties to inform the system operator of all their physical bilateral schedules. These other system operators use schedules for financial settlement.

The lack of net settlement in an ISO or RTO needlessly increases costs. Strategic Energy recommends standardization to include a requirement that an ISO or RTO perform net settlement.

And that concludes my opening remarks. Thank you.

MR. PERLMAN: Thank you.

Let's move to our last speaker, Scott Strauss, for the Massachusetts Municipal Wholesale Electric Company.

MR. STRAUSS: That's correct. Good afternoon. I'm here today on behalf of MMWEC and its 25 municipally owned electric system members, who want to thank the Commission for the opportunity to participate in today's conference and present their perspective on creditworthiness issues.

MMWEC is involved in developing New England's financial assurance policies through its participation in the New England power pool, and as of today, final approval of any changes to the region's financial assurance requirements would require a modification to the NEPOOL open access transmission tariff, and that requires the support of a super majority of the NEPOOL participants.

There's been discussion today of the painful nature of stakeholder processes, and we believe that these processes, however arduous, are critical.

NEPOOL is broadly representative of industry sectors and super majority support is generally, though not always, indicative of workability and reasonableness.

With respect to the NEPOOL arrangements, there are certain key elements I'd like to point out.

First, we believe the arrangements are transparent and objective. The financial assurance policy for NEPOOL members is an attachment to the NEPOOL OATT, and details the obligations of municipal and non-municipal entities.

The policy is written in straightforward terms, and its implementation by an independent entity, the ISO, is not dependent upon discretion. The intent is that a market participant be able to review the policy and determine its obligations promptly and with certainty.

Second, the NEPOOL arrangements are flexible and reflect the creditworthiness of municipal entities. Municipally owned entities has been mentioned a couple of times today, generally have strong and stable credit ratings that are more positive than many of their non-municipal counterparts.

When analysts look at the overall credit risks posed by the New England markets, the more positive municipal ratings help to counterbalance the less positive ratings of non-municipal participants, and the financial assurance policies reflect this reality.

Both municipal and non-municipal market participants with investment grade credit ratings are relieved of the obligation to post collateral. Relatively smaller municipally owned systems that do not have credit ratings are able, through arrangements with MMWEC, to meet the credit ratings requirement and avoid the collateral postings.

Non-municipal entities have credit limits set on the basis of a percentage of their net tangible worth, and as Bob Ludlow alluded to, the percentage is based upon the strength of an entity's credit ratings.

But, by contrast, the credit limits imposed upon municipal entities are not tied to ratings and percentages.

Third, the NEPOOL arrangements have been adjusted over time to respond to experience in the marketplace. Changes have been made in response to the bankruptcies of certain participants and the decisions of others to exit the marketplace entirely.

Most recently, and as Bob described, weekly billing, which has been Commission approved, will go into effect in two days. The premise of it is that by selling power on credit over a shorter period of time, the amount of collateral required from the participants will be less and collective exposure in the event of a default will be reduced.

As municipal entities do not generally need to post collateral, weekly billing benefits them to the extent that the administrative burdens associated with this implementation are outweighed by the benefits of a limit on exposure in the event of a default.

Fourth, we believe the NEPOOL arrangements are workable. MMWAC has seen no evidence that worthy entities have been kept out of the NEPOOL markets because of the financial assurance requirements. This may reflect that policy development occurs through the NEPOOL stakeholder process in which participants who are interested in less stringent credit requirements must find common ground with those who seek more strict policies and near complete assurance of payment in every instance.

MMWAC understands that the Commission is here considering standardizing credit practices across regions. To the extent the Commission does so, it should ensure that its efforts do not require dismantling the work that has been done in New England to develop flexible creditworthiness policies.

In the order approving weekly billing in New England, and in other orders approving creditworthiness arrangements in PJM in New York, the Commission noted that it would give due deference to stakeholder approved credit and collateral requirements, though it must, of course, still decide if a given proposal is just and reasonable. We ask that the same considerations apply to any actions taken in this proceeding.

A possible approach could be for the Commission to set minimum creditworthiness standards or conceptual guidelines, but provide each region the direction to develop and propose additional standards, consistent with the guidelines.

To the extent this approach is pursued, we ask that the Commission's guidelines not prohibit New England from continuing to implement its existing financial assurance policies, and in addition, we ask that any such guidelines or specific standards should take into account the credit risks posed by municipal entities, and the fact that they are likely to be substantially less than those posed by their non-municipal counterparts.

Thank you.

MR. PERLMAN: Thank you.

I'll start with this question: It seems to me, from what I've heard and what I understand to be the issues in archeolized markets, that, as Mr. Dixon pointed out, there is a concern about mutualized default risk. So the first thing that you ought to do is two that you can do to reduce the amount of loss there would be in the event of a default.

So should the Commission -- I guess should the Commission propose, suggest, advise, require, whatever, some kind of process where you do things like everybody reduces the settlement period, everybody tries to implement netting, recognizing bankruptcy issues, assuming that can be overcome, looks at things like the firm LD, physical contract offset for the otherwise obligation for power, to reduce, in a responsible way, the overall risk that would come from a default, and act to require the ISOs to make that a priority, doing those things a priority?

Is that something that would make sense or something the Commission should consider?

MR. McCULLAR: I think all of those bear close examination and consideration.

The one concept I would like the Commission to keep in mind, however, is as they consider how to do this, please be sure to target the requirements on those who are causing the problem, rather than broadsweepingly apply the policies to every market participants, because many of the market participants come to the market already prepared, credit-wise, and we really need to protect those participants who are doing their part by requiring those who come to the market not ready, credit-wise, to provide adequate collateral or other assurances to prevent harm to the other market participants.

MR. PERLMAN: Let me ask you a question and then if you all could -- anyone who would like to answer my question. But just to be sure, just before we lose you -- I'm doing the next panel -- I've heard a lot about people considering clearing options, and my understanding of how a clearing option would be implemented in an RTO is there would be potentially daily margining and things like no reliance on credit, but a requirement for there to be posting of collateral rather than margining -- excuse me -- rather than relying on credit.

So a municipal entity that had an exposure that came about through some sort of market spike or something could conceivably be margined for its market to market exposure in a clearing market.

Is that something that you would have issues with, or is that something that you think would be a good way to potentially move forward in implementing clearing in these markets?

MR. McCULLAR: I think, as a tool to reduce transactional risk, it's great. However, my bigger concern is that to create a clearing market would invite in other market participants, who could potentially increase credit risk and increase volatility in the markets. So I think that has to be looked at with a wide angle lens, and not just as a narrow solution to this immediate problem we're discussing today.

MR. PERLMAN: Thank you.

Is there anyone else --

MR. DAVIS: Also, as to clearing, as one of the other speakers observed, I think there is no such thing as a free lunch, and so we are, very generally, talking about the introduction into an ISO or RTO market of another party, a third party, performing a service.

There will be, inevitably and appropriately, costs that result from the performance of that service, and so, in assessing the benefits that might accrue from the introduction of this third-party service, the ISO, RTO and its market participants also have to look at the costs.

And, very generally, I mean are the market participants, as a whole, any ISO, and, ultimately, the Commission, going to be able to conclude that the community is better off, in the aggregate sense, after the introduction of the clearing function by the new third party than it was before?

MR. PERLMAN: Thank you, but I just, with my earlier question, would you agree that the Commission should be promoting shorter settlement periods, and netting whatever is possible to reduce credit exposure in RTO markets?

MR. DAVIS: Well, on that score, I would say that, again, as one of the other speakers noted, I think many of us would agree that certain very basic principles or guidelines or parameters or minimum might be appropriate, but that as you move away from general principles into the details of how many days for this function, how many dollars for that measurement, which particular reporting service to use, and the rest of it, it is increasingly difficult to see obvious opportunities for improvement because each of the ISOs and RTOs already administers a market with a number of products and a cross-section of market participants.

Together, they have a profile and a set of perspectives about their appetite, collectively and individually, for risk, and those judgments, through the governance process, are reflected in what's in place now.

And they are similar, in many respects, but they differ from ISO to ISO, just as you would expect from different markets to different markets in the regions, and I think those differences have to be carefully respected.

MR. MILLER: I think it's certainly appropriate for the Commission to suggest that the RTOs and the ISOs look at, for example, accelerated settlement and look at every item that has the potential for reducing collateral requirements and reducing default risk, because the two are kind of tied together.

Whether requiring them, I think, is something that's going to be awfully difficult for the Commission to do under the circumstances because, you know, you rely on the stakeholder process to vet whether or not, you know, this is truly and, you know, meets a requirement that can stand up to the public interest.

And in requiring, you know, an accelerated settlement, I can make a case for that sort of thing.

What is better is, as we look at things, such as third-party clearing solutions, where, because of the thresholds that we have to meet in terms of membership acceptance, you know, we're going to have to demonstrate to the members if, for example, some form of accelerated settlement or some form of third-party settlement is going to be, once we factor in all the costs and everything like that, is in the best interest.

I mean take for us, as an example, I mean we're actually going through the due diligence right now where we hope to, at the conclusion of that, calculate it, and if we can demonstrate that it's a net benefit to our members, then we'll take it to our members.

But we won't take it to our members unless we've done the analysis first. So I think suggesting those sorts of things is certainly appropriate.

MR. DICKINSON: And, I guess, just to chime in on that, I think we have a similar perspective related to, you know, to settlement type issues, and I think the concern that we have at the New York ISO is that, already, there is challenges related to the current billing and settlement process.

And I guess we're concerned that if there's an obligation that they move to a shorter period of time, can they improve the process that they already have, I think, the problems with?

So, that's one of the concerns we have associated with that.

I think the other is just that if we're going to move in that direction, that it be an option so that, you know, obviously, we -- I think everybody's concern is related to their cost of credit risk, both from the perspective collateral and from their exposure to mutualized market defaults.

And, to the degree that a shortened settlement period, as long as we can, you know, clean up the billing and settlement process, and that be an option to a company, I think that's good. But to the degree that it's a forced requirement that may, actually, cause higher working capital costs, we might be more efficiently able to do it a different way.

I think that's a better approach.

MR. PERLMAN: Let me just ask you to follow up on that.

If there was no -- if it was all optional and nobody did anything and there was a default, then it would be appropriate for the Commission, I would think, to say, "Let the socialized recovery of that default take place, and let the chips fall where they may.

"We're really not interested in you coming here and complaining about it, because we're trying to get ahead of that issue, and that's one of the reasons we're discussing it.

"But if you're going to accept the risk inherent in having the status quo, and you have socialized the fall risk, then please tell me."

You would be -- you would accept the ramifications of the default that as it would hit you on a pro rata share.

MR. DICKINSON: Well, I guess I'm not understanding what you're saying because I would understand the -- under two approaches where somebody has an option where they can either post collateral based on, you know, a weekly settlement versus a monthly settlement, that the exposure calculation -- in my mind, the way the ISO should approach that is that risk should be equally collateralized.

So, from our perspective as being a separate party, there should be no additional risk from that. It's just how that counterparty collateralizes the risk.

I think that's what you're saying. We don't see the risk the counterparty would have would change the risk to us as being a potential exposure to that default.

MR. DICKINSON: Well, I think you're right, in theory, but I guess in the event that something happened in the meantime or there was less than perfect credit analysis, the longer the period of exposure, the bigger the default risk, you know, that it's all -- we heard this morning it was an art and a science, to the degree you're not a good artist.

MR. PERLMAN: Yeah, and I think the same is true in the effect of billing and settlement process. So, I mean, if, you know, you're going to push that degree, I think there has to be some accountability to the ISOs to make sure that that's efficient.

MR. DICKINSON: But the question for you is, if nothing was done, are you comfortable with the default risk you currently bear?

MR. PERLMAN: I think, as a positive statement, the ISO has moved towards a degree where the transmission owners shared, by themselves, all of the default risk of the ISO to the credit policy.

Now, where it's more mutualized across a number of parties, and there are improved collateral requirements amongst the parties. So we're definitely happier with the system that we have.

We think there's areas where they can be improved, and I think to the degree that those things can't be worked out through the market participant process, that's where I think we look to you to say, "Hey, there's things that can be improved and made more efficient here."

MR. DIXON: I would just challenge -- I know the ISOs and RTOs have made a lot of improvements in the credit policies and the standards and the application of them to collateral in recent time, but I would challenge that they still really don't know what their true risk is to their market participants and what the mutualized default risk that they're going to subject each market participant to on a mutualized basis really is.

And, you know, to answer the question about the cost of clearing, I definitely think the cost of clearing needs to be weighed against the market liquidity, the increased market liquidity and lower transaction costs that all stakeholders, including consumers, would benefit from.

You know, I don't think that that particular challenge should be shut down. I think it should be taken up.

I think the cost of clearing itself needs to be weighed against and calculated against the increased benefit to consumers that would result from additional market liquidity, and the lowering of volatility, because when you have more market participants, you actually lower volatility in markets, and you don't increase it, so --

MR. MILLER: I'd mean to prolong your question, but I do think that's the key thing, when it comes to the RTOs. I mean, to the extent that our members have sort of said, you know, "We're comfortable with the default risk because we don't want to accelerate the settlement," you know, or decrease the settlement timeframe, you know, they have spoken on that.

On the other hand, I think, just as people who are concerned with the market, per se, the bigger issue that is out there, I think, is the fact that there is not as much liquidity out in the bilateral market.

And what a clearing solution hopefully could do by including the RTO markets in that is facilitate liquidity in the bilateral markets so that you don't have so much in the short-term markets. So then you get an "Uh-oh" in terms of volatility in the short-term markets, and that has unhappy consequences across the spectrum, both economically, politically and otherwise, and it's just bad for the competitive market.

MR. DIXON: Yeah. There has been, as Scott pointed out earlier, in the PJM market, there has been a shift in short-spot transactions from 15% to 40%, and the reason why is because there, in my opinion, is not enough margining going on in the spot markets.

If they were charging the real cost of default risk to the market participants, they would force them to go back into the bilateral market and deal with the more stringent, and probably more appropriate, credit constraints that exist right now in the bilateral market?

MR. PERLMAN: Anybody else want to take the question of reducing the credit risk through shortening settlement periods or netting?

MR. YOHO: Alan Yoho, the California ISO.

Again, we have a statement that says basically that we think the Commission is the appropriate entity to balance the needs of the net buyers and the net sellers, and we would look for time specifications.

MR. McCULLAR: I guess -- pardon me. Thank you.

I just want to make one quick comment.

In PJM, we have kicked this accelerated settlement process around quite a bit, and I think where we have landed, as a group, is to say accelerated settlements adds cost to everybody, and while it theoretically reduces default risk, we're not sure it's worth the price.

What we have settled on is to make it an option for those entities who do not otherwise qualify under credit scoring, and would be required to post a cash collateral. They could optionally have a shorter settlement period for just those people to reduce their cash collateralization.

That increases the protections to all the members, without unduly adding cost to all the members.

MR. CHOO: Just in a general belief, or at least the clearing proponents have suggested that if you can clear across multiple markets and have a larger population of people participate, you will get even greater benefits from the multilateral netting.

Are there any opinions here that would support or maybe deflect from, you know, having kind of a common netting or netting arrangement across markets?

MR. PERLMAN: Go ahead.

MR. MILLER: When you say -- I want to just ask to clarify. When you say, "across markets," are you saying across --

MR. CHOO: Across the ISO, for example.

MR. MILLER: -- RTO markets --

MR. CHOO: Yeah, and --

MR. MILLER: -- versus commodities, like fuel and fuel markets and things like that?

MR. CHOO: Yeah. Across ITO markets and potentially no -- getting the bilateral transactions involved, as well.

MR. MILLER: Well, one of our members -- one of our more prominent members filed comments that said they would love to get to a place where they get a shorter settlement timeframe, but they would also like to get to the point where you can net say PJM and MISO transactions and that sort of thing.

And we'd like to get to that. The problem is that I don't know how you can net across RTO markets without there being a third party involved.

And so you sort of get back to the third party clearinghouse solution in order to facilitate that sort of thing.

And under some scenarios, you'd also be able to -- you would do the, not only net the RTO transactions, spot market transactions, but also the OTC and, conceivably, even the fuel positions, too.

And, you know, I mean from a theoretical standpoint, that sounds like that would be, you know, just dandy. But, you know, it's one of those sorts of things, before we take it to the members, we've got to quantify the results.

MR. LUDLOW: After we got through weekly billing, we started on looking at this clearinghouse model concept, and have met with NECC, as well NYNEX. And it's clear to us that there is a big benefit that can be gained by having this cross market, cross commodity ability of netting those positions in order to reduce the capital that's tied up right now.

The other benefit is that the whole mutualization issue goes away, so that's a tremendous benefit to adopting the clearinghouse model through this third party.

MR. DIXON: I definitely think cross commodity netting would be a huge benefit for the industry. From a merchant -- you know, BP is not a merchant generator.

From a merchant generator point of view, buying gas and selling power, when you net both those obligations and wipe out any collateral requirements that you have, it's almost a free way to reduce capital use in the market, and I think that that would be --

You know, anything that increases efficiency, capital efficiency, is a good thing, and netting is one of the best ways to increase capital efficiency effectively on almost a free basis.

MR. DAVIS: Netting, broadly defined, and covering lots of products and everything, has to, I'll say, work in the context of the bankruptcy laws because it's bankruptcy scenarios about which the creditors are ultimately concerned.

This is an issue that I can flag better than I can discuss, but you can have an entity, a bankrupt entity, that's in or going through Chapter 11, they're still there in the physical sense, but the creditors are concerned about the recovery of the so-called "pre-petition obligations" against the pre-petition resources of the debtor, of the bankrupt debtor.

So when you say when any proposal is made to consolidate or net across an entity or a family of entities or multiple products, that net very demanding additional subject needs to be carefully considered.

MR. TIGER: To pick up, I guess, on Mr. Davis' relation to the bankruptcy code, are any of the other panelists interested in commenting on Mr. Dixon's attempts to describe one of the ways of dealing with the polar obligations, because it seems that that's one of the big problems with clearing in the power context. You can't turn the lights off, and that takes away a lot of the benefits that you do get in purely financial markets, and I guess, with some look at whether you think that your state regulators and your various ISOs would be comfortable with making the kind of changes that Mr. Dixon thinks would be useful?

MR. MILLER: That is something I don't think that we've even raised with our state commissions. I mean if we go this route of the third-party clearing model, it would be enough for them to accept the concept that there are benefits there.

I think, at least in the short term, and I agree with Billy on this issue, that would be the nice solution.

What may be left that is mutualized in a third-party clearing situation is the polar obligation, and, you know, given, you know, some of the obligations that, you know, are inherent, that goes with the polar, that may not be that big a deal.

MR. LUDLOW: Under the current mutualization schemes, it's not a big issue for the state commission, so it's something that's going to have to be raised in a formal setting in order to get things to move on it.

MR. LENTINI: I have a question. I know NISO allows customers to prepay, and I was wondering if the other -- I'm not too sure if the other ISOs, RTOs allow it, because it seems like it would reduce collateral requirements further, and because the payment is made even before the service is provided?

And I was wondering if the other ISOs have explored that, or is it --

MR. MILLER: When you say, "prepay," meaning to prepay now so that their credit exposure is lower?

MR. LENTINI: Right. Prepay for service and --

MR. MILLER: Yeah. I mean we know that New York has done that, and we're actually looking into that, are we not?

Yeah. We are looking into that at the moment.

MR. DICKINSON: I mean I just think that one thing that should be clarified is that, essentially, it is collateral, so to a certain perspective, you evaluate the best way to meet collateral requirements, and in a lot of cases, providing a prepayment is more expensive than a letter of credit, depending on the type of entity or risk.

MR. PERLMAN: Let me ask another clearing question.

As I understand how clearing would work, effectively, the clearing entity would have to set the credit policies and some of the parameters of the arrangements that would take place, so they could then hedge out their risk and make sure that they were sitting in the middle of something that was stable and wasn't going to change and was understood to them.

Given what you said about your stakeholder process, do you think your stakeholder process is willing to turn that over to the clearing entity for them to make those judgments, and then put in place a set of credit standards that they could then subsequently clear?

MR. DAVIS: Let me start by saying this, that that's one of the aspects that I was thinking of earlier when I said that, if after the discussions and later due diligence, we got to the point in New York of going to the stakeholders in a formal fashion and it were implemented, that would have to represent a collective decision that people were net better off than they were.

We don't know yet from the discussions we've had of what particular issues in that regard might be raised, but we, like the other ISOs, we have a lot of market participants, a lot of different products and services that are available, and, of course, we also have an extensive governance system.

All of that's designed to protect rights and allow for discussions and debates and the rest of it.

That third-party service, it seems to us, if it's to be effective in the true sense of that term, has to fit over what is in place as a result of extensive discussions, a lot of work over the years, in a way that, in fact, is consistent and doesn't require throwing out great chunks of useful procedures and services and models in order to force fit the operation of the markets into the service offered by the third-party clearinghouse.

If they can be, in that sense, impact neutral, I think we would be further along in the discussions than if they require a lot of modifications and giving up on products and giving up on governance.

MR. DOYLE: I think, from a clearinghouse perspective, and I agree with most of what Mr. Dixon presented, we need to be careful. We've got creditworthiness issues today. If we decide to go to a clearinghouse, we still have creditworthiness issues. They still have to be resolved, and the questions that we're facing today remain before us.

You know, I've heard some comments on, "Well, we need to have a clearinghouse to get rid of the barrier entry question."

Well, I'm not trying to be cynical or a smart guy, but we put together RTOs and ISOs because they were independent, and now we're going to have an independent organization monitoring the independent organization.

And, you know, I think the point I'd like to make is, as we move forward, the clearinghouse is not going to make these issues go away. They still have to be vetted. They still have to be resolved, and determinations still have to be made about who gets access to the market that the clearinghouse administers.

So I'd just like to keep that before us.

MR. DIXON: Yeah. I don't want to suggest that a clearinghouse model is really any radically different than the RTO ISO model today. It's just a much more robust system.

You know, in my opinion, the RTOs and the ISOs have been trying to recreate something that already exists in the financial markets, and that's a robust credit risk management and financial settlement system.

I'm just merely pointing out that if they adopted -- they, the RTOs, adopted that system or that service, whether it's provided by a third-party or provided by the RTO itself, that the market itself would achieve, in my opinion, much greater benefits from liquidity and more market participation, lower transaction costs and a sustainable environment.

MR. DOYLE: Yeah. I think the issue there is, in my opening remarks, I raised the two balances. One is managing the moral hazard between individual market participant creditworthiness evaluation and the mutualization of default, and then how you keep access on both, for both market participants and suppliers, so that you get the liquidity.

I think it probably boils down is the cost of going to a clearinghouse, do you get a dramatic or meaningful increase in those balances or a better balance by going to a clearinghouse than you would get if you didn't?

I think that's how I would look at it.

MR. PERLMAN: Okay. Any other questions?

MR. HENSLEY: Yeah. I'd like to ask Mr. Miller a clarifying question.

I heard you mention "net benefits," and I'm just wondering, when you or any of the ISOs add products or services, how do you determine something is in a net benefit for all the participants?

Is it a vote? Is it the costs?

MR. MILLER: It depends on the product that's offered. I mean in the case of, for example, FTR auctions, that was a new product that we offered. That had more to do with it was a determination on the staff's part that we are subjected to review by the stakeholders that it would help people manage congestion risks.

When it comes to something that's a little more difficult and out of the realm of the physical markets, net benefits is going to be more of a rigorous quantitative analysis that we'll do independently first, you know, with an outside party.

And then, if it looks -- and we'll pass that by our Board, and if it looks good to take to stakeholders, then we'll subject it to another review by the stakeholders.

MR. HENSLEY: So, usually, you initiate that then? I mean if they come to you and --

MR. MILLER: Well, frequently, in terms of products, it's sometimes done at the suggestion of stakeholders. I mean people would like to see thus and such.

And we have heard from some stakeholders that would like to see a shortened settlement cycle. They would like to see a clearinghouse solution.

I mean it's rare when we sort of do something completely whole cloth on around.

MR. PERLMAN: Okay. Well, I'd like to thank this panel, and we'll take a short break, come back around 2:30 and reconvene. Thank you.

(Short recess)

MR. PERLMAN: Okay. Let's reconvene, find our panelists for the fourth panel.

(Pause)

MR. PERLMAN: Okay. Please find your seats so we can get started, and I'd like to tell this panel we had all that conversation about clearing on the last panel just to set you up, so I hope you appreciate it.

On this panel, we're going to be talking about things like clearing and other solutions, and improvements that can be made with respect to credit issues in electricity markets. And, without more ado, let's start with, as we've done before, as noted in the agenda, with Peter Axilrod, who's going to tell us about how some things work in the equity markets, and maybe we can take some tips from there.

MR. AXILROD: Yeah. I want to thank the Commission for having us, especially since I can guarantee that I know much less about energy than anybody else in this room. But, hopefully, some of the observations and some of the experiences we've had will be useful.

I have a formal statement, but what I'd like to do, really, is just to focus on the main point a little bit informally.

DTCC is the world's largest clearing infrastructure organization, and for those of you who don't know, we clear and settle all of the domestic cash market trading in the U.S., stocks, bonds, everything.

We also provide post-trade processing services for OTC derivatives worldwide. It's a new business, but we are probably the dominant provider there, worldwide.

One of the things that people noted about the U.S. financial markets or the U.S. securities market is that the central counterparty clearing arrangement, which has been in place for about 30 years, is one where DTCC actually guarantees the settlement of all securities contracts. And, because of that, the market participants don't really worry about counterparty risks. They just trade and assume we'll make good on settlement, and that has really increased the size and efficiency of the U.S. markets.

And, consequently, people ask, "Well, why can't we put a solution like that for other markets that seem to be constrained by credit concerns and concerns about the creditworthiness of counterparties?"

And it's a logical question, but I think the answer may not be, at least from our point of view, as clear cut, or sailing might not be as smooth as people would like it to be.

Many of the reasons were mentioned at the last panel, and I won't repeat those, who's going to be the provider of last resort, how you guarantee actual physical delivery of energy, that sort of thing.

Another person in the last panel suggested that there's some degree of moral hazard traded by full credit intermediation. It lets anybody play. People don't worry about the risks they are bringing into the system too much.

I wanted to mention just one other thing. Folks had mentioned bankruptcy concerns, and this is actually important to regulators, as well.

In the securities market, market participants, in general, and actually, registered clearing corporations, in particular, have very preferred positions relative to the bankruptcy law.

It is absolutely clear that we can terminate and liquidate all of the securities contracts with a financially distressed counterparty whenever we want to, and that's important to both banking and securities regulators that we have this right, and, indeed, banking and securities regulators worldwide have suggested that, without this right, central clearing corporations may be inherently unsafe and unsound.

I don't know whether I fully agree with that, but this sort of the received wisdom among banking and securities regulators worldwide.

Well, in the energy markets, as was mentioned in the last panel, there are good public policy reasons not to permit creditors of financially distressed energy providers to do whatever they want, to liquidate contracts, to close them out, essentially, to put them out of business.

There are a lot of good reasons to make sure that whatever actions are taken with respect to financially distressed providers, give the regulators an ability to keep the lights on.

So those sorts of public policy issues, there's sort of a public policy conflict there between what's in the interest of providing energy and what banking and securities regulators have traditionally thought was important to give central counterparties all the legal rights they need to manage risk effectively.

So I'm just throwing that out there as yet another thing that needs to be resolved. I'm not saying that it can't be resolved, but the road is long.

What I was going to suggest, and what I'd really like to mention is that there might be a middle way. People talk about bilateral worlds and bilateral trading, and then you go from there to a full clearing, the traditional clearing corporation, where what the clearing entity does is step in the middle of all trades and actually guarantee the physical settlement of the trades.

And before going into this, which has been a little bit foreshadowed by the previous panel, it's worth mentioning that what's happened in the energy markets, at least from what I've been told, is that participants in the energy markets are adopting the same expedient that participants in the OTC derivatives markets have been using for years, collateral.

If I enter into a contract with somebody and the market value of the contract moves, one party provides collateral to the other to cover the current value in the market to market difference, and that mitigates my risk if my counterparty defaults or can't complete the contract for some reason.

That's been a very good expedient in the OTC financial derivatives world because the participants in those markets have had ready access to collateral. That's their business. They got lots of cash. They've got lots of securities. It's easy for them to receive and give out collateral.

My understanding is that that's not necessarily the case for participants in the energy market, especially for energy providers, so that if you're using collateralization as a way to mitigate credit risk, you're still credit restrained because, either you don't have the collateral. You have to go out and purchase a letter of credit, which is expensive, and sometimes a letter of credit provider itself requires other collateral, so even if you can afford to pay, it may be that they have credit limits to you that you can't put up enough collateral to satisfy them.

So, why not take an approach where you take an interim step before full clearing?

Well, what you try to do is make the collateralization efficient and reduce significantly the amount of collateral that firms have to put up to participate in the energy markets.

And, again, this is just a thought at this point, although I will mention that we have at DTCC worked through all of the bankruptcy issues associated with this, admittedly in the context of OTC financial derivatives.

But before I came down here, I asked our outstanding bankruptcy counsel to see -- to check if the same reasoning would apply for energy contracts, and after some amount of billing, they said, "Yes, the same reasoning would apply."

And, essentially, the idea is relatively straightforward. Let's start out by netting collateral on an overall basis. You don't have to net contracts. You don't have to net obligations, but if a participant in the netting markets is owed collateral from a number of participants and owes collateral to a number of participants, regardless of the market, regardless of the contract, why not just have them post one net collateral amount?

In order to make this work, you need a central provider that has a preferred regulatory status. It has to be a registered clearing organization under either CFTC or the SEC.

They would collect the collateral on a multilaterally net basis, and they would assure all the participants that you're just as secure as you would have been, if not more secure as you would have been, had you collected and paid out all the collateral on a bilateral basis.

So, I'd like to basically stop with that suggestion and then let this go to the rest of the panel, but I did want to point out that although we know virtually nothing about energy, DTCC knows a lot about collateralization and collateral netting, and would be a useful partner in the energy -- in following up this sort of a solution.

Among other things are the relevant subsidiaries are AAA rated. We have triple redundancy in all of our systems because the banking and securities regulators have required it, and we also have the highest level of safety and security in our systems, reviewed both by banking and securities regulators, and we have real time settlement and collateral processing.

MR. PERLMAN: Thank you.

Before we move on, since you are very familiar with this whole concept, are you aware of any clearing organizations that deal with this issue of residual physical delivery risk after liquidation?

MR. AXILROD: I know that, in Germany, there is a system. I was at a conference in Europe where the Germans claim to have a system up and running that actually guarantees physical delivery of energy contracts.

They have a provider of last resort.

I sat through the presentation. I can't tell you any more than that about how it works.

MR. PERLMAN: Well, it's something. Thank you.

Let's move to Mary Duhig, and Mary is with Aon

Trade Credit, and I know that we heard from at least ISO New England that they have bought, I guess, credit insurance to guarantee some of their default risk, and hopefully, we can learn more from Mary. Thank you.

MS. DUHIG: Well, thank you for the invitation.

Aon is a global corporation, focusing on risk management, primarily through our brokerage insurance and reinsurance operations.

Aon Trade Credit is a global practice group that focuses on mitigating the credit risk for our clients.

Credit insurance can assist the companies in effectively managing credit risk by protecting the company from the damages associated with credit loss.

Unlike derivatives, credit insurance can be structured for sizeable amounts, smaller exposures, rated entities and unrated entities. The coverage is for bankruptcy and late payments.

Determining the optimal level of risk transfer will vary by organization, depending upon their company's objectives. Each company needs to measure the effective catastrophic loss and what accumulative multiple retained losses would have on the balance sheet.

Aon structured policies for the ISOs, regulated and deregulated energy companies. Each policy that we have structured has been manuscripted for the client's specific needs.

Certain clients are looking to mitigate certain sector risks. Other clients are looking to mitigate their top exposures, and other clients want us to transfer the risk of their entire portfolio. So we have structured policies in all those scenarios to meet their needs.

Pricing depends upon the credit quality of the pool, so depending upon how many rated, unrated entities are in the pool will impact credit quality.

There is a competitive insurance market in the U.S. that has insured these credit risks. Approximately ten insurance companies actively write credit coverage, with their credit ratings ranging from AAA to A.

Those are my comments. Thank you.

MR. PERLMAN: I wonder if you can give us a few more minutes, explaining how you structured the policies for the ISOs.

MS. DUHIG: Sure. What we do is we talk to the clients as to what their level of risk they want to retain on their balance sheet.

Certain clients have requested that we have zero deductibles, and they structured the policy accordingly, like one client wanted to have all the coops insured.

So we took that pool of coops, which was $100,000,000 in annual revenue, and we insured them with a zero deductible, and the pricing was $150,000.

Another ISO was comfortable with having a deductible per buyer, so instead of having a flat deductible for the whole policy, they were comfortable with their certain level of collateral, and above that, the insurance company attached at a higher catastrophic level.

Another company wanted to insure a pool of risk, other top exposures, and they had a flat deductible. They didn't care which buyer defaulted. It was one deductible for the whole pool.

So those are the different examples we've done.

MR. PERLMAN: One other question.

We've been told, on occasion, that the credit insurance for the ISO, the credit risk, has been perceived as expensive, and there's been some resistance to buying it on that score.

Does that sound correct to you?

MS. DUHIG: We were talking about it earlier at lunch, that it's a very cost effective means of transfer, especially when you compare it to derivatives.

If you have, as an example on the coops, they were a selective risk, just the coops, you know, a hundred million dollars in exposure, and it was $150,000.

You figure these are unrated entities with balance sheets that aren't, you know, stellar. So I think it's a very effective, you know, means of risk mitigation.

And on the other pools, the pricing was even lower because of the fact there were deductibles. So it depends on the appetite of risk that the client wants to retain on their balance sheet, and the amount they're willing to transfer.

MR. PERLMAN: Thank you. Let's go to Mr. John Flory from the North American Credit and Clearing Corporation.

MR. FLORY: Thank you very much for your time and the opportunity to appear today. I am John Flory, the President of NACCC.

I'd like to give you a little background on us and then address a few key issues that have been raised in this conference.

I think you'll find that my underlying theme will be the importance of bridging the physical and the financial markets to ensure that physical reliability and financial reliability reinforce each other.

Since electricity is the most perishable of commodities, effective delivery by a transmission owner, ISO, RTO is absolutely critical for the success of a commercial transaction, and hence, it's appropriate that we have a conference like this to look at the impacts of the credit policies of the delivery entities on the overall marketplace.

Our comments today will be based upon some conversations we've had over the last year for a number of market participants, ISO and RTOs, and trying to create a credit and clearing solution that fits the physical energy market and bridges into the financial energy market.

And we've had a number of market participants tell us that they see this as helping to fit the physical energy market better than some other options, and yet providing a comparable level of accountability oversight and transparency, as you would see in other liquid commodity and securities markets.

Just as a little bit of background of NACCC, our mission is to promote capital and market efficiency in energy markets primarily through a clearing solution that integrates physical and financial energy markets.

In achieving that, we plan to become a central counterparty to buyers and sellers as a derivatives clearing organization under the supervision of the CFTC.

We are moving ourselves on both the RTO, ISO and the OTC markets to insure that we can efficiently manage credit risk from transaction through delivery. We will provide credit and clearing services that, after novation and substantial netting across both the spot and the forward markets, essentially operate to transfer energy market risks to the Wall Street entities, including insurance that can properly assume and manage the risk at a lower relative cost.

We have worked with some Chicago commodity attorneys to develop a patent pending cash flow contract that allows us to net, spot and forward contracts with maximum bankruptcy protection.

We are using proven strategic suppliers, such as the Intercontinental Exchange, and the Clearing Corporation of Chicago.

Just to let you know, ICE is the largest electronic energy marketplace, and we would use them, not for their trade matching function, but they also have a confirmation service in which they receive trades from any broker, and that would become the way for us to receive over-the-counter transactions.

We also work with the Clearing Corp., formerly BOTCC, who's been clearing commodity transactions for 75 years, and would be the clearing engine behind us.

We believe that in bridging the physical and financial energy markets is absolutely critical to having a sustainable, mature power market. We've seen the NordPool experience in which they have become probably the most successful power market in the world, where they have transaction volumes at eight times the underlying physical, and we believe its their ability to reduce the seams between the physical and the financial markets, between the cash and the forward markets, that's allowed them to achieve that level of volumes.

And we note that when they introduced the clearing of over-the-counter contracts and netting that against spot pool transactions is a time when they had a real acceleration in the volume and net marketplace.

It appears that FERC's staff also sees advantages of netting across the market transactions, and some of the comments in the earlier sections today, one of the presentations that we've seen Lee-Ken Choo give a number of times shows a marketplace in which you can net, spot and forward power and gas, as well as financials, and we also believe that that will enhance capital efficiency and market liquidity.

The CCRO has also suggested that multilateral clearing is one of the best ways for advancing the industry in terms of credit risk mitigation, improving liquidity and capital adequacy, and we agree with that, particularly if we can figure out ways to bridge the physical and financial markets in that clearing process.

There's about eight different items that I wish to highlight the differences between the physical and financial worlds I think are important in terms of bridging.

Most of them, I'm just going to list, but there's two of them I want to just give a little background on.

And the first is, I call it the difference between the physical liquidity and the physical and financial players.

As most of you know, people like ICE and other platforms have had a significant increase in their transaction volumes lately, but a lot of that has been due to the introduction of new financial players, hedge funds and banks and stuff, yet a number of the physical players, those that produce or manage electricity, like we heard from Calpine today, are continually constrained, and in some cases, dropping out.

Recently, in the desk, there was one person observed that the market will continue to be less efficient as physical participants scale back or exit.

We believe that a clearing solution that works for physical participants, as well as financial participants, is important over the long term so that new infrastructure will continue to be built and maintain physical reliability, and we're not just looking at trading opportunities during high reserves time periods.

One of the other things -- the second major point I wanted to make is actually several in the previous panel alluded to, and that is improving the efficiencies of collateral margin use by trying to break down some of the isolated credit silos people of credit posted with RTOs, people of credit have posted for gas that goes to delivery, for power that goes to delivery, margin posted with NYMEX and financial transactions.

So the ability to bring together a net of those different things will significantly enhance a lot of the trade volumes.

The other things, I'll just list, and we can talk about more later, if you'd like.

The risk transfer between differences and credit policies is noted at PJM. So they had an increase of 15 to 40% of the volumes because people saw those cheaper credit in the PJM marketplace, and so flowed out of the bilateral market.

Another issue is bankruptcy protection of netting, spot versus forward.

Most bankruptcy code does not protect trade, commodity trades that go to delivery within two days, so there's an issue there.

One of the things we're looking at is use of physical collateral, physical positions, and we believe that there is a way to give credit to people of physical assets and from the cash flows that follow from that.

We've seen some clearinghouses like the Cotton

Exchange and the National Gas Exchange have actually used the commodity in some rather accessible storage as an alternative to cash collateral and we see the FERC and the gas credit noper as being sensitive to that.

So we see that also as possible in the power area.

One of the things that was handed out in a previous discussion is the understanding of credit risk. We find some people who -- particularly people who come from the banking industry used the following Basel. They have an understanding of what potential loss and economic capital is, and their understanding of the value and of managing that risk is much higher than often those who don't come from a comparable background.

One of the other things that was mentioned earlier was the difference in cash settlement cycles. We've got the financial traders used to doing settlements, while most of the physical traders are doing monthly settlements, and I can tell you, there's been no small discussion around, as you have experienced at your accelerated settlement discussion, as the best way to make those converge.

And then, lastly, credit limits. Most conventional clearinghouses have no unsecured credit limits, and our participants must, essentially, post cash equivalent margin or collateral to cover all their value at risk, and we've seen that most physical participants like -- who have a higher credit ratings, believe they deserve some sort of unsecured credit limit.

And so we believe that there is a way to provide that within a clearinghouse type structure, as long as there is some sort of alternative backstop, and we believe that's possible.

So, in summary, we believe and agree with the panelists before us and that there are ways of making some of the advantages of other clearinghouse capital efficiencies and brought to bear in enhancing market liquidity.

We're working to try to create some of the solutions that bridge the differences of gaps between the physical and financial markets.

We see increasing support from a number of market participants and we look forward to working with them and others, including FERC and the CFTC, in refining what the right solution is.

Thank you very much.

MR. PERLMAN: Thank you.

Let's move to Toby -- I'm sorry. I'll try my best, Hsieh -- from Standard and Poors, and I know Standard and Poors has developed a new refined approach to doing credit evaluation, particularly of merchant electricity participants, so, Toby.

MR. HSIEH: Yes. Thanks for having me here. My name is Toby Hsieh. I'm a Director at Standard and Poors.

What we have developed recently is the liquidity analysis of energy treating companies, and I'm here mostly to just kind of update you guys on what we've been trying to do, and maybe as you guys come up with solutions and ideas, that you keep in mind some of the things, how we look at things.

And the overall idea of what we're trying to do is we want to focus a lot on the liquidity requirement of, you know, energy companies. I mean it has been a really big risk.

We spend a lot of time on it, and what we're trying to do is try to quantify this risk and set some kind of a transparent, simple, reasonable guideline so that companies keep adequate liquidity.

Now, there are a lot of ways that you can reduce liquidity, and we're all supportive of a lower liquidity requirements for energy companies. But, you know, our job is kind of to call it like it is and make sure that we set the requirement in a way that's consistent with the rating of companies.

And one of the ways that we have approached this is by setting up two ratios, and each ratio address certain kind of event.

I think the first ratio is called a credit event adequacy ratio, and that mainly address the liquidity requirement of a company when they're downgraded below the investment grade.

And the other ratio is called ancillary, or market and credit event liquidity adequacy, and that one, the goal is to kind of figure out what companies the liquidity situation would be, if there was a liquidity event in which the company is downgraded severely below the investment grade, plus some hit by a market move.

And, right now, we have it set at 30% market price move, and with those, we compare the liquidity requirements from market to market exposures, account receivable and payable, static margin, which, you know, the transmission organization would be having a lot of say so over a metastatic margin that companies post, and contractual collateral requirements. There are triggers, basically, and commercial paper.

And in our analysis, we give through benefit of netting. In other words, you have legal rights to net. We go ahead and assume that you have the ability to net, and then we're reducing the liquidity requirements.

I understand that a lot of companies tell us that, well, a certain kind of netting is not legal, that, from our perspective, we're more interested in the ongoing liquidity requirement of a company than there is certain events which some kind of parties will go bankrupt, and hope there is that, you know, you find a small number of your counterparties will go bankrupt, and that liquidity demand is not as much as you, yourself, when downgraded below the investment grade, you have to post collateral to all your counterparties.

And from a liquidities perspective, what we consider as available primary liquidity, there's cash and committed letter of credit and credit lines. And we compare those two numbers, and the goal here is to, for generally -- I mean as a very general guideline, what we're looking for is investment grade companies should have enough liquidity to cover a market, plus a credit event, and, you know, in that more technical term, it would be, you know, one times ancillary or market and credit liquidity adequacy.

And we've been sending out this survey to companies so we can calculate this ratio, and in August, we are expecting companies to give their survey back to us so we can analyze them and try to come up with some kind of conclusion on the adequacy of liquidity of energy companies.

And we're also working with the CCRO in coming up with more reasonable guidelines. You know, I think it's generally very helpful that industry players work with us to give us an idea of their opinions and to work together to make sure that, you know, whatever we come up with is constructive for everyone involved.

And the last thing I want to say is just that, you know, I've been looking at this liquidity issue for quite a while, and I looked at a lot of clearing platforms and clearing corporations. And the issue, so far, is that it's -- you know, this clearing issue is huge. It's very big and it's very hard to deal with.

And, you know, the reason that it's so hard is that there is a certain amount of risk that's really, really hard to mitigate, and, you know, from our perspective, a lot of times, the risk are moved around, but they don't go away.

And so in our analysis, we'll be chasing down the risk and make sure that to figure out where the risk end up, and not just that it has been somehow mitigated and put away somewhere else. And, you know, our job is track down the risk and make sure that we understand where the risk end up.

And that's really it for my comments.

MR. PERLMAN: Thank you. Let me just ask one follow-up question.

Do you have any expectations as to what the effect of getting the information back on liquidity will have on the ratings of the people that you're looking at, not, you know, globally, or would you expect the trend to be such that they may be looking for a down movement as a result of seeing this?

MR. HSIEH: Well, I really don't expect, you know, major downgrades, even in downgrades. I mean some of the bigger companies, whether a big trading operation, we have been in discussion with them for a long time, and we kind of know where they're going to come out.

And some of them have actually went out and got a lot more liquidity, you know, sometimes twice.

And I think liquidity, right now, is relatively cheap to get or accessible. I'd want to say cheap, because it's not cheap.

And so I don't really expect, you know, major reactions.

MR. PERLMAN: Thank you.

Let's move to Bob Levin of the New York Mercantile Exchange. Bob?

MR. LEVIN: Hi. On behalf of NYMEX and myself, thank you very much for inviting me to speak today.

I know the FERC staff and many of the participants have some familiarity with NYMEX, but let me just go over a few things about the organization and then get to some of your questions.

NYMEX is the world's largest energy marketplace. In that regard, we do manage a substantial level of credit.

Conservatively speaking, an estimate from last year, $20,000,000 in face value.

We manage credit through several different models, but most of our transactions have been commodity futures and options, but just so that -- you know, we do also offer OTC derivatives and the clearing of that, and I expect very competently that we will be expanding the cash market transactions as well.

To be competitive and probably to be solvent, NYMEX has needed to constantly innovate, and over the past two years, we believe that our innovations have been an essential piece of preserving competition and liquidity in the gas and electricity markets.

Instead of focusing more on electricity right now, we have provided credit intermediation to support different types of transactions. Those that are monthly, weeklies, dailies. We've had physical delivery. We've had cash settled. We've based it on the RTO markets and we've based our cash settlement on RTO markets. We've done it a day ahead, and we've done it real time, both of those.

We've also based cash settlement on published surveys.

We have on exchange transactions, off exchange transactions, into the trade pits, electronic and broker.

In the electricity markets, the ones that we're currently serving of the NY ISOs, as well as AG&J, PJM, Mid-Columbia, North Path, 15 in California, South Path, 15, California and Palo Verde. That's not news, but it's probably worth publicly announcing that we are back in California after a long absence, and we're quite pleased about that.

I'm just going to sort of go through some of the questions. I won't try to repeat them, to save a little time, but you're number six, and you've been looking at --

I think it's important that the ISO and the RTO markets, since they largely are balancing markets and ancillary service, which is I think the markets are referring to, I'm a little concerned that it may be the use of the term, "liquidity." I'm not sure why in the hell that applies to the spot market. I don't think FERC should be orienting its policy to get liquidity in that part of the market.

The important element there is actually to keep the lights on. Getting rid of barriers to entry, that seems right, and reductions in competition always is good things to look at.

But that's most from our perspective. It's not that we think they should be illiquid, but that would be the least of your problems.

We're happy to report, also, it does seem these things are lengthy, now that there has been, as John indicated, and I don't know that it's just newcomers, but we've seen tremendous growth and liquidity in the monthlies, in the longer term than that market. Us and others have seen that.

Shortly, the settlement period would certainly benefit reducing credit risk. I mean how can it not, and, David, you articulated it quite well earlier.

The real improvements, though, is in introducing the discipline and benefits of the competitive credit market to the ISO and RTO markets, and credit should be extended and price. They're based on risk and creditors' ability, which they compete in to manage that risk.

The current, you know, mutualized risk of participants and members certainly doesn't provide that. The effect that's such a short question, that's probably how can the mutualized default risk and ISOs and RTOs be reduced?

Among other things, you replace it, not the ISOs and the RTOs, but how they're managing the credit.

As one of the ISOs said, we've been talking with them and so talk about our strategic partnership with Excenture, and just briefly describe that. It would provide a daily flow of funds, competitive collateral management.

It assigns credit based on risk, with offsets in collateral for offsets in risk, and netting the payments. Of course, we already do that in our market substantially. We were already doing that in the electricity markets, by the way.

It allows participants to customize their flow of payments with their chosen credit managers, so if they're monthly, they can work that out with their credit manager, in spite of how we operate the system.

And I think it's also important to note that, even if the ISO and the RTO haven't figured out how to do daily flows, and we can understand that, we still believe it can be introduced to some extent, and should be, because that will mitigate risk.

Last, but not least, I think it very importantly connects to establish clearing and banking network that, as I said, we already managed 20 trillion dollars of face value last year in energy markets. It's already connected to the nation's banking system. It's up and running, and it's already managing electricity transactions.

There's two types of barriers of entry in this market, and I think somebody mentioned, in the last panel, that -- I think it's one thing to look at what the ISOs and the RTOs have as their own natural barriers, and that's how they manage it, and that's one of the things you don't regulate on the credit side.

I'll let others speak if they think of how the ISOs have done that is causing it, but I'm not going to identify it. I think that's really for the customers of that, but I'm glad to talk about why I think our system or our ideas would not have high barriers to entry.

As far as credit standards, I mean I don't say this in a disrespectful way, but those that offer credit certainly have their criteria, and it should apply to standards.

And it's very possible that some of the things you've identified will make it different in what people charge for credit.

We had the benefit of some informal meeting with FERC staff. I honestly don't remember what it was. I think it was last year, and they had a number of you come here. We talked about providing of last resort risk, and people have already said that's a problem.

I think the clearing helps isolate it, but nobody can reasonably be expected to carry that risk, you know, an indeterminate length of time, without being paid for it. And I think it's just time, and somebody, I think, has said it in the last panel. I mean it's really probably more of a state issue. Maybe FERC can provide some leadership on it. Clearing doesn't resolve it.

Thirteen and 14. Since you've created the ISOs and RTOs, this is one area -- I mean, usually, NYMEX is hesitant to suggest that the FERC jump in and put new standards or requirements in, and we probably still are. But you did create ISOs and RTOs, and you have an interest in them, and we respect that and understand it.

The problem is that, certainly putting a franchise in, what if the franchise doesn't do it best or right, or doesn't fit in with what everybody else wants to do.

I think, actually, FERC has had at least a partial hand, maybe a significant partial hand, in previous franchises that did not work out well in electricity, and I'm not coming here to talk so much about that, but I wouldn't want to repeat that, and I think you don't want to recreate something like that, and it's always in the best of intentions.

All the things you have in 15 are solutions, whether they're the best or not, but they certainly are all potential solutions.

And benefit costs, we did some analysis with Excenture, looking at it, and it was normalized to $100,000,000 of collateral under existing kind of a ISO models.

And we saw the potential benefits there, looking at reductions in collateral, I guess in interest costs there, but also, reductions in potential payments from default, and that's just expected.

Expected isn't really the issue. It's the 50th percentile -- well, that's normally distributed, but around the 50th percentile isn't so much of the expected. It's much more what's a major risk that you -- to not expect it. It's always the unexpected, but that's less than 10%, and that's where it gets hard.

And I'd say we saw it for that $100,000,000 of collateral, $15,000,000 to $30,000,000 of benefits.

I look forward to the discussion, and once again, thank you for inviting me.

MR. PERLMAN: Thank you. Well, let me ask you one clarifying question.

You talk about daily flows. Does that mean daily settlement?

MR. LEVIN: Yeah. From within our system, absolutely, and it's definitely in -- I mean they have daily markets at daily prices. You can do that to some extent day ahead very easily, real time, less easily, and you're weighing percent information.

And there would be some truing up afterwards, but you can get some of it, and there are some estimated within the systems, and we just feel confident that it's better to do some of that as soon as you can, because it helps manage the risk better.

MR. PERLMAN: Thank you.

MR. PERLMAN: -- than Michael Schubiger. I understand that Michael's company is involved in financial markets and is very comfortable in dealing with those markets and the credit there but has had some experiences in RTO markets that are maybe less favorable from his perspective.

So I'll turn it over to Michael to tell us his perspective on these issues.

MR. SCHUBIGER: Okay, thank you. I appreciate the Commission's time and inviting us here.

My name is Mike Schubiger. I'm CEO of SESCO Enterprises. We're an active physical and financial trader in the New England markets, the New York markets, the PJM markets. We're approved to do business in IMO. And when MISO starts up in the spring, we'll be active in those markets as well.

I'm here today on behalf of the financial marketer SESCO Enterprises, Epic Merchant Energy, and Black Oak Energy.

What I wanted to discuss today was the virtual bidding and the process in the credit obstacles that we've encountered in the ISO and RPO markets. In case no one here understands the virtual policy and how it works -- but virtual bidders, they facilitate the transfer of risk from a generator or a load to an entity that's capitalized and experienced to manage this risk.

Each of these entities, whether gen load or virtual bidders, can be speculating or hedging at any time in these markets. So it's not just virtual bidders that speculate in these markets.

What we look for is price signals sent by the ISO's and between the ISO's. And we look for divergent points and convergent points, because, you know, we believe that a convergent market indicates whether a market's robust and competitive.

And that convergence reduces daily price volatility, which are good things for the market. With the ISO and RTO markets expanding, we've noticed that there's many points in each of the ISO's where convergence has not occurred as efficiently as one might expect, having these markets open to everybody.

And we believe the reasons for that failed price convergence is the owner's credit policies, both on the financial and physical side. Having an owner's credit policy does not allow you to deploy capital across the footprint as efficiently as you might like to, depending upon the price signals that are sent.

We've experienced excessive holding periods of collateral. And we've even experienced hair cuts of cash as high as 15 percent.

There's additional fees when we transact as well. There are bid cost fees. There are capital charges to these over-collateralized positions. There's balancing reserves. And then there's a hurdle rate that we need to meet to provide that value to the market place.

We've experienced that because of these increased costs in the credit policy and bid charges that there's quite -- quite often there are several points that we just can't bid because there are $8 balancing reserves or $10 balancing reserves. The profitability just isn't there to provide that value.

We've also noticed that the ISO's use a 97 percentile proxy price with arbitrary factors instead of using a portfolio approach. And I'll explain that later in an example. And also that on top of the 97 percentile there's multipliers of 2, 2.6, 6, 7, 50, as high as 60.

And those multipliers are already added to a 97 percentile event. So you have an event that is very far out on the curb and then you're adding multiplies to it.

You know, we believe that the ISO's should manage their collateral real time. It will result in the appropriate levels of collateral and the excess collateral would be reinvested into the market to provide efficiency and liquidity.

And example of a policy is if we had 100 megawatts to offer into the market for the whole day and we selected a proxy price of 50 -- and that would be the 97 percentile number -- with a factor of 2 we would have to post $240,000 before we even got to bid this.

And this would just be to offer this. It wouldn't be to clear it. It would just be to offer into the market -- $240,000.

If we did a highly correlated point, meaning we sold one point and we bought another point and they were highly correlated, it would be $480,000 just to cover a spread, which could be $2 to $3 of risk. So $480,000 and those are real numbers.

The collateral requirement bears no correlation to the risk brought to the market, meaning whether you offer $90 or $50 or $10, the credit requirement remains the same, but the risk to the market is very different.

So if a market can go as high as $100 and you offer $90 and another participant offers $50 and another participant offer $10, the ISO's view that that as the same risk being brought to the pool when clearly it's not.

Some of the credit policy and efficiencies we've seen -- as I've stated, 1 megawatt bid at $1 is much less risk than 1 megawatt bid at $100. All ISO's consider these risks as equal.

There's no consideration for experience factors.

If a participant's in the market for several months, several years and they're not a rated entity, there's no experience factors on how they've managed their risk. There's no visits to the office. What is your engine system? We see how you're providing value. And we see your balance sheet. And there's no communication at that level.

ISO's have real time pricing data but fail to use this data to proactively manage a participant's credit. There's, you know, data out there in five-second increments and five-minute increments. And there's data available the next day. That data is really not used.

There's no synergies between the system. Everything goes to a settlement system instead of developing a credit system.

The IT system upgrades will enhance the overall competitive nature of the market. We've noticed that these multiples seem to be for blind spots. The ISO's have systems where they can't see data for several days. Bilaterally that would never work. In a bilateral market no one could really function that way.

If we were dealing with a bilateral relationship and just allowing three days or four days or five days of risk to build up without managing it, that would be unacceptable.

But the ISO uses these blind spots. And it's ineffective in providing value to the market. We've encountered the stakeholder process as being very ineffective -- the individual company agendas versus market agendas.

We've seen economists. We've seen people stand up and talk about the market efficiencies and come with solutions to market efficiencies. But when it comes time for the vote, it has voted based upon, you know, the individual company agenda and not what's best for the market.

And as I stated, there's really no synergies between the credit market and settlement system. When you add costs to financial players, you know, they need to cover those hoarder rates.

So in turn what happens is they could raise their bid prices, which would be a more aggressive bid into the market. That more aggressive bid in the market has no correlation because, as I stated earlier, they would use $50 to assess that risk no matter what I bid. If I bid $1, $100, or $200, they would use $50 to manage that.

Some of the efficiencies that we see as the shorter settlement period and netting across all products -- and we've also even talked about factoring of the ISO activity. I think it was brought up earlier that if you buy from one ISO and you sell to another ISO physical product and you realized a profit, you may have to post a significant amount of collateral in tune of, you know, 50 or 60 days' worth of that risk in one of the ISO's.

And in turn when you have a receivable coming from another ISO, if you could factor that receivable and post that as security against the payment to the other ISO, that would work and you would not have to tie this capital up for an extensive period of time.

We agree with the clearinghouse concept, the centralization of risk, the consistency in requirements, the expertise that they have in the markets, the improved market liquidity that will come from a clearing house, the leveraging of the pool collateral, which is the financial market model. It's been discussed several times. It can reduce cash flow requirements and lower collateral requirements.

Our analysis shows that the costs are far cheaper to go with the clearinghouse mechanism than it is the cost of capital to support these onerous credit policies.

In summary, I'd like to say that, you know, virtual bidders facilitate market efficiencies by providing liquidity and highly volatile markets. There is no free ride.

Virtual bidders pay their share by facilitating and managing risk within the ISO footprint. They perform a service that benefits all participants.

The current use of proxy prices and multipliers are arbitrary and result in grossly excessive credit requirements as I've detailed in this presentation. The portfolio approach is much better.

ISO's and RTO's do not evaluate the actual credit risk that an entity imposes on the market and the membership. Participants cannot provide value to the entire system. They have to pick and choose because they have to over-collateralize the risk that they're truly bringing to the market. So they can't take that excessive collateral and deploy it across the system.

Settlement date is available on a 5-minute basis --

MR. PERLMAN: Excuse me, Mr. -- can I cut you short there --

MR. SCHUBIGER: Sure.

MR. PERLMAN: -- so we can get to some questions.

MR. SCHUBINGER: Of course.

MR. PERLMAN: So if you have any more comments to make, we'll find time for it.

I want to ask Mr. Flory a question. You were talking about earlier that your proposal would be to novate the RTO transactions to some other -- to a derivative I take it? Could you explain that further.

MR. FLORY: Yes. What we are talking about doing is novating the receivables and payables in an RTO into what we call a cashflow contract, which then allows us the ability to net that against forward transactions with bankruptcy protection.

MR. PERLMAN: You would take the -- you would have sort of a credit derivative or a derivative that reflects the receivable that the RTO has and that would then get cleared in your clearinghouse against other transactions in some way.

MR. FLORY: Against -- yeah, that you can come up with the cashflow contracting equivalents for forward contracts and for spot transactions. And essentially all transactions eventually end up as AR and AP. And so there's -- when you reduce them to that lowest common denominator and there's a derivative that we created around that that will allow us a netting for -- with bankruptcy protection.

MR. PERLMAN: And then you said that you would take this reduced credit risk that would exist by the netting and the bankruptcy protection and then you would add to it. So for the credit insurance you are --

MR. FLORY: Then there's several different ways we are looking at managing that. We've had some financial institutions who have said that they were essentially willing to provide lines of credit to cover the exposure of some of the larger participants.

And they were looking at using either insurance themselves or credit derivatives themselves to back up that line of credit as part of their risk-management practices.

We've -- for a large entity's line of credit backed up by our own credit insurance policies, so there's a mix. And we're looking at this in some of our, you know, previous -- and some of our discussions revealed that it's a mix of practices that allows us to fine-tune the way of mitigating such transferring the risk.

MR. PERLMAN: But I guess your derivative contract would have to mirror the obligations that are embedded in the RTO tariff for the physical --

MR. FLORY: At least from a payments perspective.

MR. PERLMAN: Would you have any problem allowing, as we heard earlier today, the participation process and the overall members committees to continue to do their work -- and if they wanted to change that, change that -- or would you need to have some stability in that contract in order for your model to work.

MR. FLORY: I'm not going to pretend to fully answer that question. I'll just say that in our initial review so far the credit requirements that we would see under this approach have come in below the credit requirements of most of the RTO's and ISO's so that people usually stay the same or better from where they are now.

And so that it -- we believe that's at least a good starting point, you know. And then once you get that starting point, we'll see where things go.

MS. PERL: This question is for Mr. Flory. I am very skeptical that you can do press product netting in anything that involves electricity just because (a) they're almost 2,200 markets a month in the one -- in the day-ahead market and one in one's own. Say, NYISO.

There are 10 zones in NYISO. That's just NYISO. And there's volatility. I think the more you're in this -- electricity, the less you understand it.

So number one, how could you get me to a comfort level that I could accept -- cross product netting and electricity. I have no problem say -- gas versus unleaded gasoline, for instance.

And (b) would a more limited netting, say within just the energy market, just within the virtuals, confer approximately the same benefits?

MR. FLORY: Okay, we have -- well, first off, Bob, don't you currently have people in your market who are already -- Bob Levin. People already in NYMEX or have some power contracts that they're netting against gas contracts?

MR. LEVIN: You're handing the mic to me?

MR. FLORY: I'm just giving you as an example for a starting point, yes.

MR. LEVIN: Well, that was nice of John.

(Laughter.)

MR. FLORY: I'll take it back in a minute.

MR. LEVIN: I probably share some skepticism regarding some of their model myself. But as I did say, we've had netting already, both in electricity and its other commodities.

But there's a lot of volatility there. It is not foregone. I certainly don't think zone J has anywhere near the relationship with PJM West, which is, you know, the -- and PJM -- I shouldn't say PJM West, but anyways, the western hub there -- as does zone A. But there is a relationship.

And there certainly is -- when you combine some of our basic contracts -- Henry and the PJM or the New York ISO's, the combination. And then sometimes the break is anywhere from a third in collateral to as much as 60 percent. We've managed with combinations.

But that's all risk-based. And we evaluate that every day. And we take risk very seriously.

MR. FLORY: See, you need to look at what the correlations in the prices are and that determines essentially what these price credits are. And that's what Bob was referring to in terms of the level of netting of one point versus another.

MS. PERL: All right, Bob, when you said you are listening -- a third to about 60 percent of the collateral, is that how much -- how much of the transactions does that represent on say a megawatt million cubic feet basis? And is that represented on a daily basis?

MR. LEVIN: Oh, I'm sorry. What? In our futures markets, okay, which is a little differently than we would envision doing it for the cash market in electricity, but the same general principles, but the applications have to be different.

But in answer to your question, because I think it's very relevant, nonetheless, since the principle will hold over, we have certain collateral amounts for each type of futures contract. And if you add those positions up independently, you'll get a number. It will add up to, say, $10,000 -- just to make the map easy. And that would be for a pretty significant face value of contracts.

What I'm saying is that anywhere from a third of that, say $3,000, we would return because we would say that we see offset and the underlying risk to about two-thirds, 65 percent. We've had about a 65 percent credit.

I apologize it does not apply today. And Mike might know. Don't hit me in the kidneys or something. But say the Henry Hub contract or the regular natural gas contract and the Transco zone 6 minus that basis, plus say zone J in New York. Now, there is a nice offset. You can buy the gas, take it up to Transco, and, you know, sell it. I mean buy the electricity. And it all offsets.

But you do have to be on the right side of that transaction. But that's the sort of thing that has had, say, 65 percent off.

MR. PERLMAN: I have another question for Mr. Flory. Just so I understand because we had discussion about settlement periods and you noted that.

If you had a 30-day settlement period and then you have your credit derivative that you're waiting settle, and then there's a lot of -- if you have -- you see some credit degradation to your -- to the people who are representing that derivative, underlying it, and there is maybe some volatility or price spike or something like that, would you then margin them again settlement at the end of the 30 days? Is that how this would work?

MR. FLORY: We would do daily monitoring of people's positions and also both their market positions in terms of by themselves and also in terms of their credit positions -- if there's been things that have happened that would change their credit exposures.

It's a lot easier to do a daily monitoring of that for the larger people from whom there's the credit and default swap markets.

But we would monitor their positions and as we see their position starting to exceed whatever their credit limit is, then margin would be required at that point just like it is today in both the RTO and the OTC markets.

MR. PERLMAN: But let's say they are a municipality and they were rated. In an RTO I don't think they would ever be margined. And let's assume they were short, they weren't covered, and all of a sudden the market price went very high and they saw big exposure.

Would you be able to margin them on your own, based upon your own criteria? Is that how this would work?

MR. FLORY: We'd have a -- well, first off, there are -- most of the RTO's, ISO's have credit limits that they apply to all their participants. For most of the public members it's rarely that's a binding constraint -- that they would hit those credit limits.

So it hasn't been an issue that's been a big trigger in most cases. There are some smaller folks for whom they aren't rated and haven't been convinced seeing the

RTO's or ISO's and so they would have to post collateral.

And so we see initially, starting with that umbrella credit policy comparable to an ISO --

MR. PERLMAN: But you would mirror their credit policy and to the degree that they can margin, you would parallel margin --

MR. FLORY: For a starting point that would be the umbrella with which we would work. And then we'd have refinements within that to lower that as we refine the policies, yes.

MR. PERLMAN: Sebastian, do you have a question?

MR. TIGER: A question for Toby in regards to -- maybe you could talk in a more detail about your process with the CCRO and sort of adoption of or reticence about the adoption of the ratios and the dissemination of those among market participants, because it struck me that some of the morning conversation about, you know, I'm getting transparency in the OATT conversation as to sort of what risk management processes there were in companies and what the exposure was -- that that was occurring between the transmission provider and the potential customer.

I mean, it wasn't necessarily all that transparent to the customer what was ultimately going to come out. Perhaps your ratio would provide some of that transparency. Is that sort of the idea behind the product and what's the industry's likely or current response to the product coming out?

MR. HSIEH: Yeah, I think that's got really good points. I mean our rating is not just, you know, in a few letters. It's the rationale and other things we provide.

And one of the things we'd like to provide a way to help counterparties and RTO's and ISO's -- whoever, to be able to assess counterparty credits. And to you guys I'm sure even more important than long-term credit rating is the short-term ability of the counterparties to pay. And you know, I hope that the liquidity ratio -- well, if we do it in a simple and transparent way and everyone can appreciate what goes into it, that you'd be able to perhaps consider that as part of your credit analysis.

And we certainly do at our shop -- to think that's part of our credit analysis. I mean, it's very important that, you know, nobody focus on one number and come out with a conclusion.

And we also try to emphasize that as we talk to potential users and with companies that, you know, we don't see it that way and they shouldn't see it that way.

And as far as working with the CCRO -- and by the way, it's not just people -- companies within the CCRO. We also reach out to companies beyond CCRO. We talked about all of them.

And, you know, we have actually had some companies who thought our criteria was kind of lenient. And some companies think, you know, they are too stringent. And we have companies simply think that, you know, it doesn't apply to them or is not ideal in terms of, you know, how we are approaching it.

So, you know, like all issues we're working through the issues and try to get it to a point where everyone can get more comfortable with what we're trying to do. And, you know, at the end of the day, you know, this is a big, important issue -- that if we can come to some kind of solution, it would I think really benefit everyone involved.

MR. TIGER: I have a question for Mr. Axilrod, perhaps on the history of the organization. It seems like people don't want to necessarily recognize the costs of mutualized credit risk until it hits. Does that apply to sort of the growth of DTCC at all in terms of the history of financial organizations?

You know, what was what got the ball rolling with, you know, clearing in the financial sector and --

MR. AXILROD: Actually it's only one of our subsidiaries where concerns over credit risk was the driving factor. And that was Emerging Markets Clearing Corporation. For obvious reasons.

What got DTCC going historically was just the paperwork crisis of the 60s, where the stock exchange had to shut down Wednesdays in order for the paperwork to catch up with trading.

So that actually provoked Congress to call for a national clearance and settlement system, where all this stuff would be automated. All the transactions would be netted and settled on a net basis.

So that's really what got it going. A consequence of all this netting through a central counterparty structure is that DTCC or clearing subsidiaries and predecessor companies actually became the counterparty to all trades, the buyer to every seller and the seller to every buyer. Therefore, if somebody failed, since we were legally the counterparty, we had to settle their transactions. And what that did is forced us then to come up with the whole risk management protocol to collect margin every day. And I actually did that for 10 years at the clearing subsidiary, NSCC.

And we kept in pretty close touch with our members. We are user owned and user governed and operate on a not-for-profit basis.

And we had a membership and risk committee of our board of directors, which is comprised of risk professionals and operations professionals from the committee. And since it was their money that was ultimately at risk, if we blew it, if we didn't collect enough margin from out participants and didn't respond quickly enough to financially distressed participants, all of our margining procedures and surveillance methods had to be approved by this committee.

And they were acutely aware of their exposure if we got it wrong. And in fact at one point we didn't get it quite right. Fortunately we warned people beforehand. And this was a hole in our system and they didn't do anything about it. And the industry lost some money.

And that caused people to, you know, provide more resources to get it right and to get it right in the future.

MR. CHOO: Yeah. Maybe as a follow-up, you said the DTCC's owner used -- yeah, is not for the benefit of the owners. Who are the owners? Are they dealers? Are they all the market participants?

MR. AXILROD: It's every -- every market participant has the right to buy shares in proportion to the use of the clearing services. There are only five or six that have the right to buy enough shares to assure themselves a board position. So they do.

And there are the usual suspects -- the three large clearing banks, the Bank of New York, State Street, and Chase. In addition I think Merrill Lynch does enough business to assure itself the right to own shares.

The rest of the participants can buy shares or not. They don't get dividends. Some like to buy shares just to support the company. And the shares that are not bought by participants will be bought by the New York stock exchange.

Nevertheless, the New York stock exchange only has one seat on our board. And if they ever, I think, exercise their right to give themselves more than one seat, the SEC would step in and say you can't do it.

So that's basically how it works. And we're represented by all market participants. So it includes banks; it includes broker dealers; it includes mutual funds; it includes alternative investment managers as well.

MR. PERLMAN: I have a request for Ms. Duhig. We heard earlier today that there was some question as to whether the ISO's could really identify their mutualized default risk. But if you're going to write insurance for them, you must feel that you can.

Do you feel that is a complicated task? And what sort of things do you do to get a handle on the scope of that risk?

MS. DUHIG: It can be a complicated task because not only do you have the delivered piece, you also have the mark-to-market piece. A lot of the carriers will focus on putting in place coverage for the delivered piece.

We normally recommend to clients to look at the top 75 days of exposure. So in this industry it would be the summer months to look at your peak exposures and either purchase credit limits based upon those intended exposures.

The mark-to-market is a little bit more challenging. And a lot of the insurance companies have lost a lot of money on that piece. And the amount of coverage available for that isn't as great.

MR. PERLMAN: Thank you. Do we have any other questions?

(Pause.)

COMMISSIONER KELLIHER: I just wanted to ask Mr. Schubiger -- I think you were nearly done with your statement and I just wanted to see if there were any other comments you wanted to make.

MR. SCHUBIGER: Thank you. I appreciate that. I just wanted to state that, you know, we strongly encourage the Commission to hold the multi-day workshop on credit-related issues. This is needed to understand the details, mechanics, and need for the Commission's potential rulemaking procedure.

COMMISSIONER KELLIHER: Thank you. I appreciate it.

MR. SCHUBIGER: Thanks.

MR. PERLMAN: He beat me to that. Is there anyone in the audience who'd like to make a comment for the record in this proceeding?

Please state --

CFTC COMMISSIONER BROWN-HRUSKA: I just wanted to also commend you for setting this conference up. It just -- it really is an important contribution to my understanding of credit issues. And I think it's a very positive thing for us to be thinking about these issues.

I think a lot of important points have been made that I've heard about the importance of restoring liquidity to the markets and raising liquidity. And we've got a lot of experts here in liquidity and provision and credit mitigation.

I just had a couple of questions. I actually had to step out while Mr. Levin was talking and I wanted to make sure that you addressed the issue of whether or not exchanges have dealt with physical delivery default or the potential for that.

I mean, I know that certainly in the Chicago markets we've seen that where, you know, a farmer has faced delivery default issues or, for example, I didn't in the energy markets if that's been an issue that you have dealt with before.

MR. LEVIN: Okay. Thank you, Commissioner. In the scheme of things I could get everything. But absolutely we have -- our major contracts have delivery obligations in them.

And we've treated it from a legal perspective differently at different times, but in electricity eventually -- and now people are just using cash settled, and that's the market's preference. We have physical delivery contracts. They prefer to use the cash settled ones.

But we actually put in that clearing numbers are responsible for performance in there. In our natural gas contracts and our heating oil and unleaded and on our crude oil what we have in there are just some very powerful disincentives from not reforming.

And I will take a moment to explain how effective they can be because there's some very good examples. But the way the law allows us, we can penalize people that are found to be in nonperformance. And we do, say, 20 percent of the contract value.

That does not relieve them from their delivery obligation in mitigating it if they did not perform to a counterparty. So they continue to have their regular commercial obligation, plus a 20 percent penalty from NYMEX. And that's been very effective. Now, that sounds effective and it actually has been effective. But there's a couple of great examples. And one in particular: hurricane Andrew, which came around at a fairly early point in the development of the Henry Hub natural gas delivery contract. It was '92 or so I think when Hurricane Andrew came through.

And anybody that goes back in the gas business knows that there used to be something, and not just in that industry, but that clever phrase "price majeure," which of course means people did not perform if they didn't like the price.

And that was absolutely the case in the gas business. And over time we even heard from production companies' lawyers something known as firm and then NYMEX firm.

And I think NYMEX firm derives from the fact that during Hurricane Andrew, when it went over not only our delivery area, but a big part of the production area in the Gulf coast, many cash contracts were simply not performed on. Maybe both parties decided they couldn't do it and they stepped away.

Every one of the NYMEX contracts were performed on. And we didn't make special allowance. We might have had to. We might have had to convene some of our processes to manage that. And we have certain ways of overseeing that.

But we just went to everybody in the market and we said, "We think you should be able to figure this out amongst yourselves." And they did. And they understood the penalties behind that.

Does that mean that everything turned into a physical delivery -- it might have been delivered elsewhere. They may have decided to cash settle it out through a means that took them off of our protections, out of our protections. All those are available.

So we've managed. I went on for quite a bit there. But just to give it, I think, an important and powerful illustration. I could give others. We have managed through delivery performed. And we haven't had nonperformance of delivery. And we've had a lot of energy delivered against our contracts over the last 25 years.

MR. PERLMAN: Thanks.

CFTC COMMISSIONER BROWN-HRUSKA: Let me just thank you for that, because that's what I -- you know, I guess kind of gets to this issue that I've kind of been saying is that, you know, the idea that the financial markets and the physical delivery markets are not separate markets.

I mean, the financial markets and the physical markets are intricately integrated in important ways. And you can't let one part sort of go without the other part suffering.

So bringing them together and finding solutions that enables financial integrity to flourish and encourage physical delivery trading and encourage liquidity is a real positive I think from our perspective -- both from the CFTC's perspective and FERC's perspective -- because, you know, financial integrity is important to us as regulators.

So again I just want to congratulate everybody for coming today and sort of educating us, because I think it's very positive.

COMMISSIONER KELLIHER: And I want to thank Dave for making the trains run on time today. Thank you.

MR. PERLMAN: With that we'll ask this gentleman to identify himself and to give us any comments he'd like.

(Pause.)

MR. ANDERSON: How's that? Is that better? Okay, one more time. I'm Robert Anderson. I'm Executive Director of the Committee of Chief Risk Officers. I also have enjoyed this interesting session on credit.

The CCRO -- for those of you who that don't know, some of you from the banking industry and whatnot here -- we are a professional association of energy companies dedicated to identifying and documenting best practices for measuring, managing, and reporting financial risk and its effect on the robustness of energy companies and the markets they compete within.

The third and fourth panels you had going today all talk from varying angles about clearing. And I have just a short statement specifically about clearing that the CCRO would like to make -- and to just get into the record formally.

Clearing provides the benefits of multilateral netting, centralized collateral managements, standard margining, and in most cases a credible guarantor backing the events default.

CCRO research has shown that true multilateral clearing may reduce collateral requirements by as much as 75 to 90 percent. And it does this by advancing the benefits of bilateral netting to a larger grouping of counterparties.

In true clearing a participant's credit exposure to counterparties is replaced in whole or in part by credit exposure to the clearinghouse. The result is that the net credit exposure of an active participant is more closely aligned with a market risk of its overall portfolio, netting all positions.

The power of true multilateral clearing is unmatched. The CCRO wants to continue to encourage our industry to embrace clearing by participating in a clearing vehicle of their choice based on each company's own competitive criteria.

In November of 2002 the CCRO published a credit risk management white paper, which includes a discussion of clearing in considerable detail and generally advises companies to move forward with participation in clearing in a prompt, yet prudent fashion.

In particular, we recommend in our white paper that potential clearing providers be evaluated based on 10 distinctive attributes.

For today's discussion we want to make a statement that again encourages clearing, yet helps the FERC and our industry to move forward according to our documented best practices.

Since our white paper was first published in November '02 several clearing platforms have come and several may have gone. The platforms we have evaluated, which includes all those discussed today -- each carry issues that we see as material for the FERC to consider. And I'll list those right now. First, while all of these service providers offer limited credit margin reduction and value for certain products and transactions, none of them offer all the benefits of a traditional clearing house.

The service providers that have offered these solutions to the energy merchant industry are profit-oriented unlike traditional clearinghouses. All of these solutions would involve significant clearing fees and substantial costs to the energy merchant industry that impact and add to the overall costs of doing business by the energy merchant.

For the expense involved these solutions do not drastically reduce or eliminate the amount of guarantee capital offered, satisfactorily lower the amount of the margin payments, or dissipate the counterparty risk across numerous counterparties.

Ultimately, the bottom line is granting a new or existing entity that would provide clearing services a franchise monopoly, as may be under consideration by the FERC, is not the answer.

A franchise monopoly for a single for-profit clearing entity raises substantial concerns for commercial and legal viability, feasibility, complexity, and fairness.

In addition, a franchise monopoly that would be implemented as an imposed solution by the FERC raises substantial concerns as to which groups or classes of market participants would bear the cost for implementation and operation of it.

Finally, we would question whether one franchise monopoly could in any case address all the credit and clearing problems that the CCRO has identified here and in its white papers.

Thank you for considering these comments and your future assessments.

MR. PERLMAN: Thank you. Is there anyone else who would like to make a comment?

(No response.)

MR. PERLMAN: Well, with that, that will conclude this technical conference. I thank all for their participation. And it was very useful to us. We'll consider.

(Whereupon, at 4:00 p.m., the technical conference was adjourned.)