SPP Southwest Power Pool

**Southwest Power Pool**

**CREDIT PRACTICES WORKING GROUP**

**August 30, 2010**

**• A G E N D A •**

9:00 a.m. – 2:00 p.m. Central
Hyatt Regency DFW Airport Hotel

1. Call to Order and Opening Remarks ........ Terri Wendlandt
2. Introduction of Members ........ Terri Wendlandt
3. Finance Committee Remarks ........ Harry Skilton
4. SPP Future Markets ........ Richard Dillon
5. Credit and "Day 2 Markets" RTO Perspective ........ Hal Loomis
6. Credit and "Day 2 Markets" Participant Perspective ........ Morgan Davies
7. SPP Credit Today ........ Tom Fritsche and Phil McCraw
8. Brainstorm Credit Approaches ........ All
9. Charter ........ Terri Wendlandt
10. Adjournment ........ Terri Wendlandt

Southwest Power Pool

Helping our members work together
to keep the lights on...
*today & in the future*

Southwest Power Pool

# Future Markets and Credit

Credit Task Force
August 30, 2010

# MARKET PRODUCTS





## Products of the Market

- **Purchase/Sale of Energy**
  - **Day Ahead**
  - **Real-time**
  - **Bilaterals**
- **Virtual offers/bids**
- **Transmission Congestion Right (TCR)**

## Purchase/Sale of Energy

- Commitment in the Day-ahead market at a market based price. Real-time market is the difference between Day-ahead commitment and actual consumption/injection
- Participants are the same as current market
- A bilateral shifts the settlement of the generator to the purchaser's settlement statement
- Settlements are for all MWh, netted by Participant





## Virtual Offers/Bids

- Market participant is not transacting energy, but the price spread between the Day-ahead and Real-time
- Volume is estimated at 10% of the actual MWh
- Investors transacting are estimated at 10%

## Transmission Congestion Rights

- **Sold annually and monthly (residual). Settled with the Operating Day settlement.**
- **Hedge settlement based on daily congestion and settled with the Operating Day settlement.**
- **Purchase for hedge purposes 75% - 95% of value**
- **Purchase for investment purposes 5% - 25% of value**





# ENTITIES PARTICIPATING IN MARKET

## Participating Entities

- ✓ **Utilities**
- ✓ **Independent Power Producers**
- ✓ **Hybrid (Investment houses with generation or load)**
- **Marketers**
- **Investment houses**





## Participation in Markets

| | Purchase/Sale of Energy | Virtuals | Transmission Congestion Rights |
|---|---|---|---|
| **Utilities** | ✓ | ✓ | ✓ |
| **IPP** | ✓ | ✓ | |
| **Hybrid** | ✓ | ✓ | ✓ |
| **Marketers** | ✓ | ✓ | |
| **Investment Houses** | | | ✓ |

# Transactional Date and Settlement Date

| | Purchase/Sale of Energy | Virtuals | Transmission Congestion Rights |
|---|---|---|---|
| Business Transaction | Daily | Daily | Annual and Monthly* |
| Settlement Date | Operating Day | Operating Day | Operating Day |

*The auction determines the commitment to hold the TCR instrument. The monetary exchange does not occur until the Operating Day (matching the hedge settlement)





# Credit Exposure Risk

| | Low | Medium | High |
|---|---|---|---|
| Utilities | ✓ | | |
| IPP | ✓ | ✓ | |
| Hybrid | | ✓ | |
| Marketers | | ✓ | ✓ |
| Investment Houses | | | ✓ |

# TRANSACTIONAL VOLUMES





## Monthly Average Net Position ($Millions)

| | Purchase/Sale of Energy | Virtuals | Transmission Congestion Rights |
|---|---|---|---|
| Utilities/IPP | 3.5 | -1.0 | 1.0 |
| Hybrid | -0.2 | -0.4 | -0.05 |
| Marketers | | -2.0 | -0.1 |
| Investment Houses | | | -0.8 |

Monthly Average Fund Transfer = $50 million

Negatives are payments to Market Participant

SOUTHWEST POWER POOL

# Monthly Average Net Position ($Millions) per Market Participant

| | Purchase/Sale of Energy | Virtuals | Transmission Congestion Rights |
|---|---|---|---|
| Utilities/IPP | 0.1 | Minimal | 0.05 |
| Hybrid | -0.1 | Minimal | Minimal |
| Marketers | Minimal | Minimal | Minimal |
| Investment Houses | | Minimal | -0.1 |

Negatives are payments to Market Participant



SPP Southwest Power Pool

Richard Dillon
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# PJM Credit Policy

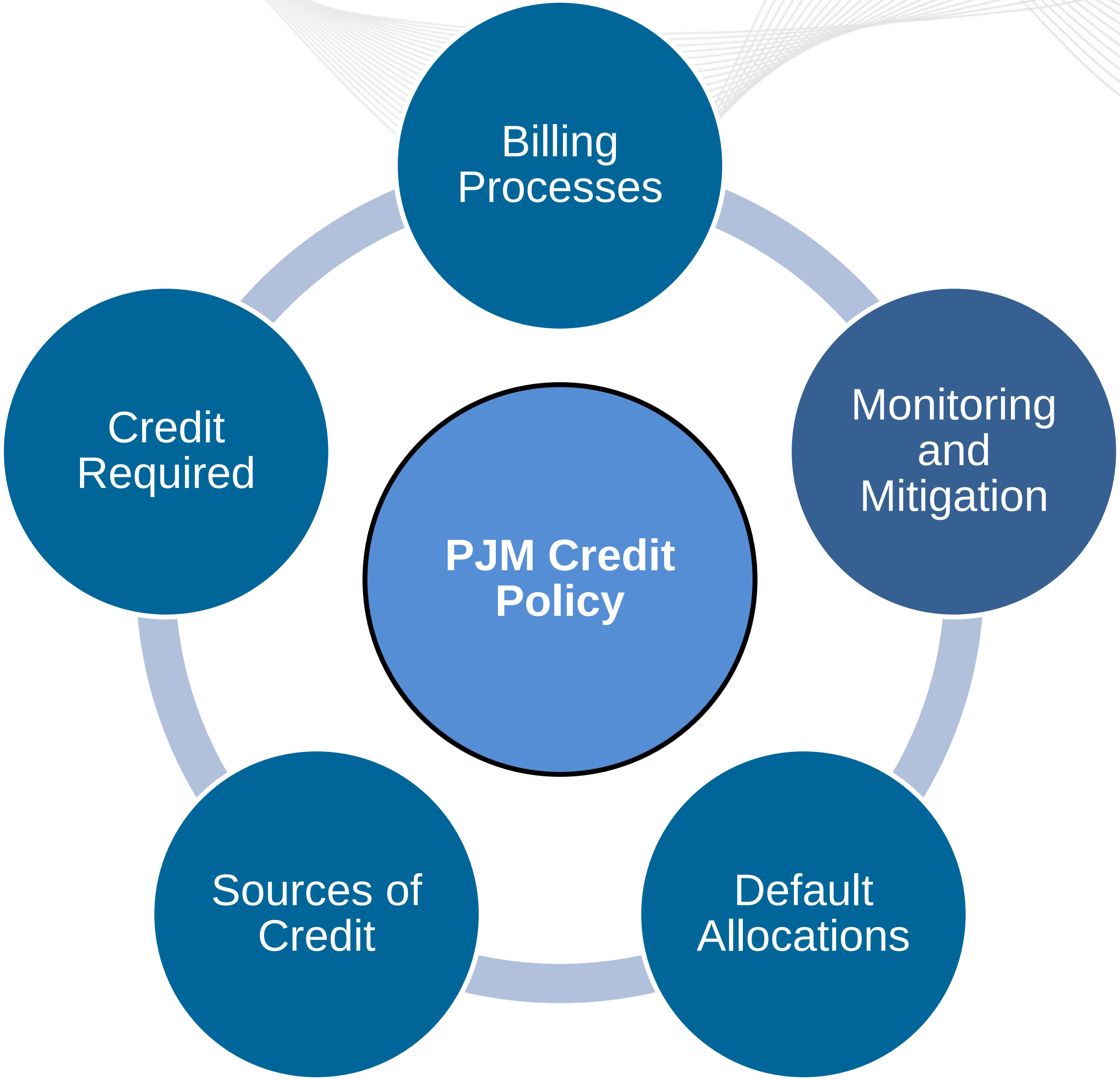
## Presentation for
## SPP Credit Practices Working Group

**August 30, 2010**
**Dallas, TX**

Harold Loomis
Credit Manager
PJM  Interconnection

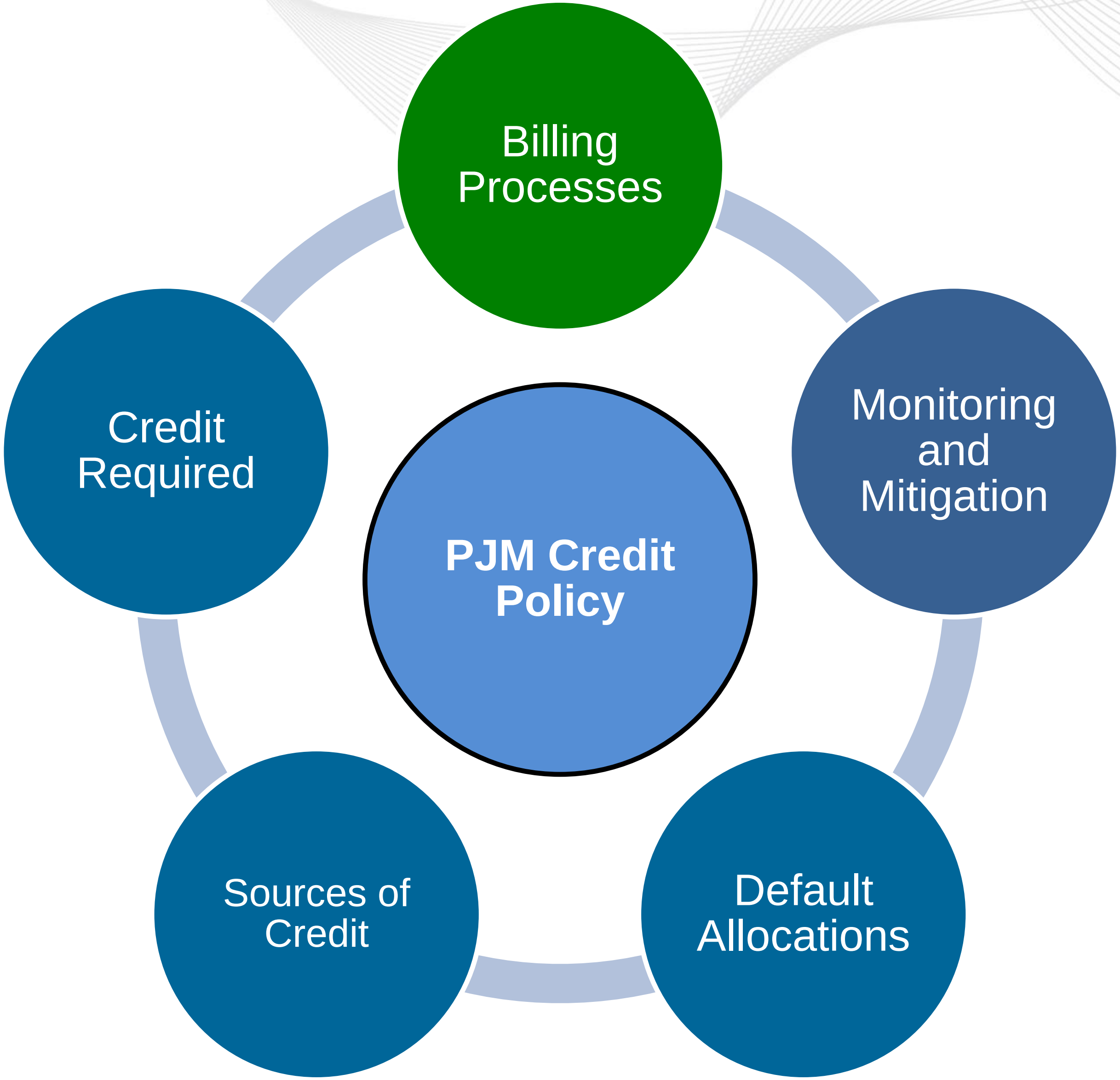
# Disclaimer

- Opinions expressed are those of the presenter only, and do not necessarily represent the position of PJM
- This presentation highlights only selected key provisions of the credit policy and credit practices at PJM, and does not represent every facet thereof.
- Readers are referred to Attachment Q (sheet 523) of the PJM Open Access Transmission Tariff for the complete credit policy
  - www.pjm.com > documents > agreements > PJM Agreements > "PJM Open Access Transmission Tariff"
    - http://www.pjm.com/documents/agreements/~/media/documents/agreements/tariff.ashx
- An overview document is also available on the web
  - www.pjm.com > about pjm > member services > become a member > "Overview of PJM Credit Policy and Credit Requirements"
    - http://www.pjm.com/about-pjm/member-services/~/media/documents/agreements/pjm-credit-overview.ashx



Billing Processes
Monitoring and Mitigation
Default Allocations
Sources of Credit
Credit Required
PJM Credit Policy

1. Credit Subcommittee (CS)
   – Discussion of substance and alternatives
2. Market Implementation Committee (MIC)
   – Additional substantive discussion if needed
   – Broader stakeholder participation than CS
3. Markets and Reliability Committee (MRC)
4. Tariff Advisory Committee (TAC)
   – Reviews draft tariff language
5. Members Committee (MC)
   – 2/3 sector vote needed to endorse
6. PJM Board of Managers
7. Federal Energy Regulatory Committee (FERC)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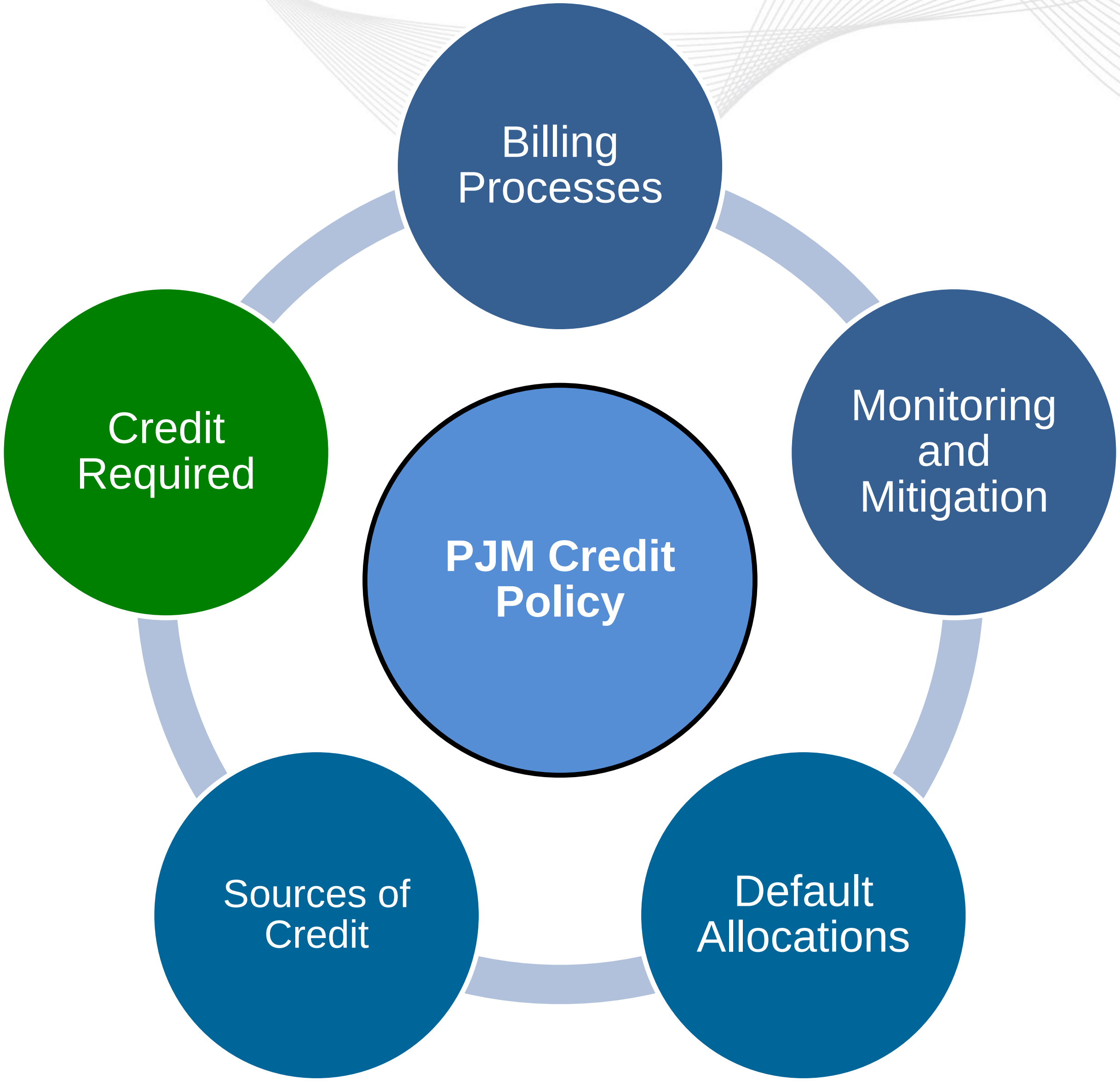
# PJM Billing Cycle

- As of June 1, 2009 PJM operates on a weekly billing cycle
  - Weeks run Thursday through Wednesday
- Weekly invoices are actually month-to-date bills less previously invoiced amounts
  - Including only specified line items
  - Containing ~95% or more of dollar amounts
  - Drastically reduces week-to-week adjustments
- Weekly bills are issued every Tuesday for previous week
  - Payments due Friday
  - Payouts made Monday
- Late payments
  - Short-pay vs. float

- Month-end bills issued by 5th business day of following month
  - Month-end and month-beginning stub weeks paid together
  - Coincidental month end and week end results in late month invoice preparation
    - Due date delayed to following week
- Up to 3 weeks general market exposure
  - Includes cure period & runouts
  - Reduction of 60 – 65% from monthly invoicing

- PJM members may have multiple accounts
  - Convenient break out of activity for their internal accounting
- PJM market systems are account-centric - including billing
  - Invoices are prepared at the account level
  - No recognition is given to common ownership of multiple accounts in PJM systems
  - There is no single "payment due" number provided to members
  - Netting of accounts is done by credit group for credit purposes and Treasury Department for financial payments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- Market activity requirements
  - Peak Market Activity
  - Current obligations and Working Credit Limit
- New Members
- Virtual bidding
- FTRs
- Capacity (RPM)

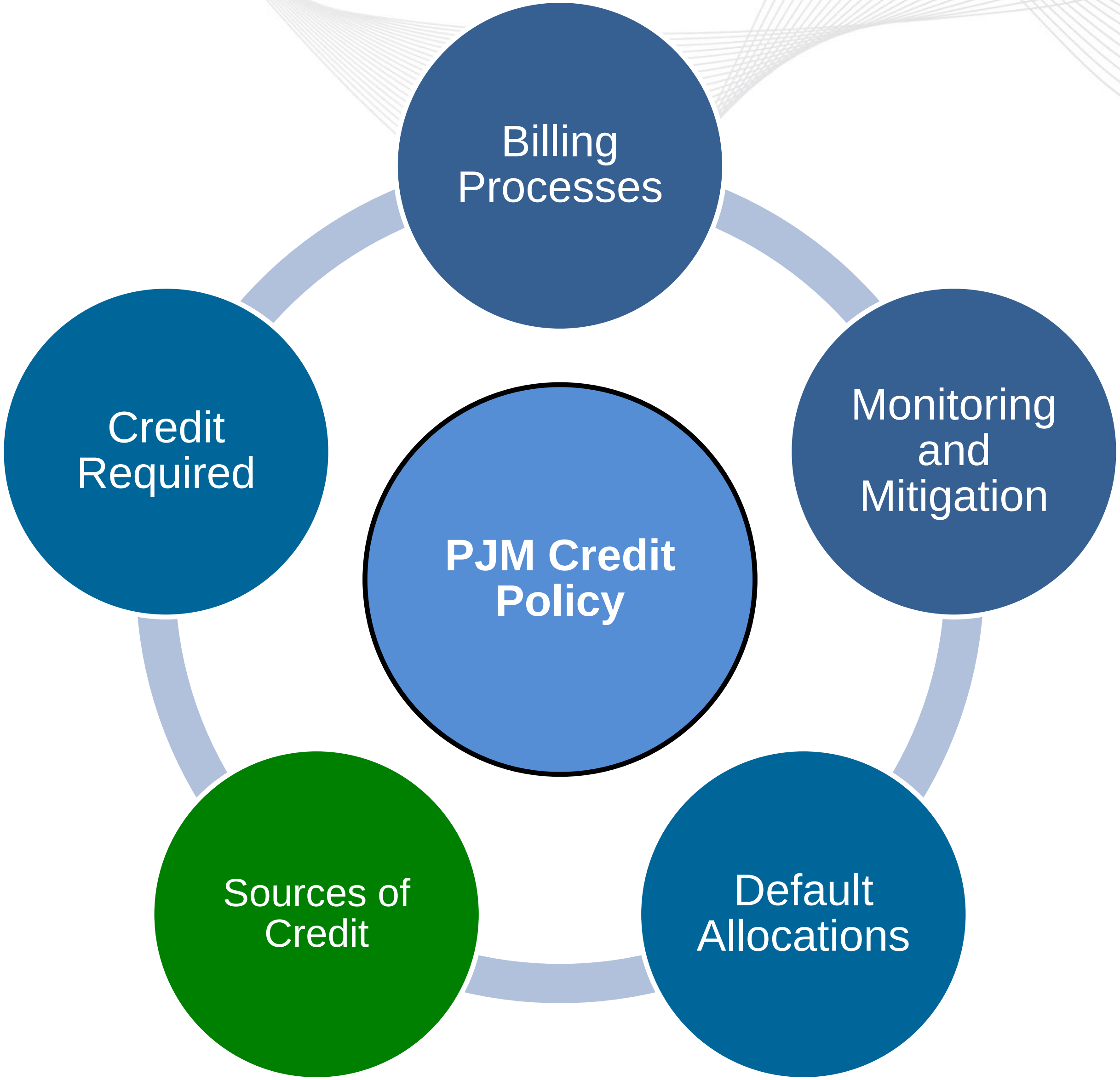
- Peak Market Activity (“PMA”) credit requirement
  - Highest exposure in any 3-week period in past year
  - Based solely on invoices
    - FTR activity is removed from invoices for this calculation
      - Separate credit requirements for FTRs
- Current Obligations and Working Credit Limit
  - Working Credit Limit (“WCL”) is 75% of total market credit
    - 25% buffer for weekends and runouts
  - Collateral call if current obligations approach WCL
- PMA and WCL requirements are in parallel
  - PMA is a long-term requirement
  - WCL is a short-term requirement

- New Members
  - Look to member for projection of potential activity
    - "Honor system" – but with tracking
  - Minimum $50,000 for first year
  - No initial credit required for
    - New generators with no activity other than just selling
    - New demand/curtailment resources with no other planned activity

- Virtual bidding
  - Part of energy market, not separate market
  - Exposure calculated separately for each location
    - Based on 97th percentile price volatility experienced in same two months in prior year
  - All members reviewed daily
    - Members with uncleared bid exposures exceeding credit available are flagged for future bid screening
  - Members subject to screening will have bids rejected if exposure exceeds credit available

- FTR (Financial Transmission Rights)
  - Calculated on portfolio basis
  - Credit required for net exposure
    - Total of price minus adjusted historical value summed across all FTRs
      - Cleared FTRs may net (negative individual FTR requirement may reduce overall portfolio requirement)
      - Bid FTRs may not net (only positive requirements added)
    - Calculated on monthly basis
      - Annual FTRs broken down into monthly components
      - Only positive months contributing to total portfolio credit requirement
  - Additional credit requirement for counterflow portfolios

- Capacity (RPM – Reliability Pricing Model)
  - No credit requirement for LSEs
    - Capacity cost is included in invoice, so already in PMA credit requirement
    - If LSE defaults, load and related capacity requirement return to provider of last resort
  - No credit required for existing resources
  - Credit required for planned (non-existing) resources
    - Pre-auction – preset RTO-wide rate
    - Post-auction – may be reduced depending on actual cleared prices in locational deliverability areas
    - Actual rates based on penalties for non-performance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- Unsecured credit
  - Only if qualified
  - Corporate guaranties
  - Seller Credit
- Secured Credit
  - Letters of Credit
  - Cash deposit

# PJM Unsecured Credit

- Unsecured credit up to 2.5% of TNW (tangible net worth)
  - Must have investment grade rating or high internal score
  - Ratings from S&P, Moody's, Fitch
    - All ratings must be investment grade
  - Credit Score used only for unrated entities
    - Interest coverage ratio; Free cash flow to total debt; Debt-to-equity; Debt-to-EBITDA
    - Other factors also considered for municipalities and cooperatives
- Dollar cap on unsecured credit
  - Based on ratings/score alone – not size
  - Maximum $50 million for highest rated companies
  - $150 million family cap
- Material adverse conditions
  - Cause to terminate unsecured credit

# PJM Unsecured Credit

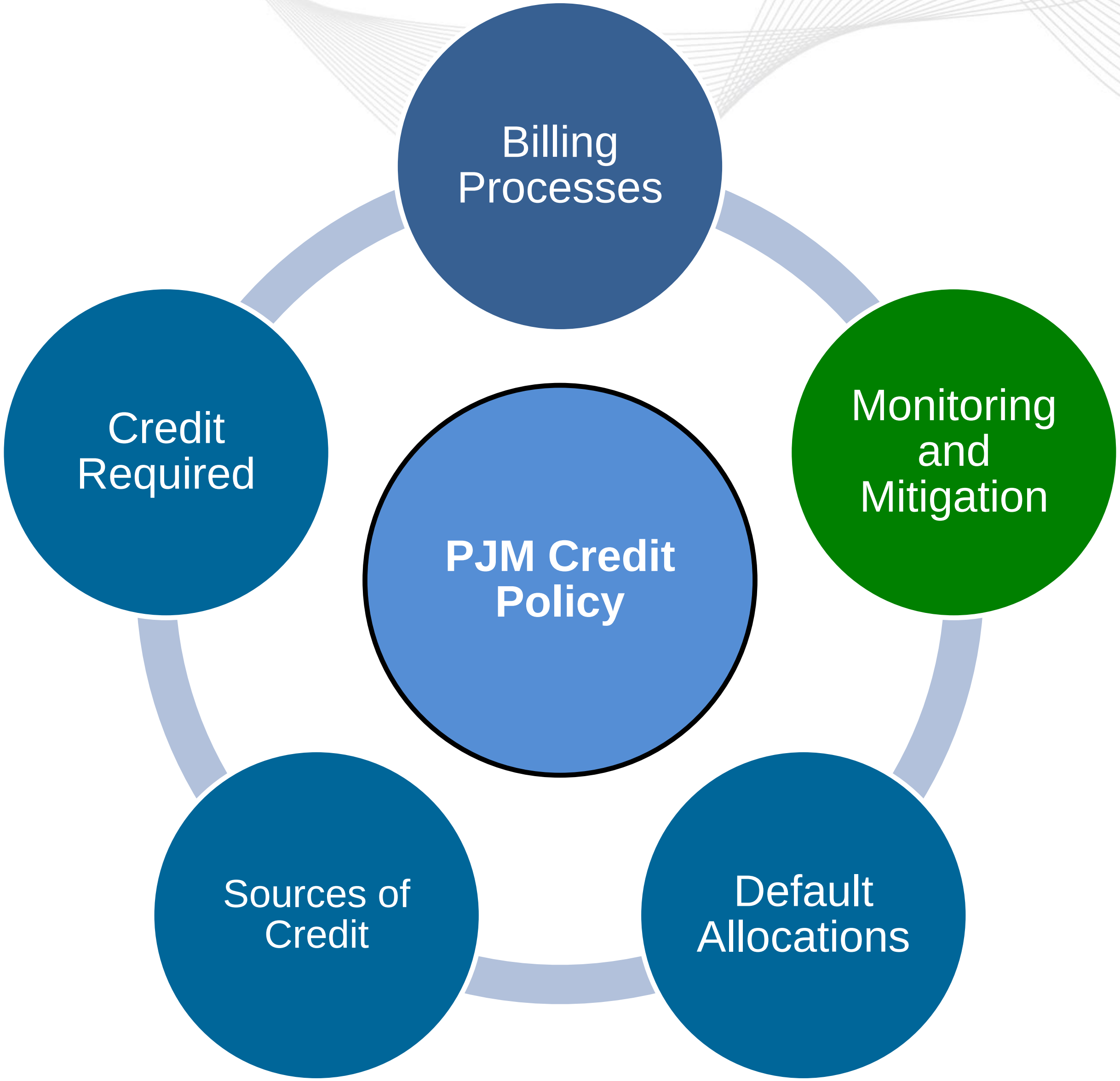
| Rating | Credit (%TNW)* | Dollar Cap* |
|---|---|---|
| A- or better | 2.125% - 2.5% | $50 million |
| BBB+ | 2% | $42 million |
| BBB | 1.583% | $33 million |
| BBB- | 1.04% | $7 million |
| Below BBB- | None | None |
| Unrated with higher scores | 0.875% - 1.3% | Typically $7 million |
| Unrated with lower scores | 0.48% - 0.833% | $2 million |

* Allowances may change with ratings watch

- Corporate guaranties
  - Creditworthy domestic or foreign guarantors
  - PJM standard form required
  - Considered transfer of unsecured credit, not collateral
- Seller Credit
  - For consistent net sellers
    - 60% of $13^{th}$ lowest net sell week in past 52
    - Must be net sellers every month for past 12 months
      - But could be net buyer up to 12 individual weeks
  - May be used for FTR or RPM credit requirements and some virtual bidding
- RPM Seller credit
  - Special additional credit for RPM for average net sellers

- Letters of Credit
  - Minimum “A” rating (not “A-”)
    - From all agencies that rate it
  - May be from domestic bank or rated domestic branch of foreign bank
  - PJM standard form required
  - Evergreen required
- Cash deposit
  - Held in separate accounts – one for each member
  - Interest earned credited to each member’s collateral account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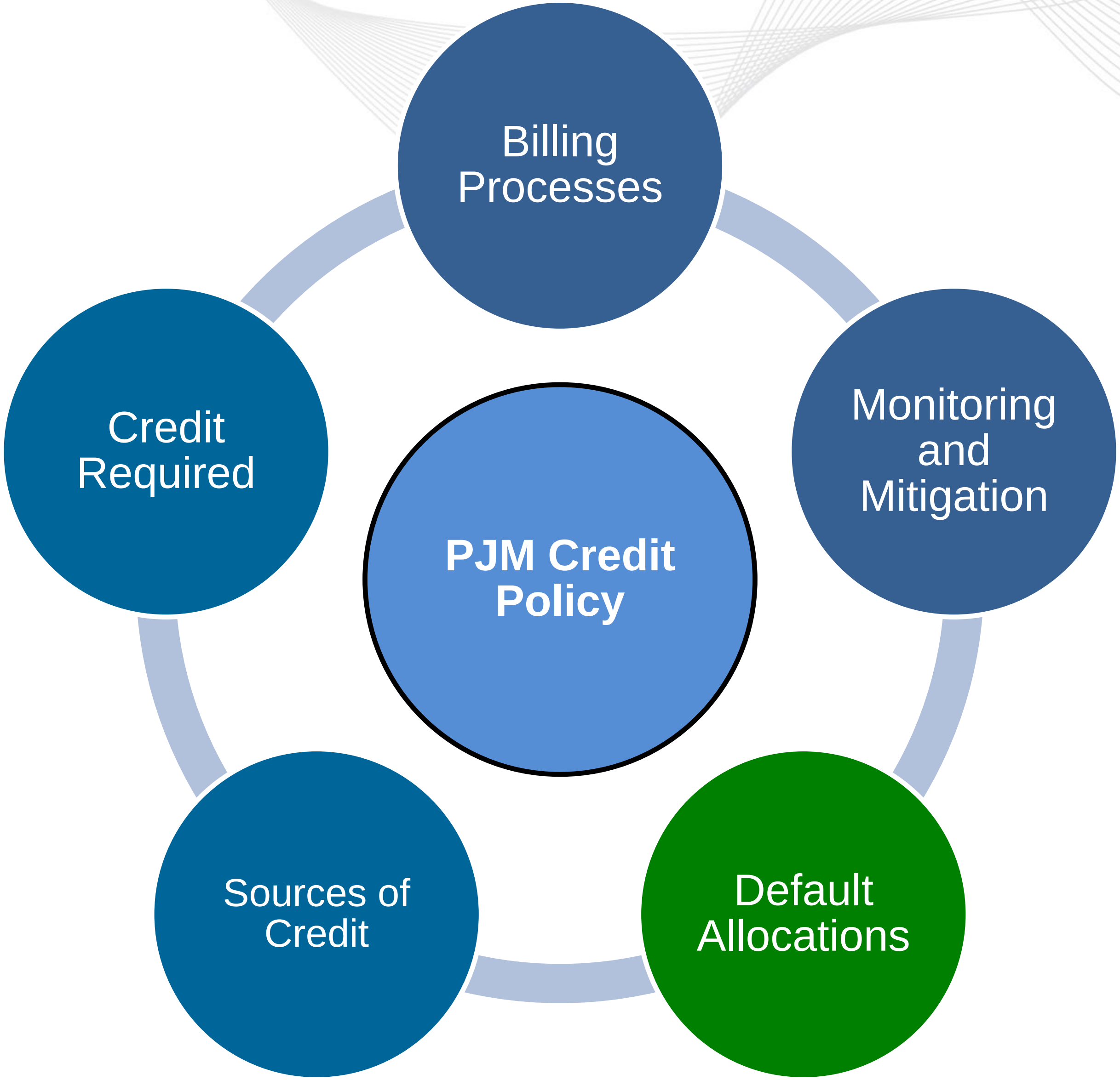
- Peak Market Activity must not exceed credit available for market activity
- Current obligations may not exceed Working Credit Limit
  - 75% of credit available for market activity
  - Current data received three times weekly
- FTR and RPM requirements are in addition and tracked separately

- Credit mitigating actions are not a form of credit, but may serve to reduce credit requirements
- Market participants may schedule bilateral energy transactions through PJM (“eSchedules”)
  - PJM recognizes ownership change for energy
  - Buyers indemnify PJM against failure by sellers
- Certain members may make early bill payments to reduce weekly bill amounts used for credit requirement calculations
  - Must be receiving unsecured credit to qualify
  - May make up to ten such payments per year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- Default Allocations
  - Defaults assessed to membership through two-tier allocation
    - 10% assessed per-capita, with $10,000 annual cap per member
    - 90% assessed by gross activity in past 3 months
      - Defined as sum of absolute values of line items on monthly invoices for month of default and prior two months
        - » After intra-month adjustments
      - Inter-month adjustments not included
  - Potential municipal waivers

 

# Additional Credit Policy Matters

- Invoices are financially binding when issued
  - Adjustments show in future invoices
- Virtual bidding
  - Part of energy market, not separate
- Credit Policy in Tariff
  - Overview document not in Tariff required posted publicly

- Default Allocation – from asset and load to activity
- FTR credit evolution
  - From none to general to specific monthly history
  - Counterflow adder
- FTR contract term evolution
  - First monthly, then annual, quarterly, and long-term
- Invoicing – From monthly to "month-to-date" weekly
- Cure period 3 to 2 days
- Notification to members
- Counterparty Clarification
  - Pool vs. non-pool transactions
- eCredit system

 

# PJM Credit Policy – Current and Upcoming Topics

- Data delay time and data matching
- Potential Credit Exposure (PCE)
- Late payment penalties
- Account-level credit practices
  - Automatic credit systems (FTR, virtual bidding)
- Credit scoring
  - Incorporate other data/factors for rated entities
    - More timely external information
      - Various services provide equivalent or alternative ratings implied by market measures
  - Recalibrate/update scoring methodology for unrated entities
- FTR credit
  - Individual path volatility
- Potential Revisions from FERC ruling on Credit NOPR

# SPP Day 2 Credit Considerations

Monday, August 30, 2010

Morgan Davies
Director - Corporate Credit
Calpine Corporation

# SPP Day 2 Credit Considerations

- Regulatory  (3)
- Settlement Cycles
- Netting and Legal Certainty of Netting/Set-off
- Collateral Requirements
- Credit Management Practices
- Credit Policy Considerations for IPP’s

# Regulatory (1)

- SPP Day 2 Credit Policy should be developed within the context of the existing/potential regulatory environment
- FERC's 2004 Credit Policy Statement
  - Credit risk and collateral requirements could be reduced by implementing weekly billing, and requested ISOs/ RTOs initiate processes to adopt shorter settlement periods
  - Netting should be adopted where practical
  - ISO / RTO (and OATT) must consider qualitative and quantitative factors in granting credit (beyond credit ratings)
  - ISOs / RTOs should consider other measures such as credit insurance, credit clearing (discussed later)

# Regulatory (2)

- FERC 2010 Notice of Proposed Rulemaking (NOPR)
  - Shortening the Settlement Cycle
  - Use of Unsecured Credit
  - Financial Transmission Rights Markets
  - Ability to Offset Market Obligations
    - ISO/RTO's to clarify their status as a party to each transaction so as to eliminate any ambiguity or question as to their ability to manage defaults and to offset market obligations
  - Minimum Criteria for Market Participation
  - Material Adverse Change
  - Grace Period to "Cure" Collateral Posting

# Regulatory (3)

- Does FERC issue a final rule from the NOPR?
- Impact of Title VII Legislation?
- CCRO PMC Panel Initiative

# Settlement Cycles

- Biggest driver in reducing risk of default AND barriers to entry
  - In 2004, ISO-NE implemented weekly billing
    - Settlement cycle reduced from 55 days to 13 days
    - Credit risk to ISO-NE reduced nearly 67%, AND
    - collateral reduced from ~$177MM to ~$58MM (nearly $120 MM of liquid capital freed up)
  - November 2004 FERC Policy Statement
    - "Credit risk and collateral requirements could be reduced by implementing weekly billing"
    - The Commission requested ISOs/RTOs initiate processes to adopt shorter settlement periods
  - Consistent with findings from the financial industry
    - "Time equals Risk" from Baucmann Report to the SEC
    - Shortened settlement cycles endorsed by the SEC, G30, FED, CPSS / IOSCO to reduce systemic risk

# Netting and Legal Certainty of Netting/Set-off

- FERC 2004 Policy Statement
  - The Commission believes that three basic types of netting should be adopted, to the extent practicable
- CCRO 2006 Recommendations to Regulators (Clearing Paper)
  - Continue to promote accelerated settlements and netting
  - A much clearer understanding of the legal landscape is required especially with respect to safe harbor status of netting
- Issue: What is "practical" due to lack of clarity in the event of a BK
  - FERC 2010 NOPR – "the Commission proposes ….. to require that each RTO and ISO …….. clarify their status as a party to each transaction so as to eliminate any ambiguity or question as to their ability to manage defaults and to offset market obligations"
  - CCRO 2010 Power Markets Netting Paper
    - "*It is **emerging** best practice in "intra-ISO netting" for an ISO to create or designate a central counterparty entity through which market participants may execute transactions.*"

# Collateral Requirements

- Accelerating Settlements is the most effective way to reduce collateral requirements AND protect against a credit loss
  - Trend is towards reducing the amount of unsecured credit being granted by ISO/RTO's, usually in concert with reducing settlement cycles
- Netting should be adopted wherever practicable
- FTR's represent a credit risk with its own unique characteristics and potentially non-normal distribution of credit outcomes
  - ***Look at ERCOT (and other markets) on how to manage this risk***
    - CRR's Credit screen to be passed before bids/offers accepted
    - Daily margining/Probabilistic margining to be employed
    - No annual auctions of CRR's until a minimum of 6 one month auctions have been completed and upon approval of the ERCOT BOD
- Forms/types of collateral and other security
  - Form of guaranty (guarantied obligations, foreign guarantors)

# Credit Management Practices

- Need to look beyond the Rating Agencies
  - Credit management should utilize market driven information to manage credit risk
- Best practices should be implemented:
  - Daily margining, position reporting, stress testing
  - Robust credit management and reporting systems
- Credit Policy and Credit Management Development
  - Leverage knowledge of stakeholders with credit experience as well as stakeholders with market design experience (how the products/markets work)
  - Actively participate in the CCRO PMC Panel for current and emerging best practices for ISO/RTO's
  - Day 2 Credit Policy should be developed being mindful of current and potential regulations, (i.e., NOPR -FERC, Title VII -CFTC)
  - Look at netting best practices and feasibility of expanding netting opportunities (i.e. CCRO PMC Netting Paper on intra and inter ISO/RTO netting)

# Credit Considerations for IPP's

- Goal should be to minimize credit risk to the market while minimizing barriers to entry
  - Both goals are related and attained by developing robust credit practices
- Accelerate settlements as much as possible to minimize credit requirements and default risk
  - Also reduces the amount of unsecured credit to be extended
- Maximize opportunities for netting
  - Explore feasibility of cross-commodity netting
- Look to organizations such as the CCRO to develop best practices for RTO credit risk design and management
  - SPP should actively engage in the CCRO PMC effort

# SPP Credit Policy Tutorial

Revised – August 20, 2010





# Credit Policy Overview

Southwest Power Pool

## SPP Credit Policy – Executive Summary

- **The purpose of the Credit Policy is to establish a transparent and non-discriminatory process for extending secured and unsecured credit.**
- **The policy was created by SPP's Credit Task Force and approved by the Finance Committee and Board of Directors.**



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SPP Credit Policy – Executive Summary

- **Scoring models for credit customers are based on common financial characteristics and designed for specific industry groups.**
- **The score produced by the model translates into an Unsecured Credit Allowance for the customer.**
- **Customers that do not qualify for unsecured credit or desire credit above an unsecured allocation may post financial security with SPP.**

## SPP Credit Policy – Executive Summary

- **Each day, SPP will**
  1. **determine the Total Potential Exposure (TPE) of each credit customer and**
  2. **compare the TPE of each credit customer is compared to that customer's Total Credit Limit (the sum of unsecured and secured credit allocations).**

- **If TPE exceeds the Total Credit Limit, the customer must provide financial security to SPP in the amount of the difference.**





## SPP Credit Policy – Executive Summary

- **Events of Default by a credit customer place SPP at a higher risk of loss and include the following:**
  1. **Failure to pay invoices in full when due.**
  2. **Failure to cure a TPE violation.**
  3. **Failure to provide requested information in a timely manner.**
  4. **Bankruptcy filing.**

- **Remedies available to SPP for uncured defaults include suspension of all unsecured credit and termination of service (after FERC approval).**

# Credit Scoring





## Credit Scoring Methodology *

- **Qualitative Factors considered in scoring include:**
  - **Ability to set rates without regulatory approval**
  - **Number and composition of members or customers**
  - **Exposure to energy price risk for load served**
  - **Rating agency ratings assigned to unsecured debt**
  - **Tenure and quality of management**
  - **Terms of wholesale power contracts, if any**
  - **Risk management practices**
  - **Payment record with SPP, if any**
  - **Other non-financial measures of creditworthiness**
- **An overall score on a scale of 1 – 6 is used (1 is the highest).**

*** See Credit Policy Articles 4.2.1, 4.2.2, and 4.2.3**

# Credit Scoring Methodology *

- **The credit evaluation performed incorporates qualitative and quantitative elements. The two are then weighted as reflected below, resulting in a total Composite Score.**

| | Weighting | |
|---|---|---|
| Industry Segment | Qualitative | Quantitative |
| Large Company [1] | 30% | 70% |
| Small Company [2] | 30% | 70% |
| Not-For-Profit [3] | 60% | 40% |

**[1] For-profit with net fixed assets > $250 million**
**[2] For-profit with net fixed assets <= $250 million**
**[3] Cooperatives, municipalities, state and federal agencies**

*** See Credit Policy Articles 4.2.1, 4.2.2, and 4.2.3**





# Determining the Unsecured Credit Limit *

- **The Composite Score is the sum of weighted Qualitative and Quantitative scores.**
- **Using the final Composite Score and the entity type, the customer's tangible net worth is multiplied by the appropriate percentage to determine the Unsecured Credit Allowance.**

| | % of Tangible Net Worth Assigned as Unsecured Credit Limit | | |
|---|---|---|---|
| Composite Credit Score | Large Company | Small Company | Not-For-Profit |
| 1.00 – 1.99 | 5.000% | 5.000% | 7.500% |
| 2.00 – 2.99 | 3.000% | 3.000% | 4.500% |
| 3.00 – 3.59 | 2.000% | 2.000% | 3.000% |
| 3.60 – 4.39 | 0.750% | 0.750% | 1.125% |
| 4.40 – 4.99 | 0.250% | 0.250% | 0.375% |
| 5.00 – 6.00 | 0.000% | 0.000% | 0.000% |

- **Maximum Unsecured Credit Limit under the SPP Credit Policy is $25,000,000.**
- **Minimum Unsecured Credit Limit for a Not-For-Profit is $250,000.**

*** See Credit Policy Article 4.3**

# Total Potential Exposure





## Calculating Total Potential Exposure *

- The formula for determining Total Potential Exposure is TPE = TSPE + ME
  - TSPE = Transmission Service Potential Exposure
  - ME = Market (Energy Imbalance) Exposure
- The formula for determining Transmission Service Potential Exposure is TSPE = ITSC + CTSC + METE
  - ITSC = Invoiced but unpaid service
  - CTSC = Service taken but not yet invoiced
  - METE = Estimate of future charges based on historical usage for the remainder of the 50 day exposure window

* See Credit Policy Articles 5.1 and 5.2

## Calculating Total Potential Exposure *

- **The formula for determining Market (Energy Imbalance) Exposure is ME = IMTSC + CMSC + MEME**
  - **IMSC = Invoiced but unpaid service**
  - **CMSC = Service taken but not yet invoiced**
  - **MEME = Estimate of future charges based on historical usage**

*** See Credit Policy Articles 5.1 and 5.2**





## Example of TPE Calculation *

- **Based on current day of June 13, 2010.**

- **Assumptions:**
  - **TSPE**
    - **May invoice amount of $8,500 is outstanding.**
    - **Amount of METE charges from end of CTSC to end of exposure window (7 days) is $3,200.**
    - **Highest Network Service invoice over last 12 months is $3,000 in September (30 day month).**
  - **ME**
    - **Previous weekly invoice remains outstanding.**
    - **Average daily settlement activity for last 365 days is $700.**
    - **Average daily settlement activity for last 7 days is $600.**

*** See Credit Policy Articles 5.1 and 5.2**

## Example of TSPE Calculation *

| | Operating Date | Amount | Operating Date | Amount | Total |
|---|---|---|---|---|---|
| ITSC | May Invoice | $ 8,500 | | | |
| ITSC - Total | | | | | $ 8,500 |
| CTSC | 06/01/10 | $ 300 | 06/07/10 | $ 250 | |
| | 06/02/10 | $ 350 | 06/08/10 | $ 350 | |
| | 06/03/10 | $ 250 | 06/09/10 | $ 300 | |
| | 06/04/10 | $ 300 | 06/10/10 | $ 350 | |
| | 06/05/10 | $ 350 | 06/11/10 | $ 250 | |
| | 06/06/10 | $ 250 | 06/12/10 | $ 300 | |
| CTSC - Total | | | | | $ 3,600 |
| METE | | | | | |
| Charges from CTSC to end of window | | $ 3,200 | | | |
| Network Service - [($3,000/30)*7] | | $ 700 | | | |
| METE - Total | | | | | $ 3,900 |
| **TSPE - Total** | | | | | **$ 16,000** |

*** See Credit Policy Article 5.2.2**



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## Example of IMSE Calculation *

| Settlement Weekday | Settlement Date | Operating Weekday | Operating Date | Invoice Amount |
|---|---|---|---|---|
| Wednesday | 05/31/10 | Friday | 05/26/10 | $ 900 |
| Thursday | 06/01/10 | Saturday | 05/27/10 | $ 1,000 |
| Friday | 06/02/10 | Sunday | 05/28/10 | $ 850 |
| Monday | 06/03/10 | Monday | 05/29/10 | $ 900 |
| Monday | 06/04/10 | Tuesday | 05/30/10 | $ 750 |
| Monday | 06/05/10 | Wednesday | 05/31/10 | $ (500) |
| Tuesday | 06/06/10 | Thursday | 06/01/10 | $ 800 |
| | | | **Total IMSC** | **$ 4,700** |

*** See Credit Policy Article 5.2.1**

# Example of CMSE Calculation *

| Settlement | | Operating | | Invoice |
|---|---|---|---|---|
| **Weekday** | **Date** | **Weekday** | **Date** | **Amount** |
| Thursday | 06/08/10 | Saturday | 06/03/10 | $ 850 |
| Friday | 06/09/10 | Sunday | 06/04/10 | $ 900 |
| Monday | 06/10/10 | Monday | 06/05/10 | $ 800 |
| Monday | 06/11/10 | Tuesday | 06/06/10 | $ 700 |
| Monday | 06/12/10 | Wednesday | 06/07/10 | $ 850 |
| | | | **Total CMSC** | **$ 4,100** |

*** See Credit Policy Article 5.2.1**





# Example of MEME Calculation *

| Settlement | | Operating | | Invoice |
|---|---|---|---|---|
| **Weekday** | **Date** | **Weekday** | **Date** | **Amount** |
| Tuesday | 06/13/10 | Thursday | 06/08/10 | $ 700 |
| Wednesday | 06/14/10 | Friday | 06/09/10 | $ 700 |
| Thursday | 06/15/10 | Saturday | 06/10/10 | $ 700 |
| Friday | 06/16/10 | Sunday | 06/11/10 | $ 700 |
| *Cure* | 06/17/10 | Monday | 06/12/10 | $ 700 |
| *Cure* | 06/18/10 | Tuesday | 06/13/10 | $ 700 |
| *Cure* | 06/19/10 | Wednesday | 06/14/10 | $ 700 |
| *Cure* | 06/20/10 | Thursday | 06/15/10 | $ 700 |
| *Cure* | 06/21/10 | Friday | 06/16/10 | $ 700 |
| | | | **Total IMSC** | **$ 6,300** |

*** See Credit Policy Article 5.2.1**

## Reconciliation of TPE Calculation *

| TSPE | Amount | Total |
|---|---|---|
| ITSC | $ 8,500 | |
| CTSC | $ 3,600 | |
| METE | $ 3,900 | |
| **TSPE - Total** | | $ 16,000 |
| **ME** | **Amount** | |
| IMSC | $ 4,700 | |
| CMSE | $ 4,100 | |
| MEME | $ 6,300 | |
| **ME - Total** | | $ 15,100 |
| **TPE - Total** | | **$ 31,100** |

*** See Credit Policy Article 5.2.3**





## Invoicing Schedule

- **Invoices for Transmission service are sent by the third (3rd) business day of each month. Payments due within fifteen calendar days of the date of the invoice.**
- **Energy Imbalance services are invoiced each Thursday by 8:00 a.m. CST. Payments are be due by 5:00 p.m. CST on the Wednesday following after the invoice date.**

# Financial Security





## Acceptable Forms of Financial Security *

- If TPE exceeds the Total Credit Limit, the customer must provide financial security to SPP in the amount of the difference.
- Permitted forms of financial security include:
  - Cash deposit with SPP
  - Standby letter of credit
- Cash deposits are held in a segregated account and accrued interest is paid to the customer each quarter.

* See Credit Policy Articles 6 (Guarantees) and 7 (Financial Security)

## Acceptable Forms of Financial Security *

- **A security agreement (see Appendix B to the Credit Policy) is required from the customer when financial security is posted.**
- **A third party guaranty from an affiliated entity (e.g. parent company) is acceptable security. The guarantor is subject to the same credit scoring and evaluation process as the customer.**

*** See Credit Policy Articles 6 (Guarantees) and 7 (Financial Security)**





## Events of Default

## Examples of Events of Default *

- **Failure to remit any amount payable under the SPP's Open Access Transmission Tariff (unless cured).**
- **Failure to cure a TPE violation**
- **Failure to provide financial information or post financial security within the time periods specified in the policy.**
- **Bankruptcy or similar filing by a customer.**
- **Other circumstances as outlined in Article 8.1.5 of the SPP Credit Policy.**

*** See Credit Policy Article 8.1**





## Available Cure Provisions

- **Three business days are provided for the following:**
  - **remit a required invoice for energy imbalance services.**
  - **for a TPE violation, pay an invoiced amount and/or provide financial security (Article 5.3.2).**
  - **replenish the security to cure a payment default should it become necessary for SPP to offset a delinquent payment against a posted cash deposit (Article 7.1.2.3).**
  - **submission of required financial information (Article 8.1.6).**

- **Five business days are provided to cure non-payment of an invoice for transmission services.**

## General Remedies for Events of Default *

- Available remedies to SPP include:
  - liquidation of posted financial security to satisfy unpaid invoices.
  - suspension of the unsecured credit for up to ninety days and filing for termination of service agreement for an uncured payment default.
  - fully securing all credit for customer's with suspended unsecured credit allowances.
  - termination of a customer's rights under the credit policy.
  - termination of service in accordance with the tariff and applicable law.

* See Credit Policy Article 8.3





## Short Payments and Uplift

## Short Payments – Background

- **Covered in Section V of Attachment L of the SPP Tariff.**
- **Terms as defined in Attachment L:**
  - **<u>Unpaid Obligation</u> – An unpaid past due amount of an invoice pursuant to Section 7 of the Tariff or for Market Services for which SPP does not reasonably expect payment in full.**
  - **<u>Uncollectible Obligation</u> – An Unpaid Obligation that has not been paid within ninety (90) days after SPP declared an invoice an Unpaid Obligation.**
- **Once an invoice is determined to be a Uncollectible Obligation, the dollar amount of this invoice is allocated among all the participants in the market during that week based on their share of the absolute value of the total invoices.**





## Short Payments – Hypothetical Situation

- **The assumptions are:**
  - **In this invoice cycle, there are five participants in the market.**
  - **Three participants have funds that are due to be paid to SPP.**
  - **Two have credit balances and are owed money by SPP.**
  - **On the invoice due date, one MP fails to pay and is in default.**

| MP | Outstanding Invoices Gross | Outstanding Invoices Paid | % of Total Payout | Total $ Payout | Total $ Short Paid |
|---|---|---|---|---|---|
| A | $ 2,000 | $ 2,000 | | | |
| B | $ (6,000) | | 60% | $ 4,200 | $ (1,800) |
| C | $ (4,000) | | 40% | $ 2,800 | $ (1,200) |
| D | $ 3,000 | $ - | | | |
| E | $ 5,000 | $ 5,000 | | | |
| | | $ 7,000 | 100% | $ 7,000 | $ (3,000) |

## Short Payments – Hypothetical Situation

- **Using the data in the previous example, the following transactions are made:**

| MP | Outstanding Invoices ($ Absolute Value) Gross | Outstanding Invoices ($ Absolute Value) Paid | % of Total Paid | Total Loss $ to All MPs | Prior $ Short Paid | Net $ Due From or (Owed) to MPs |
|---|---|---|---|---|---|---|
| A | $ 2,000 | $ 2,000 | 11.8% | $ 353 | $ - | $ 353 |
| B | $ 6,000 | $ 6,000 | 35.3% | $ 1,059 | $ 1,800 | $ (741) |
| C | $ 4,000 | $ 4,000 | 23.5% | $ 706 | $ 1,200 | $ (494) |
| D | $ 3,000 | $ - | 0.0% | $ - | | $ - |
| E | $ 5,000 | $ 5,000 | 29.4% | $ 882 | $ - | $ 882 |
| | $ 20,000 | $ 17,000 | 100.0% | $ 3,000 | $ 3,000 | $ - |

- **The net effect is the reallocation of the unpaid amount from only those that were due money to all participants in the market that week. SPP does not collect any funds above the original unpaid invoice.**





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# In Conclusion…

- All SPP credit customers are encouraged to review the complete SPP Credit Policy available on the SPP website at: http://www.spp.org/publications/Credit%20Policy.pdf
- The Credit Practices Working Group will continue to review and adjust to the Credit Policy (subject to FERC approval) in order to maintain viable and robust energy markets.
- Credit Customers are encouraged to become active in the CPWG.