



**Overview of the Credit Issues  
Related to Proposed New Market Implementation**

**Presented to the Future Market Info Session  
June 8, 2009**



## Agenda

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- II. Determination of a Participant's Available Credit
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- VI. Defaults, Cures and Potential Losses
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## Background

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- Our review of the credit procedures relating to new market products included the following entities:
  - MISO
  - ISO New England
  - PJM
  - New York ISO
- The majority of our effort focused on the policies and operating procedures of MISO and PJM.
- Our intent was to assess the similarities and differences in their approaches and offer a high level summary.



## Determination of a Participant's Available Credit

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- A market participant's Total Credit Limit is the sum of:
  - any unsecured credit (if offered and approved) and
  - secured credit (subsequently described in more detail later).
- Each ISO/RTO computes any Unsecured Credit Allowance based on a participant's tangible net worth. An upper limit on unsecured credit is also enforced.
- Each entity uses a different approach to determine a total amount of credit for each customer. The credit scoring models and other related details behind these calculations are outlined in each company's credit policy.
- Both MISO and PJM determine a separate credit allocation for customers participating in financial transmission rights market.



## Determination of a Participant's Available Credit

- The current caps placed on unsecured credit by the ISO/RTOs are:
  - MISO \$ 50,000,000
  - PJM \$ 150,000,000
  - New York \$ 500,000,000
  - New England \$ 75,000,000
  - SPP \$ 25,000,000
- Like some of the other ISO/RTOs, the SPP stakeholders may decide to allocate credit differently for products in the real-time markets from those in the future markets.



## Creating a Secured Credit Allocation

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- A participant that requires additional credit in excess of any Unsecured Credit Allowance or does not qualify for unsecured credit may increase their Total Credit Limit by offering Financial Security.
- MISO, PJM and SPP all accept the following forms of Financial Security:
  - Cash
  - Letter of Credit
- In addition to Financial Security, each ISO/RTO permit the use of a financial guaranty on behalf of a market participant to augment their Total Credit Limit. The underwriting standards used to determine unsecured credit allocations are applied to potential guarantors.



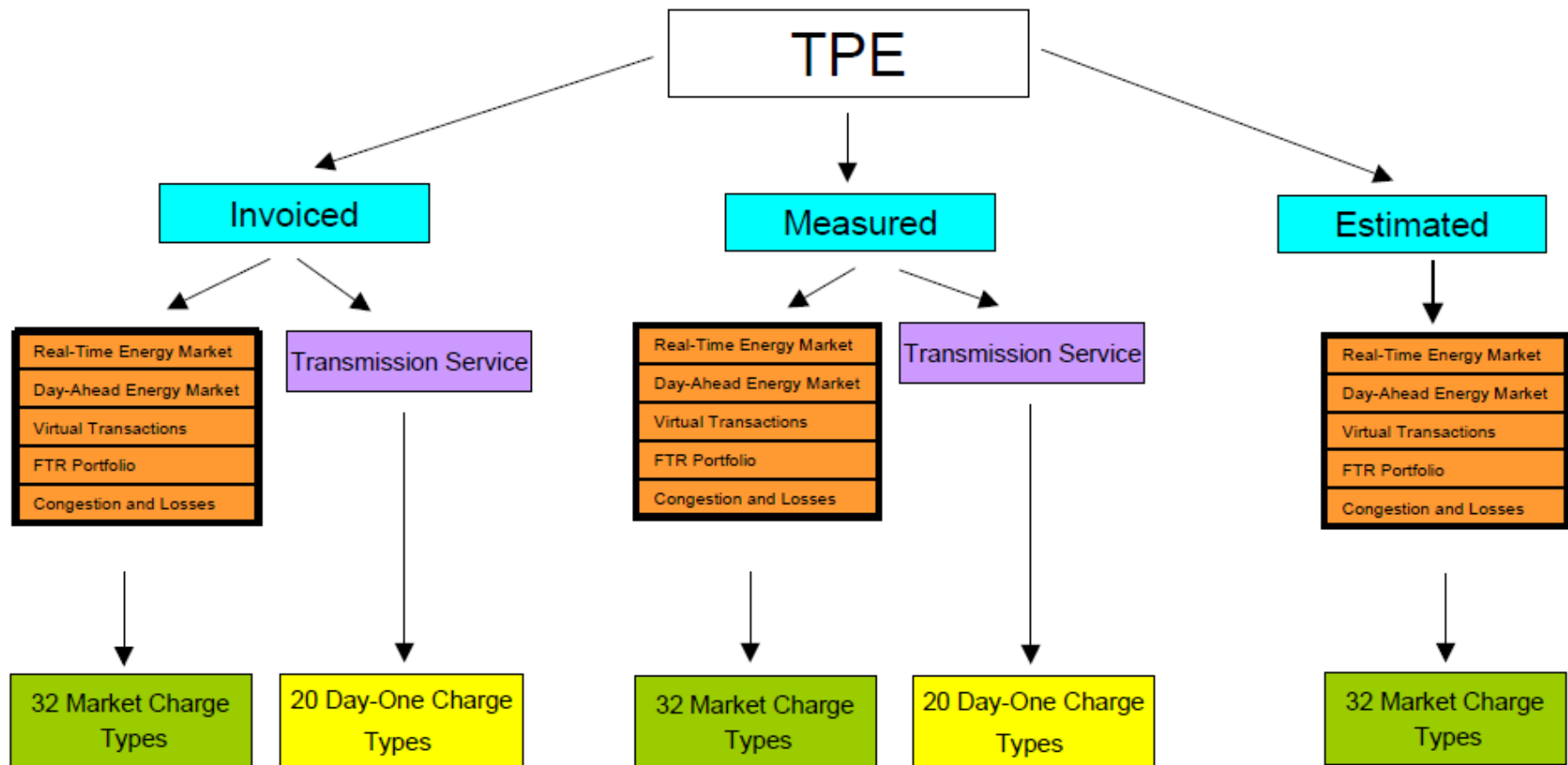
## Determination of a Market Participant's Credit Exposure

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- Along with the determination of a participant's Total Credit Limit, this is one of the most important elements in the credit process.
- Each ISO/RTO employs its own customized approach.
- For both real-time and future markets, the computation of a participant's exposure is the sum of the following basic elements:
  1. Services taken which have been billed but not paid.
  2. Services taken which have not been billed.
  3. An estimate of services to be taken over a defined period based on the participant's historical usage.
- The mechanics for determining credit exposures for the various products under consideration (energy, regulation, spinning, supplemental and congestion hedging) can be demonstrated once the characteristics of each market are agreed upon by the stakeholders.



## Flowchart of MISO's Exposure Calculation





## Recent Changes by PJM Regarding FTRs and Unsecured Credit

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- In the wake of the turmoil in the financial sector, several ISO/RTOs have contemplated a reduction in the amount of unsecured credit allocated to market participants.
- These problems were particularly pronounced at PJM, which had over **\$17 million** in unsecured exposure to Lehman Brothers and experienced over **\$58 million** in defaults on FTR positions.
- Because of the problems it encountered in its FTR markets in 2008, PJM filed at FERC a request to:
  - reduce the unsecured credit cap granted to a single customer
  - shorten settlement periods from one month to one week and
  - to eliminate the use of unsecured credit in their FTR market.
- In April 2009, FERC approved these requests (with minor revisions for the benefit of Load Serving Entities).



## Defaults by Market Participants

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- The credit policy for each entity outlines the conditions under which a default could occur.
- Typically a default will result from:
  - a customer's lack of timely payment of an outstanding invoice or
  - the existence of potential credit exposure that exceeds the amount of credit (unsecured + secured + guaranty) that has been allocated to that customer by the ISO/RTO.
- For SPP, the most common is a Total Potential Exposure Violation. This occurs when the customer's Total Potential Exposure exceeds its Total Credit Limit.



## Curing a Default

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- For a default to be properly cured, it must take place within the time periods defined below:
  - MISO – two days (plus 1 day if notification occurs after noon)
  - PJM – three days
  - SPP – three days
- To cure a Total Potential Exposure violation, a participant must do one or more of the following:
  - pay early any invoices already issued
  - increase the Total Credit Limit by an increase in the amount of Financial Security posted
  - increase the amount of a financial guaranty, thereby increasing the amount of Unsecured Credit Allowance.
- For a payment default to be considered cured, the entire balance of the unpaid invoice must be paid within the cure period.



## Potential Losses and Uplifts to Participants

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- Covered in Section V of Attachment L of the SPP Tariff
- An Initial Unpaid Obligation is allocated to those who are paid in the market for the week that the default occurred.
- If after 90 days an invoice remains unpaid, it is declared an Uncollectible Obligation and is reallocated to all participants that did business in the market during the week the default occurred.



## Considerations for the Market Working Group

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- There are issues related to credit that will warrant the review and discussion of the Finance Committee and Credit Task Force. They should also be considered by the MWG as future markets and products are designed. Those include:
  - Will market participants be allowed to use unsecured credit for new markets services, especially congestion hedging products?
  - How quickly should SPP be able to declare a non-paying customer in default and terminate its market participation?
  - Should parties such as financial and investment firms that are not interested in the reliable and efficient delivery of energy have the ability to conduct business in SPP's future markets?
  - What are the settlement periods for each possible product and service?
  - Given that losses incurred will be distributed to all participants in the market at the time of the transaction, what are the clearly definable benefits related to reliability and overall market operation that will be offered by a specific new service?



## Summary

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- There are two basic elements that should be considered carefully:
  - Calculation of a participant's available credit – the sum of all credit created through the presentation of collateral and any unsecured credit and/or guaranty that is determined based on creditworthiness.
  - Daily determination of a participant's market exposure – this computation will be a product of the services ultimately implemented and the operational mechanics of each (e.g. settlement frequency, use of unsecured credit, default cures)
- From a credit risk perspective, the approaches taken to the settlement and management of a participant's exposure are critical.
- There are lessons to be learned from the experiences of those that have preceded SPP in this effort, especially PJM. It seems clear they came to realize that unsecured credit is not appropriate for futures instruments.



**Questions**