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| NPRR Number | [1292](https://www.ercot.com/mktrules/issues/NPRR1292) | NPRR Title | Granular Product Type for CRR TOU |
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| Date | | October 2, 2025 | |
|  | |  | |
| Submitter’s Information | | | |
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| Phone Number | |  | |
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| Market Segment | | Independent Generator | |

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| Comments |

Vistra values the constructive engagement on this Nodal Protocol Revision Request (NPRR) PRR during the various stakeholder meetings. The feedback received has helped refine the proposal, which Vistra believes will address the concerns raised and ensure that the granular Congestion Revenue Right (CRR) Time Of Use (TOU) blocks effectively meet stakeholder needs and deliver an enhanced hedging product to the market.

1) Retention of the current 5\*16 and 2\*16 TOU blocks

Stakeholders emphasized the importance of maintaining the original on-peak TOU blocks to support their established hedging strategies. While Vistra strongly believes that the proposed solar and non-solar TOU blocks offer a more efficient means of hedging against the evolving generation and congestion patterns within the grid, the proposal has been revised to incorporate the new TOUs without eliminating the original on-peak TOU blocks.

Vistra requests ERCOT’s consideration to implement the solution in such a manner that the newly proposed solar and non-solar on-peak TOUs may enable retirement of on-peak blocks if needed.

2) Simplification of monthly solar and non-solar TOU blocks

Stakeholders expressed concerns about the added complexity of having variable start and end hours for TOUs each month. Vistra recognizes the value of having a product that is easy to use and has updated the proposal to have two sets of start and end hours for Solar and Non-solar TOUs blocks: one set for April–September and another for October–March. Vistra believes that this streamlined approach will facilitate adaptability and anticipates that enhanced simplicity may encourage Intercontinental Exchange (“ICE”) to develop similar offerings.

Vistra is confident these amendments address the primary concerns identified while delivering a more effective hedging product for the CRR market. By retaining the original on-peak TOU blocks and simplifying the new solar and non-solar options, stakeholders can maintain their current strategies while also benefiting from increased flexibility and ease of use. Vistra looks forward to continued collaboration with stakeholders as this important proposal advances.

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| Revised Cover Page Language |

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| Revision Description | This Nodal Protocol Revision Request (NPRR) creates the granular Congestion Revenue Right (CRR) Time Of Use (TOU) blocks to align with the current resource mix and improve auction speed and efficiency. Currently, CRRs are traded as weekday/weekend peak and off-peak, with no opportunity to further shape hedges. New additional granular CRR TOU blocks will divide weekday/weekend peak between solar and non-solar hours, to create a more targeted hedging product. |
| Justification of Reason for Revision and Market Impacts | Increase in Intermittent Renewable Resources (IRRs) has changed generation and congestion patterns in the system - current blocks (especially 5x16 and 2x16) show significant price variability due to differences between solar and non-solar hours with congestion values frequently shifting between positive and negative within the block. In addition, more granular blocks would allow market participants to hedge more efficiently with Obligations (over Options) which require fewer computational resources for CRR auction clearing, speeding up process and efficiency.  Proposed solar and non-solar TOU Blocks would have start and end hours as:      TOU Mapping   * Solar and Non-Solar Hours per month of the year for Monday through Friday (excluding NERC holidays) – 2 TOUs * 5x16 blocks for hours ending 0700-2200 for Monday through Friday (excluding NERC holidays) – 1 TOU * Solar and Non-Solar Hours per month of the year for Saturday and Sunday, and NERC holidays – 2 TOUs * 2x16 blocks for hours ending 0700-2200 for Saturday and Sunday, and NERC holidays – 1TOU * 7x8 blocks for hours ending 0100-0600 and hours ending 2300-2400 Sunday through Saturday (No proposed changes) – 1 TOU     Legend   |  |  | | --- | --- | | Solar Weekday/Weekend TOUs (2 TOUs) |  | | Non-Solar Weekday/Weekend TOUs (2 TOUs) |  | | Off-Peak TOU (No proposed changes – 1 TOU) |  | |

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| Revised Proposed Protocol Language |

7.3 Types of Congestion Revenue Rights to Be Auctioned

(1) ERCOT shall auction the following types of Congestion Revenue Rights (CRRs):

(a) Point-to-Point (PTP) Options;

(b) PTP Obligations; and

(c) Flowgate Rights (FGRs) that are defined in Section 7.3.1, Flowgates.

(2) PTP Options are evaluated hourly in each CRR Auction as the positive power flows on all directional network elements created by the injection and withdrawal at the specified source and sink points in the quantity represented by the CRR bid or offer (MW), excluding all negative flows on all directional network elements.

(3) PTP Obligations are evaluated hourly in each CRR Auction as the positive and negative power flows on all directional network elements created by the injection and withdrawal at the specified source and sink points of the quantity represented by the CRR bid or offer (MW).

(4) PTP Options can only result in payments from ERCOT to the CRR Owner of record. A PTP Obligation may result in either a payment or a charge to the CRR Owner of record.

(5) CRRs must be auctioned in the following Time Of Use (TOU) blocks (having the same MW amount for each hour within the block):

(a) 5x16 blocks for hours ending 0700-2200, Monday through Friday (excluding North American Electric Reliability Corporation (NERC) holidays), in one-month strips;

(b) 5xhour (5x“H”) blocks for solar (“S”) and non-solar (“NS”) hours per month for Monday through Friday (excluding NERC holidays), in one-month strips as follows:

(i) For the months from April to September, 5x11S blocks for hours ending 0900-1900;

(ii) For the months from April to September, 5x5NS blocks for hours ending 0700-0800 and 2000-2200;

(iii) For the Months from October to March, 5x8S blocks for hours ending 1000-1700;

(iv) For the Months from October to March, 5x8NS blocks for hours ending 0700-0900 and 1800-2200; and

(c) 2x16 blocks for hours ending 0700-2200, Saturday and Sunday, and NERC holidays in one-month strips; and

(d) 2xhour (2x“H”) blocks for solar (“S”) and non-solar (“NS” hours per month for Saturday and Sunday, and NERC holidays in one-month strips as follows:

(i) For the months from April to September, 2x11S blocks for hours ending 0900-1900;

(ii) For the months from April to September, 2x5NS blocks for hours ending 0700-0800 and 2000-2200;

(iii) For the Months from October to March, 2x8S blocks for hours ending 1000-1700;

(iv) For the Months from October to March, 2x8NS blocks for hours ending 0700-0900 and 1800-2200; and

(e) 7x8 blocks for hours ending 0100-0600 and hours ending 2300-2400 Sunday through Saturday, in one-month strips.

(6) CRR Auction bids and Pre-Assigned Congestion Revenue Right (PCRR) nominations must specify a TOU block.

(7) For the CRR Monthly Auction only, a single block bid may be submitted for all hours in a calendar month, which represents a linked-offer for all seven TOU blocks described above in paragraph (5).

7.5.5.3 Auction Process

(1) The CRR Auction must be a single-round, simultaneous auction for selling the CRRs available for all auction products. ERCOT shall enter into the CRR Auction system a credit limit for each Counter-Party that has at least one CRR Account Holder. A Counter-Party’s CRR Auction credit limit is equal to the lesser of the credit limit as determined in Section 16.11.4.6.1, Credit Requirements for CRR Auction Participation, or, if provided, the Counter-Party’s self-imposed CRR Auction credit limit for the CRR Monthly Auction or for a time-of-use within a CRR Auction held as part of a CRR Long-Term Auction Sequence.

(2) Prior to the CRR Auction, ERCOT will conduct a two-part pre-auction screening process. First, if the Counter-Party’s CRR Auction credit limit is greater than that Counter-Party’s credit exposure as defined below using the CRR bid volumes rather than awarded volumes, then the Counter-Party’s CRR Auction credit limit will be ignored as the CRR Auction is solved. Second, for each CRR Account Holder of a Counter-Party, if the CRR Account Holder’s self-imposed credit limit is greater than that CRR Account Holder’s credit exposure as defined below, then the CRR Account Holder’s self-imposed credit limit will be ignored as the CRR Auction is solved.

The calculated exposure for the pre-auction screening for each CRR Account Holder is the sum of the credit exposure for PTP Obligation bids, PTP Obligation offers, and PTP Option bids for that CRR Account Holder. The calculated exposure for the pre-auction screening for each Counter-Party is the sum of the credit exposure for PTP Obligation bids, PTP Obligation offers, and PTP Option bids for that Counter-Party. PTP Option offers have zero credit exposure. Separately, for PTP Obligation bids, PTP Obligation offers, and PTP Option bids, for each source/sink Settlement Point combination, the credit exposure will use the bid price and MW quantity that produces the maximum credit exposure that could result from the CRR Auction for that source/sink Settlement Point combination.

(3) The credit constraint for each Counter-Party is based on the following calculation:

**ACR*b* = AOBLCR *b* + AOPTCR *b*- AOBLCRO *b***

Where:

AOBLCR *b* = ∑*m* ∑*h*∑*j, k*[(BOBLMW *m, h,(j, k), b*\* (Max(0, BPOBL *m, h,(j, k), b*) – Min(0,A *ci99, m, h,(j, k), b*, EACP *m, h,(j, k)*)))]

AOPTCR *b* = ∑*m* ∑*h*∑*j*, *k*[(BOPTMW *m, h,(j, k), b* \* BPOPT*m, h,(j, k), b*)]

AOBLCRO *b* = ∑*m* ∑*h*∑*j*, *k*(OOBLMW*m, h,(j, k), b* \* Min(0, OPOBL*m, h,(j, k), b*))

The above variables are defined as follows:

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| --- | --- | --- |
| Variable | Unit | Description |
| ACR *b* | $ | *Auction Credit Requirement*—The auction credit requirement for a Counter-Party *b.* |
| AOBLCR *b* | $ | *Auction PTP Obligation Credit Requirement*—The auction credit requirement for all PTP Obligation bids submitted by a Counter-Party *b* for all Operating Days. |
| BOBLMW *m, h, (j, k), b* | MW | *Awarded Bid PTP Obligation*—The awarded bid PTP Obligation with the source *j* and sink *k* for the hour *h,* and month *m* submitted by a Counter-Party *b.* |
| BPOBL *m, h, (j, k), b* | $/MW per hour | *Bid Price for PTP Obligation*—Bid Price for PTP Obligationwith the source *j* and sink *k* for the hour *h,* and month *m* submitted by a Counter-Party *b.* |
| A*ci 99, m, h, (j, k), b* | $/MW per hour | *Path-Specific DAM-Based Adder*—The path-specific DAM-based adder with the source *j* and sink *k* for the hour *h,* and month *m* submitted by a Counter-Party *b*; calculated as 99th percentile of the average rolling consecutive DAM settled price for the reference CRR source/sink over a period that represents a month for each product type (18 days for5\*16 and 5xhour (5x“H”) blocks for solar (“S”) and non-solar (“NS”) hours as defined in Section 7.3(5)(b), 8 days for 2\*16 and 2xhour (2x“H”) blocks for solar (“S”) and non-solar (“NS”) hours as defined in Section 7.3(5)(d), 28 days for 7\*8). The look-back period for DAM settled prices shall be the lesser of Nodal Market go-live to current time and current time minus three years. If historical Day-Ahead Settlement Point Prices (DASPPs) are not available for a Settlement Point for one or more Operating Days, ERCOT will designate a proxy Settlement Point for this purpose, and the DASPPs of the proxy Settlement Point of corresponding Operating Days are used. |
| EACP*m, h, (j, k)* | $/MW per hour | *Effective Auction Clearing Price*—The auction clearing price with the source *j* and sink *k* for the hour *h,* and month *m*.  For each CRR PTP Obligation, this value is equal to the auction clearing price of an awarded CRR selected as follows:  (a) Awarded CRRs with the source *j* and sink *k* containing hour *h* and operating month *m* are selected from the set of unexpired awarded PTP Obligations. If no awarded CRRs are found the EACP value is zero.  (b) If (a) results in more than one awarded CRR, awarded CRRs with the most recent award date are selected.  (c) If (b) results in more than one awarded CRR, then the awarded CRR with the lowest auction clearing price is selected. |
| AOBLCRO *b* | $ | *Auction PTP Obligation Credit Requirement for Offers*—The auction credit requirement for all PTP Obligation offers submitted by a Counter-Party *b* for all Operating Days. |
| OOBLMW*m, h, (j, k), b* | MW | *Awarded Offer PTP Obligation*—The awarded offer PTP Obligation with source *j* and sink *k* for the hour *h,* and month *m* submitted by a Counter-Party *b.* |
| OPOBL *m, h, (j, k ), b* | $/MW per hour | *Offer Price for PTP Obligation*—The offer price for PTP Obligation with the source *j* and sink *k* for the hour *h,* and month *m* submitted by a Counter-Party *b.* |
| AOPTCR *b* | $ | *Auction PTP Option Bid Credit Requirement*—The auction credit requirement for all PTP Option bids submitted by a Counter-Party *b.* |
| BOPTMW*m, h, (j, k),b* | MW | *Awarded Bid PTP Option*—The awarded bid PTP Option with the source *j* and sink *k* for the hour *h,* and month *m* submitted by a Counter-Party *b.* |
| BPOPT*m, h, (j, k), b* | $/MW per hour | *Bid Price for PTP Option*—The bid price for PTP Option with the source *j* and sink *k* for the hour *h,* and month *m* submitted by a Counter-Party *b*. |
| *b* | none | A Counter-Party. |
| *m* | none | An operating month. |
| *h* | none | An Operating Hour. |
| *j* | none | A source Settlement Point. |
| *k* | none | A sink Settlement Point. |
| *ci99* | none | 99th percentile confidence interval. |

(4) ERCOT may review preliminary CRR Auction results to ensure that post auction collateral requirements are satisfied for all CRR Account Holders participating in the CRR Auction. If it is practicable to rerun the applicable CRR Auction, and the post CRR Auction collateral requirements for a Counter-Party are not satisfied, ERCOT:

(a) Shall promptly notify the Counter-Party of the amount by which its Financial Security must be increased and allow it until 1500 on the next Bank Business Day from the date on which ERCOT delivered Notification to increase the Financial Security.

(b) If sufficient Financial Security is not received by 1500 on the next Bank Business Day, ERCOT shall void all of the Counter-Party’s bids and offers in the CRR Auction and rerun the CRR Auction without that Counter-Party’s activity.

(c) ERCOT shall award CRRs in quantities truncated to the nearest tenth MW (0.1 MW).

(d) The CRR clearing price is equal to the corresponding Shadow Price for that CRR product.

(e) Except as noted in paragraph (f) below, when a CRR Account Holder is awarded CRRs as a result of a CRR Auction, the CRRs do not become the property of the winning CRR Account Holder, and the CRRs may not be placed in their CRR accounts, until the required CRR Invoice has been paid.

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| ***[NPRR1023: Replace paragraph (e) above with the following upon system implementation:]***  (e) When a CRR Account Holder is awarded CRRs as a result of a CRR Auction, the CRRs do not become the property of the winning CRR Account Holder, and the CRRs may not be placed in their CRR accounts, until the required CRR Invoice has been paid. |

(f) Following a one-time auction of CRRs pursuant to Section 16.11.6.1.4, Repossession of CRRs by ERCOT, or Section 16.11.6.1.5, Declaration of Forfeit of CRRs, the CRRs may be placed in the account of the winning CRR Account Holder immediately upon determination of the winning bidder if the post-auction collateral requirement is satisfied and if ERCOT determines that the transfer is required to ensure the correctness of the inventory for any subsequent CRR Auction.

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| ***[NPRR1023: Delete paragraph (f) above upon system implementation.]*** |

(5) ERCOT shall use a linear programming auction engine model for each CRR Auction that evaluates all CRR Auction bids and CRR Auction offers submitted, and selects a combination of CRR Auction bids and CRR Auction offers that:

(a) Makes the solution simultaneously feasible within the limits of the ERCOT network capability over the auction term; and

(b) Maximizes the objective function, which is equal to the total economic value (as expressed in the CRR Auction bids) of the awarded CRR Auction bids, less the total economic cost (as expressed in CRR Auction offers) of the awarded CRR Auction offers, while observing all applicable constraints.

(6) The CRR Network Model must, to the extent practicable, reflect the continuous and post-contingency system operating limits and operational procedures (i.e., Remedial Action Schemes (RASs), Automatic Mitigation Plans (AMPs) and Remedial Action Plans (RAPs)) in the Network Operations Model used by ERCOT during Real-Time operations, as discussed below in Section 7.5.5.4, Simultaneous Feasibility Test.

(7) Once a CRR Auction is complete, ERCOT shall archive and keep the CRR Auction system and all models used to finalize the CRR Auction results under ERCOT’s data retention policy as that policy applies to data that may be needed to resolve requests for billing adjustments under applicable billing adjustment procedures.

(8) Once a CRR Auction is complete, ERCOT will make available on the MIS Certified Area each active CRR Account Holder’s credit exposure calculated within the CRR Auction process (as defined in paragraph (3) above).

**16.11.4.5 Determination of the Counter-Party Future Credit Exposure**

(1) ERCOT shall monitor and calculate the Counter-Party’s FCE for all the CRR Account Holders represented by the Counter-Party as CRR Owner of record at ERCOT.

FCE a = FCEOBL a + FCEOPT a

The above variables are defined as follows:

| Variable | Unit | Description |
| --- | --- | --- |
| FCE *a* | $ | *Future Credit Exposure* for all CRRs held by *all CRR Account Holders* represented by the Counter-Party. |
| FCEOBL *a* | $ | *Future Credit Exposure for PTP Obligations* for all PTP Obligations held by all CRR Account Holders represented by the Counter-Party as CRR Ownerof record at ERCOT, for all Operating Days in the current operating month, Prompt Month, and all Forward Months. |
| FCEOPT *a* | $ | *Future Credit Exposure for PTP Options* for all PTP Options held by all CRR Account Holders represented by the Counter-Party as CRR Ownerof record at ERCOT, for all Operating Days remaining in the current operating month and Prompt Month. |
| *a* | none | All CRR Account Holders represented by the Counter-Party. |

(2) The Counter-Party’s FCE for PTP Obligations (FCEOBL) held by all CRR Account Holders represented by the Counter-Party as CRR Owner of record at ERCOT are calculated as follows:

**FCEOBL** *a* **=** ∑*m* **[(∑*h*∑*j, k*NAOBLMW *m, h, (j, k)*) \* (-Min(0, PWA *ci100, m*, PWACP *m*))]**

**PWACP *m*=∑*h*∑*j, k*[NAOBLMW *m, h, (j, k)*\* EACP*m, h, (j, k)*] / ∑*h*∑*j, k*[NAOBLMW *m, h, (j, k)*]**

The above variables are defined as follows:

| **Variable** | **Unit** | **Description** |
| --- | --- | --- |
| FCEOBL *a* | $ | *Future Credit Exposure for PTP Obligations* for all PTP Obligations held by all CRR Account Holders represented by the Counter-Party as CRR Ownerof record at ERCOT for all Operating Days in the current operating month, Prompt Month, and all Forward Months. |
| NAOBLMW*m, h, (j, k)* | MW | *Net Awarded PTP Obligations*⎯Net awarded PTP Obligations with the source *j* and sink *k* for the hour *h* and month *m* owned by all CRR Account Holders represented by the Counter-Party as CRR Owner of record at ERCOT for all Operating Days in the current operating month, Prompt Month, and Forward Months. |
| PWA*ci100, m* | $/MW per hour | *Portfolio Weighted Adder*⎯The portfolio weighted adder calculated as the 100th percentile of a volume weighted average rolling consecutive DAM settled price for all CRR Account Holders represented by the Counter-Party as CRR Owner of record at ERCOT based on volumes owned for the month *m*, over a period that represents a month for each product type (18 days for 5\*16 and 5xhour (5x“H”) blocks for solar (“S”) and non-solar (“NS”) hours as defined in Section 7.3(5)(b), 8 days for2\*16 and 2xhour (2x“H”) blocks for solar (“S”) and non-solar (“NS”) hours as defined in Section 7.3(5)(d), 28 days for 7\*8). The look-back period for DAM settled prices shall be the lesser of January 1, 2011 to the current time, and the current time minus three years. If historical Day-Ahead Settlement Point Prices (DASPPs) are not available for a Settlement Point for one or more Operating Days, ERCOT will designate a proxy Settlement Point for this purpose, and the DASPPs of the proxy Settlement Point of corresponding Operating Days are used. |
| PWACP *m* | $/MW per hour | *Portfolio Weighted Auction Clearing Price*⎯The portfolio weighted auction clearing price calculated as the volume weighted auction clearing price for all CRR Account Holders represented by the Counter-Party as CRR Owner of record at ERCOT based on the most recent auction clearing price for the month *m* and volumes owned for the month *m.* |
| EACP*m, h, (j, k)* | $/MW per hour | *Effective Auction Clearing Price*— The auction clearing price with the source *j* and sink *k* for the hour *h,* and month *m*.  For each CRR PTP Obligation, this value is equal to the auction clearing price of an awarded CRR selected as follows:  (a) Awarded CRRs with the source *j* and sink *k* containing hour *h* and operating month *m* are selected from the set of unexpired awarded PTP Obligations. If no awarded CRRs are found the EACP value is zero.  (b) If (a) results in more than one awarded CRR, awarded CRRs with the most recent award date are selected.  (c) If (b) results in more than one awarded CRR, then the awarded CRR with the lowest auction clearing price is selected. |
| *j* | none | A source Settlement Point. |
| *k* | none | A sink Settlement Point. |
| *m* | none | An operating month. |
| *h* | none | An Operating Hour. |
| *a* | none | All CRR Account Holders represented by the Counter-Party. |
| *ci100* | none | 100th percentile confidence interval. |

(3) The FCE for PTP Options (FCEOPT) held by all the CRR Account Holders represented by the Counter-Party as CRR Owner of record at ERCOT are calculated as follows:

FCEOPT a = - ∑m ∑h ∑j, k [(NAOPTMW m, h, (j, k)) \* Max(0, A ci99, ctou, (j, k))]

The above variables are defined as follows:

| **Variable** | **Unit** | **Description** |
| --- | --- | --- |
| FCEOPT *a* | $ | *Future Credit Exposure for PTP Options*⎯FCE for all PTP Options held by all CRR Account Holders represented by the Counter-Party as CRR Ownerof record at ERCOT for all Operating Days remaining in the current operating month and Prompt Month. |
| A *ci99, ctou, (j, k)* | $/MW per hour | *Path Specific DAM Based Adder*⎯Path specific DAM based adder calculated as 99th percentile of the average rolling consecutive DAM settled price for the CRR source *j* and sink *k* over a period that represents a month for each CRR Time Of Use (TOU) *ctou* product type (18 days for 5\*16 and 5xhour (5x“H”) blocks for solar (“S”) and non-solar (“NS”) hours as defined in Section 7.3(5)(b), 8 days for 2\*16 and 2xhour (2x“H”) blocks for solar (“S”) and non-solar (“NS”) hours as defined in Section 7.3(5)(d), 28 days for 7\*8). The look-back period for DAM settled prices shall be the lesser of January 1, 2011 to the current time, and the current time minus three years. If historical DASPPs are not available for a Settlement Point for one or more Operating Days, ERCOT will designate a proxy Settlement Point for this purpose, and the DASPPs of the proxy Settlement Point of corresponding Operating Days are used. |
| NAOPTMW*m, h, (j, k)* | MW | *Net Awarded PTP Options*⎯Net awarded PTP Options with the source *j* and sink *k* for the hour *h* and month *m* owned by all CRR Account Holders represented by the Counter-Party as CRR Owner of record at ERCOT for remaining Operating Days in the current operating month, and Prompt Month. |
| *j* | none | A source Settlement Point. |
| *k* | none | A sink Settlement Point. |
| *m* | none | An operating month. |
| *ctou* | none | CRR Time Of Use block. |
| *h* | none | An Operating Hour. |
| *a* | none | All CRR Account Holders represented by the Counter-Party. |
| *ci99* | none | 99th percentile confidence interval. |