



Monthly Balance of Planning Period FTR Auction

- First Balance of Planning Period Auction will be the June 2006 Monthly Auction conducted in Mid-May 2006
- Current monthly FTR auction format offers FTRs for the next month only
- The Balance of Planning Period Auction format offers FTRs for the next month and several additional bidding periods
- There will be a credit requirement starting with the June 2006 Monthly Auction

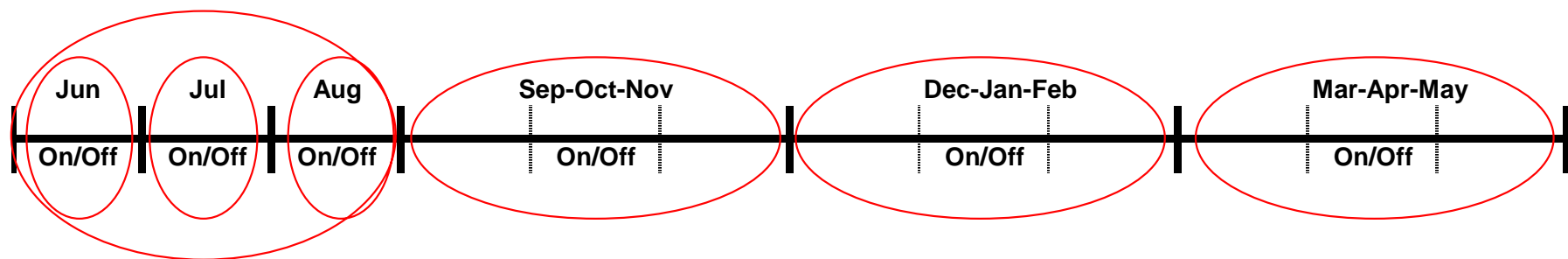


Monthly Balance of Planning Period FTR Auctions

First Balance of Planning Period Auction will be the June 2006 Monthly Auction conducted in Mid-May 2006

Valid Bidding Periods

- Next 3 individual calendar months remaining in planning period
- Any complete planning period quarter remaining in planning period





Monthly Balance of Planning Period FTR Auctions

- FTR bid/offer prices & clearing prices are in \$/MW-period
 - \$/MW-year in annual auction for an annual product
 - \$/MW-month in monthly auction for single-month product
 - \$/MW-quarter in monthly auction for quarterly product
- Valid FTR Source and Sink Points available in the monthly Balance of Planning Period Auction as shown on next slide

	Annual FTR Auction	Monthly FTR Auctions Next Calendar Month	Monthly FTR Auctions Quarters and 2 nd /3 rd Month
FTR Obligations	<p><i>Valid Sources & Sinks are limited to:</i></p> <ul style="list-style-type: none"> •Hubs •Zones •Aggregates •Interface Buses •Generator Buses 	<p><i>Valid Sources & Sinks include any single bus or combination of buses for which a <u>Day-ahead LMP</u> is calculated & posted:</i></p> <ul style="list-style-type: none"> •Hubs •Zones •Aggregates •Interface Buses •Generator/Load Buses 	<p><i>Valid Sources & Sinks are limited to:</i></p> <ul style="list-style-type: none"> •Hubs •Zones •Aggregates •Interface Buses •Generator Buses
FTR Options	<p><i>Only a subset of paths will be eligible for FTR Options in order to prevent potential auction clearing performance issues</i></p>		



Monthly Balance of Planning Period Auctions

Valid Bidding Periods

```
- <env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
- <env:Body>
- <SubmitRequest xmlns="http://eftr.pjm.com/fttr/xml">
- <FTRQuotes market="SEP 2003 Auction" round="1">
- <FTRQuote trade="Buy">
  <Path source="APS" sink="AECO" />
  <Class>24H</Class>
  <Period>All</Period>
  <Hedge>Obligation</Hedge>
  <MW>123.0</MW>
  <Price>321.00</Price>
</FTRQuote>
- <FTRQuote trade="Buy">
  <Path source="APS" sink="AECO" />
  <Class>24H</Class>
  <Period>All</Period>
  <Hedge>Obligation</Hedge>
  <MW>111.0</MW>
  <Price>111.00</Price>
</FTRQuote>
- <FTRQuote trade="Buy">
  <Path source="AECO" sink="APS" />
  <Class>OnPeak</Class>
  <Period>All</Period>
  <Hedge>Option</Hedge>
  <MW>50.0</MW>
  <Price>5.00</Price>
</FTRQuote>
</FTRQuotes>
</SubmitRequest>
</env:Body>
</env:Envelope>
```

“All” will no longer be a valid Period for the monthly auctions. Instead, use the Period names shown on the next two slides



2006/2007 FTR Monthly Auction Names and Periods

Market Name	Period	Start	End
JUN 2006 Auction	JUN	6/1/06	6/30/06
JUN 2006 Auction	JUL	7/1/06	7/31/06
JUN 2006 Auction	AUG	8/1/06	8/31/06
JUN 2006 Auction	Q1	6/1/06	8/31/06
JUN 2006 Auction	Q2	9/1/06	11/30/06
JUN 2006 Auction	Q3	12/1/06	2/28/07
JUN 2006 Auction	Q4	3/1/07	5/31/07
JUL 2006 Auction	JUL	7/1/06	7/31/06
JUL 2006 Auction	AUG	8/1/06	8/31/06
JUL 2006 Auction	SEP	9/1/06	9/30/06
JUL 2006 Auction	Q2	9/1/06	11/30/06
JUL 2006 Auction	Q3	12/1/06	2/28/07
JUL 2006 Auction	Q4	3/1/07	5/31/07
AUG 2006 Auction	AUG	8/1/06	8/31/06
AUG 2006 Auction	SEP	9/1/06	9/30/06
AUG 2006 Auction	OCT	10/1/06	10/31/06
AUG 2006 Auction	Q2	9/1/06	11/30/06
AUG 2006 Auction	Q3	12/1/06	2/28/07
AUG 2006 Auction	Q4	3/1/07	5/31/07
SEP 2006 Auction	SEP	9/1/06	9/30/06
SEP 2006 Auction	OCT	10/1/06	10/31/06
SEP 2006 Auction	NOV	11/1/06	11/30/06
SEP 2006 Auction	Q2	9/1/06	11/30/06
SEP 2006 Auction	Q3	12/1/06	2/28/07
SEP 2006 Auction	Q4	3/1/07	5/31/07
OCT 2006 Auction	OCT	10/1/06	10/31/06
OCT 2006 Auction	NOV	11/1/06	11/30/06
OCT 2006 Auction	DEC	12/1/06	12/31/06
OCT 2006 Auction	Q3	12/1/06	2/28/07
OCT 2006 Auction	Q4	3/1/07	5/31/07



2006/2007 FTR Monthly Auction Names and Periods

Market Name	Period	Start	End
NOV 2006 Auction	NOV	11/1/06	11/30/06
NOV 2006 Auction	DEC	12/1/06	12/31/06
NOV 2006 Auction	JAN	1/1/07	1/31/07
NOV 2006 Auction	Q3	12/1/06	2/28/07
NOV 2006 Auction	Q4	3/1/07	5/31/07
DEC 2006 Auction	DEC	12/1/06	12/31/06
DEC 2006 Auction	JAN	1/1/07	1/31/07
DEC 2006 Auction	FEB	2/1/07	2/28/07
DEC 2006 Auction	Q3	12/1/06	2/28/07
DEC 2006 Auction	Q4	3/1/07	5/31/07
JAN 2007 Auction	JAN	1/1/07	1/31/07
JAN 2007 Auction	FEB	2/1/07	2/28/07
JAN 2007 Auction	MAR	3/1/07	3/31/07
JAN 2007 Auction	Q4	3/1/07	5/31/07
FEB 2007 Auction	FEB	2/1/07	2/28/07
FEB 2007 Auction	MAR	3/1/07	3/31/07
FEB 2007 Auction	APR	4/1/07	4/30/07
FEB 2007 Auction	Q4	3/1/07	5/31/07
MAR 2007 Auction	MAR	3/1/07	3/31/07
MAR 2007 Auction	APR	4/1/07	4/30/07
MAR 2007 Auction	MAY	5/1/07	5/31/07
MAR 2007 Auction	Q4	3/1/07	5/31/07
APR 2007 Auction	APR	4/1/07	4/30/07
APR 2007 Auction	MAY	5/1/07	5/31/07
MAY 2007 Auction	MAY	5/1/07	5/31/07

- Credit requirements apply to all annual FTR auction and balance of planning period FTR auctions (monthly, quarterly and balance products)
 - A credit requirement is not required from “Established” FTR Auction Participants for prompt-month monthly FTR products, which is the individual monthly product for the immediately-upcoming month
 - “Established” participants defined as those with at least six months of bidding experience and completed monthly FTR Auction activity
- FTR Auction participants must establish a total FTR Credit Limit prior to bidding into an FTR Auction
- A Credit Requirement is calculated for each buy bid/sell offer being made into an open auction and for each buy bid/sell offer that cleared in any previous auction.
- A participants’ Total Credit Requirement is the sum of the individual bid/offer Credit Requirements offset by any ARR credits
- Participants must maintain credit with PJM at least equal to the Participants’ Total Credit Requirement
- No bid will be accepted into an open auction if the bid causes a Participants’ Total Credit Requirement to exceed the Participants’ Credit Limit

- A Credit Requirement is calculated for each buy bid/sell offer
 - Credit Requirement is equal to the FTR Cost minus an offset for the expected economic value of the FTR
 - Expected economic value based on historical Day-Ahead Market LMPs
 - Use weighted average of past three years (50%-30%-20%) when calculating historical LMPs
 - Separate historic values for on-peak, off-peak and 24-hour FTRs
 - PJM-calculated averages for each node are posted on the web
 - Discount historical value by 30% when calculating credit requirements for FTR paths with positive expected value



Credit Requirement Calculation (cont.)

- For an open auction, the credit requirement calculation is made using bid MWs and bid prices
- For a cleared auction, the credit requirement calculation is made using cleared MWs and cleared prices
- The Credit Requirement will be set to zero for any FTR Buy Bid which has an exposure value of zero or less
- The Credit Requirement will be set to zero for any FTR Sell Offer which has an exposure value of zero or less at the time it is submitted into an open auction
 - Once the auction has cleared, however, credit requirements are recalculated, and successful sell offers may have a negative credit requirement (i.e. for a cleared auction, the Credit Requirement is not set to zero for a cleared sell offer which has an exposure value of zero or less)
- Self-Scheduled FTRs will have a zero Credit Requirement

- Specific timetable for credit release
- Annual Auction product: 15% released after financial settlement of the December PJM bill in January and an additional 15% after payment of each subsequent bill, with the full amount released after payment of the May bill in June
- Quarterly Auction products: The full amount of credit will be released after settlement of the bill for the last month of activity in the quarter.
- Monthly Auction products: The full amount of credit will be released after settlement of the bill for that month of activity



FTR Credit Examples

Buy Bids

Historical LMPs

Node	On-Peak (4160 hours)	Off-Peak (4600 hours)	24-Hour (8760 hours)
A	\$82.00	\$19.00	\$48.92
B	\$85.00	\$20.00	\$50.87

Credit Requirement (CR) for Buy bids is set to zero if Exposure < 0 otherwise CR = Exposure

Buy Bids

Source	Sink	Bid MWs	Hedge Type	Class	Bid (\$/MW-yr)	Payment	Expected Value	Exposure	Credit Required
A	B	1	Obligation/Option	ON	\$10,000	\$10,000	$(\$85 - \$82)(1\text{MW})(4160 \text{ hrs})(1 - .30) = \$8,736$	\$1,264	\$1,264
A	B	1	Obligation/Option	ON	\$6,000	\$6,000	$(\$85 - \$82)(1\text{MW})(4160 \text{ hrs})(1 - .30) = \$8,736$	-\$2,736	0
B	A	1	Obligation	ON	-\$9,000	-\$9,000	$(\$82 - \$85)(1\text{MW})(4160 \text{ hrs}) = -\$12,480$	\$3,480	\$3,480
B	A	1	Option	ON	\$1,000	\$1,000	$(\$82 - \$85)(1\text{MW})(4160 \text{ hrs}) = -\$12,480$ -\$12,480 \$0	\$1,000	\$1,000

Payment is equal to:
(Bid MW)*(Bid Price) for open auctions
(Cleared MW)*(CP) for cleared auctions

30% de-ration factor is not applied to paths with Sink LMP < Source LMP

\$EV is set to zero if Sink LMP < Source LMP and Hedge Type=Option

Historical LMPs

Node	On-Peak (4160 hours)	Off-Peak (4600 hours)	24-Hour (8760 hours)
A	\$82.00	\$19.00	\$48.92
B	\$85.00	\$20.00	\$50.87

For an open auction, Credit Requirement for Sell Offers is set to zero if Exposure < 0

Sell Offers

Source	Sink	Bid MWs	Hedge Type	Class	Bid (\$/MW-yr)	Payment	Expected Value	Exposure	Credit Required Submitted	Credit Required Cleared
A	B	1	Obligation	ON	\$10,000	-\$10,000	$(\$85-\$82)(-1\text{MW})(4160\text{ hrs})(1-.30)=-\$8,736$	-\$1,264	\$0	-\$1,264
A	B	1	Obligation	ON	\$6,000	-\$6,000	$(\$85-\$82)(-1\text{MW})(4160\text{ hrs})(1-.30)=-\$8,736$	\$2,736	\$2,736	\$2,736
B	A	1	Obligation	ON	-\$9,000	\$9,000	$(\$82-\$85)(-1\text{MW})(4160\text{ hrs})=\$12,480$	-\$3,480	\$0	-\$3,480
B	A	1	Option	ON	\$1,000	-\$1,000	$(\$82-\$85)(-1\text{MW})(4160\text{ hrs})=\$12,480$ \$12,480 \$0	-\$1,000	\$0	-\$1,000

Payment is equal to:
 (-1)*(Bid MW)*(Bid Price) for open auctions
 (-1)*(Cleared MW)*(CP) for cleared auctions

30% de-rating factor is not applied to paths with Sink LMP < Source LMP

\$EV is set to zero if Sink LMP < Source LMP and Hedge Type=Option

For a cleared auction, Credit Requirement equals Exposure for all Sell Offers



of Hours per Bidding Period

- The credit calculation requires the number of on-peak, off-peak and 24-hr hours in the period being bid on

	# of On-Peak Hours	# of Off-Peak Hours	# of 24-HR Hours
JUN 2006	352	368	720
JUL 2006	320	424	744
AUG 2006	368	376	744
SEP 2006	320	400	720
OCT 2006	352	393	745
NOV 2006	336	384	720
DEC 2006	320	424	744
JAN 2007	352	392	744
FEB 2007	320	352	672
MAR 2007	352	391	743
APR 2007	336	384	720
MAY 2007	352	392	744
2006/07 Planning Period	4080	4680	8760
Planning Period Quarter 1	1040	1168	2208
Planning Period Quarter 2	1008	1177	2185
Planning Period Quarter 3	992	1168	2160
Planning Period Quarter 4	1040	1167	2207

- The FTR Position section now includes two new tabs for displaying credit summary and credit detail for any selected date.
- Select current date to view current credit requirement.
- During an open auction these screens will update as bids are submitted to reflect new credit available.
- After an auction is cleared, the credit will be calculated based on clearing results.
- The selected date will display the credit summary taking into account the settlement date for all FTRs.
- Settlement Dates available at
<http://www.pjm.com/markets/settlements/downloads/06cal.pdf>

- eData
- EES
- eFTR
- eMKT
- eMTR
- eSchedules
- eSuite Messages
- Load Response
- NICCapacity
- OASIS
- Non - eSuite Tools**
- eDART
- eGADS
- eFuel
- Emerg. Procedures

Quotes by Portfolio Quotes by Participant

FTR Quotes by Participant

Portfolio: Market: Period:

Pages: 1 Records: 1 - 1 of 1 matches.

FTR Quotes by Portfolio for JUN 2006 Auction

<input type="checkbox"/>	Source	Sink	Period	Class	Hedge	Trade	Bid MW	Bid Price
<input type="checkbox"/>	JCPL	DPL	JUL	24H	Obligation	Buy	100.0	600.00

The June 2006 Auction is currently open in this screen.

- FTR Main
- FTR Results
- FTR Quotes**
- FTR Trading
- FTR Position
- ARRs
- Administration

- Company
- eData
- EES
- eFTR
- eMKT
- eMTR
- eSchedules
- eSuite Messages
- Load Response
- NICCapacity
- OASIS
- Position - eSuite Tools
- eDART
- eGADS
- eFuel
- Emerg. Procedures

- Position
- Credit Summary
- Credit Detail

Credit Summary Get

Date :

Credit Limit: 100000 Credit Available: 47291.2
 Credit Requirement: 52708.8 ARR Credit: 0

Pages: 1

Records: 1 - 1 of 1 ma

Auctions			
Market	Round	Right Type	Credit Requirement
JUN 2006 Auction	1	FTR	52708.8

This screen is used to determine available credit for a selected date. Select current date to view current credit requirement. The credit will be calculated for open or cleared auctions depending on settlement dates.

- FTR Main
- FTR Results
- FTR Quotes
- FTR Trading
- FTR Position
- ARRs
- Administration

- eCapacity
- eData
- EES
- eFTR
- eNKT
- eNTR
- eSchedules
- eSuite Messages
- Load Response
- NICCapacity
- DASIS
- Position - eSuite Tools**
- eDART
- eGADS
- eFuel
- Emerg. Procedures

Position Credit Summary **Credit Detail**

Credit Detail Get Report

Date :

Pages: 1

Records 1 - 1 of 1 matches

FTRs																
Right Type	Market	Round	Sink	Source	Period	Class	Hedge	Trade	Bid MW	Bid Price	Cleared MW	Cleared Price	Bid Credit Requirement	Cleared Credit Requirement	Current Credit Requirement	
FTR	JUN 2006 Auction	1	DPL	JCPL	JUL	24H	Obligation	Buy	100	€00			52708.8		52708.8	

This screen is used to show all FTRs for a selected date that have not been settled.

Select current date to view current credit requirement for each FTR.

The credit will be calculated for open or cleared auctions.

Bid Credit is displayed for open auctions.

Cleared Credit is displayed for cleared auctions.

Current Credit displays total current credit for each FTR.

- FTR Man
- FTR Results
- FTR Quotes
- FTR Trading
- FTR Position**
- ARRs
- Administration