**6.5.1.3 Public Market Information**

**6.5.1.3.1** Annually, the CAISO shall publish the following information including, but not limited to:

(a) Market Clearing Prices for all Aggregated PNodes used in the CRR Auction clearing for on-peak and off-peak;

(b) CRR Holdings by CRR Holder (including):

 (i) CRR Sources name(s);

 (ii) CRR Sink name(s);

 (iii) CRR quantity (MW) for each CRR Source(s) and CRR Sink(s);

 (iv) CRR start and end dates;

 (v) Time of use specifications for the CRR(s); and

 (vi) Whether the CRR is a CRR Option or CRR Obligation.

**6.5.1.3.2** Monthly, the CAISO shall publish the following information, including, but not limited to:

(a) Market Clearing Prices for all Aggregated PNodes used in the CRR Auction clearing for on-peak and off-peak;

(b) CRR Holdings by CRR Holder (including):

 (i) CRR Sources name(s);

 (ii) CRR Sink name(s);

 (iii) CRR quantity (MW) for each CRR Source(s) and CRR Sink(s);

 (iv) CRR start and end dates;

 (v) Time of use specifications for the CRR(s); and

 (vi) Whether the CRR is a CRR Option or a CRR Obligation.

(c) Information on adjustments to Notional CRR Values based on collection of Transmission Constraint-specific congestion revenue pursuant to Section 11.2.4.

**\* \* \* \***

**11.2.4 CRR Settlements**

The CAISO will pay or charge CRR Holders for Congestion costs depending on the: (1) type of CRRs held by the CRR Holder; (2) direction of Congestion as measured through the IFM; (3) MCC as calculated in the IFM; and (4) IFM congestion revenue the CAISO collects on binding Transmission Constraints over which a CRR is modeled as having a PTDF. The CAISO provides payments to CRR Holders for CRRs that have positive Daily CRR Settlement Values and charges CRR Holders whose CRRs have negative Daily CRR Settlement Values. The CAISO will settle payments and charges associated with Daily CRR Settlement Values on a daily basis, and will settle potential Monthly CRR Make-Whole Payments on a monthly basis.

**11.2.4.1 Calculation of the IFM Congestion Charge**

For each Settlement Period of the IFM, the CAISO will calculate the IFM Congestion Charge as the IFM MCC amount for all scheduled Demand and Virtual Supply Awards, minus the IFM MCC amount for all scheduled Supply and Virtual Supply Awards. The IFM MCC amount for all scheduled Demand and Virtual Demand Awards is the sum of the products of the IFM MCC and the total of the MWh of Demand scheduled in the Day-Ahead Schedule and Virtual Supply Awards at all the applicable PNodes and Aggregated Pricing Nodes for the Settlement Period. The IFM MCC amount for all scheduled Supply and Virtual Supply Awards is the sum of the products of the IFM MCC and the total of the MWh of Supply scheduled in the Day-Ahead Schedule and the Virtual Supply Awards at all the applicable PNodes for the Settlement Period.

**11.2.4.1.1 [Not Used]**

**11.2.4.1.2 Calculation of Hourly CRR Congestion Fund**

The CAISO calculates an Hourly CRR Congestion Fund for every Transmission Constraint that is congested in a Settlement Period. The Hourly CRR Congestion Fund specific to a particular binding Transmission Constraint in a given Settlement Period is the sum of the: (a) portion of the IFM Congestion Charge in that Settlement Period attributable to congestion on the Transmission Constraint to which the congestion fund corresponds; (b) debits specific to the Transmission Constraint calculated pursuant to Section 11.2.4.4.1 associated with a CRR modeled as having a negative PTDF on the Transmission Constraint; and (c) CRR revenue adjustments the CAISO may make pursuant to Sections 11.4.6 and 11.4.7 that are associated with the Transmission Constraint.

**11.2.4.2 Settlement Calculation for the Different CRR Types**

For the purposes of determining Notional CRR Values based on the various CRR Types, the CAISO will calculate the Settlement of CRRs as described in this Section 11.2.4.2. When a CRR Source or CRR Sink is a LAP, the CAISO will use the Load Distribution Factors used in the IFM to produce the LAP Price at which it will calculate Notional CRR Values. When a CRR Source or CRR Sink is a Trading Hub, the CAISO will use the weighting factors used in the IFM, and in the CRR Allocation and CRR Auction processes, to produce the Trading Hub prices that it will use to calculate Notional CRR Values.

**11.2.4.2.1 [Not Used]**

**11.2.4.2.2 [Not Used]**

**11.2.4.3 Payments and Charges for Monthly and Annual Auctions**

The CAISO will charge CRR Holders for the Market Clearing Price for CRRs obtained through the clearing of the CRR Auction as described in Section 36.13.6. To the extent the CRR Holder purchases a CRR through a CRR Auction that has a negative value, the CAISO will retain the CRR Auction proceeds and apply them to credit requirements of the applicable CRR Holder, in accordance with Section 12.6.3 of the CAISO Tariff. The CAISO will net all revenue received and payments made through this process. The CAISO allocates CRR Auction revenues for each season coming from the annual auction uniformly across the three months comprising each season based on time of use. The CAISO will add the CRR Auction revenues from the annual and monthly CRR Auctions to the corresponding CRR Balancing Account for the month.

**11.2.4.4 Hourly CRR Calculations, Daily CRR Settlement, and Potential Monthly Make-Whole Payments**

**11.2.4.4.1 Calculating the Hourly Congestion-Supported CRR Value**

For each Settlement Period, the CAISO uses the funds in the Hourly CRR Congestion Funds calculated in Section 11.2.4.1.2 to determine the Congestion-Supported CRR Value for CRRs.

The CAISO allocates a CRR modeled as having a positive PTDF on a binding Transmission Constraint a portion of that Transmission Constraint’s Hourly CRR Congestion Fund in proportion to that CRR’s modeled flow over that Transmission Constraint (accounting for revenue adjustments made pursuant to Sections 11.2.4.6 or 11.2.4.7), as compared to the sum of all other CRRs’ modeled flow over that Transmission Constraint (accounting for revenue adjustments made pursuant to Sections 11.2.4.6 or 11.2.4.7).

The CAISO will not allocate to a CRR Hourly CRR Congestion Funds in excess of the portion of the CRR’s Notional CRR Value in that Settlement Period that corresponds to that Transmission Constraint based on the PTDF from the CRR’s modeled flow, minus any revenue adjustments made pursuant to Sections 11.2.4.6 or 11.2.4.7 that are allocated to that Transmission Constraint.

The CAISO allocates a CRR modeled as having a negative PTDF on a binding Transmission Constraint a debit equal to that CRR’s Notional CRR Value in that Settlement Period that corresponds to that Transmission Constraint based on the PTDF from the CRR’s modeled flow.

A CRR’s Congestion-Supported CRR Value in a Settlement Period is the sum of that CRR’s respective allocations or debits from the various Hourly CRR Congestion Funds for that Settlement Period.

Any funds remaining in a Hourly CRR Congestion Fund after all funds have been allocated to CRRs in that hour are reserved for potential Daily CRR Make-Whole Payments or Monthly CRR Make-Whole Payments there were modeled as having a positive PTDF on that Transmission Constraint in that Settlement Period. The funds held in reserve for a given CRR are held in proportion to that CRR’s modeled flow in that Settlement Period (accounting for revenue adjustments made pursuant to Sections 11.2.4.6 or 11.2.4.7) in proportion to that modeled flow over that Transmission Constraint by all CRRs in that Settlement Period (accounting for revenue adjustments made pursuant to Sections 11.2.4.6 opr 11.2.4.7).

**11.2.4.4.2 Daily Settlement of CRRs and Calculating the Daily CRR Settlement Value**

The CAISO allocates the funds in a Daily CRR Congestion Fund as a Daily CRR Make-Whole Payments to CRRs that have funds reserved for them in a Daily CRR Congestion Fund pursuant to Section 11.2.4.4.4, and whose total Congestion-Supported CRR Values pertaining to that Transmission Constraint during the day are less than the total of the Notional CRR Values pertaining to that Transmission Constraint during the day (accounting for revenue adjustments made pursuant to Sections 11.2.4.6 or 11.2.4.7).

A CRR’s Daily CRR Settlement Value is the sum of the Congestion-Supported CRR Values across the Settlement Periods of the Trading Day and any Daily CRR Make-Whole Payments allocated to that CRR.

A Daily CRR Make-Whole Payment specific to a CRR and Transmission Constraint cannot exceed the portion of the CRR’s Notional CRR Value in that Trading Day that corresponds to that Transmission Constraint based on the PTDF from the CRR’s modeled flow minus any revenue adjustments made pursuant to Section 11.2.4.6 or 11.2.4.7 that are allocated to that Transmission Constraint.

The CAISO adds any funds remaining in a Daily CRR Congestion Fund after the CAISO has made all necessary Daily CRR Make-Whole Payments to that Transmission Constraint’s Monthly CRR Congestion Fund. Funds remain reserved for a specific CRR when they are moved over to a Monthly CRR Congestion Fund.

**11.2.4.4.3 Monthly Clearing of the Monthly Constraint-Specific CRR Congestion Fund**

The CAISO distributes the total of the Monthly CRR Congestion Fund at the end of each month.

The CAISO first distributes the funds in a Monthly CRR Congestion Fund as Monthly CRR Make-Whole Payments to CRRs that have funds reserved for them in a Monthly CRR Congestion Fund pursuant to Section 11.2.4.4.1 and whose total Congestion-Supported CRR Values pertaining to that Transmission Constraint during the month are less than the total Notional CRR Values pertaining to that Transmission Constraint during the month (accounting for revenue adjustments made pursuant to Sections 11.2.4.6 or 11.2.4.7).

A Monthly CRR Make-Whole Payment specific to a CRR and Transmission Constraint based on the PTDF from the CRR’s modeled flow minus any revenue adjustments made pursuant to Sections 11.2.4.6 or 11.2.4.7 that are allocated to that Transmission Constraint.

The CAISO adds to a month’s CRR Balancing Account any funds remaining in a Monthly CRR Congestion Fund after the CAISO has made all required Monthly CRR Make-Whole Payments.

**11.2.4.5 CRR Balancing Account**

The CRR Balancing Account will accumulate: (1) seasonal and monthly CRR Auction revenues as described in Section 11.2.4.3; (2) any funds remaining in a Monthly CRR Congestion Fund after the CAISO has made all Monthly CRR Make-Whole Payments; ; (3) any IFM Congestion Charges associated with Day-Ahead Ancillary Services Awards as provided in Section 11.10.1.1.1; and (4) IFM Congestion Fund Credits as specified in Section 11.2.1.5.

The CAISO distributes the CRR Balancing Account to Scheduling Coordinators in an amount equal to (a) the funds in the CRR Balancing Account, multiplied by (b) the ratio of each Scheduling Coordinator’s Measured Demand (net of the Scheduling Coordinator’s Measured Demand associated with valid and balanced ETC or TOR Self-Schedule quantities, which IFM Congestion Credits and/or RTM Congestion Credits were provided in the same relevant Trading Day), divided by (c) the total Measured Demand for all Scheduling Coordinators for the relevant Trading Day (net of the total Measured Demand associated with valid and balanced ETC or TOR Self-Schedule quantities, which IFM Congestion Credits and/or RTM Congestion Credits were provided in the same relevant Trading Day).

Interest accruing due to the CRR Balancing Account will be at the CAISO’s received interest rate and will be credited to each monthly CRR Balancing Account accrued interest fund, which is then allocated to monthly Measured Demand excluding Measured Demand associated with valid and balanced ETC, TOR, or Converted Rights Self-Schedule quantities, which IFM Congestion Credits and/or RTM Congestion Credits were provided in the same month.

**11.2.4.6 Adjustment of CRR Revenue Related to Virtual Awards**

In accordance with this Section 11.2.4.6, the CAISO will adjust the revenue from the CRRs of a CRR Holder that is also a Convergence Bidding Entity whenever either of the following creates a significant impact on the value of the CRRs held by that entity: the CRR Holder/Convergence Bidding Entity submits Virtual Bids; or the CRR Holder/Convergence Bidding Entity reduces in the RTM an import or export awarded in a Day-Ahead Schedule. As set forth in Section 11.32, the CAISO will also adjust the revenue from the CRRs of a CRR Holder (regardless of whether the CRR Holder is also a Convergence Bidding Entity) where the Scheduling Coordinator representing that CRR Holder reduces in the RTM an import or export awarded in a Day-Ahead Schedule.

(a) For purposes of this Section 11.2.4.6 and the definition of Flow Impact, a reduction by a Scheduling Coordinator submitting Schedules on behalf of an entity that is a CRR Holder to an import or export Schedule in the RTM will be treated as a Virtual Award if the segment of Economic Bids (but not Self-Schedule) leading to the Schedule reduction is: at an Energy Bid price greater than the Day-Ahead Market LMP at the relevant intertie, in the case of an import; or at any Energy Bid price less than the Day-Ahead Market LMP at the relevant intertie, in the case of an export.

In addition, if the RTM Bid does not include the full MW quantity of the Day-Ahead Schedule through some combination of Economic Bid and Self-Schedule, then the MW range not covered by the RTM Bid that was included in the Day-Ahead Schedule will be treated as a Virtual Award.

For each CRR Holder subject to this Section 11.2.4.6, for each hour, and for each Transmission Constraint binding in the IFM or FMM the CAISO will calculate the Flow Impact of the Virtual Awards awarded to the Scheduling Coordinator that represents the CRR Holder. For the purposes of calculating the CRR adjustments as specified in this Section 11.2.4.6, the CAISO will include nodal MW constraints that the CAISO applies to Eligible PNodes in the IFM pursuant to Section 30.10.

(b) The CAISO will determine the peak and off-peak hours of the day where Congestion on the Transmission Constraint was significantly impacted by the Virtual Awards awarded to the Scheduling Coordinator that represents the CRR Holder. Congestion on the Transmission Constraint will be deemed to have been significantly impacted by the Virtual Awards awarded to the Scheduling Coordinator that represents the CRR Holder if the Flow Impact passes two criteria. First, the Flow Impact must be in the direction to increase the sum of the CRR Holder’s Notional Values in their portfolio in that Settlement Period. Second, the Flow Impact must exceed the threshold percentage of the flow limit for the Transmission Constraint. The threshold percentage is ten (10) percent of the flow limit for each Transmission Constraint.

(c) For each peak or off-peak hour that passes both criteria in Section 11.2.4.6(b), the CAISO will compare the Transmission Constraint’s impact on the Day-Ahead Market value of the CRR Holder’s CRR portfolio with the Transmission Constraint’s impact on the FMM value of the CRR Holder’s CRR portfolio, as applicable.

(d) The CAISO will adjust the peak or off-peak period revenue from the CRR Holder’s CRRs in the event that, over the peak or off-peak period of a day, the Transmission Constraint’s contribution to the Day-Ahead Market value of the CRR Holder’s CRR portfolio exceeds the Transmission Constraint’s contribution to the FMM value of the CRR Holder’s CRR portfolio, as applicable. The amount of the peak period adjustment will be the amount that the Transmission Constraint’s contribution to the Day-Ahead Market value of the CRR Holder’s CRR portfolio exceeds the Transmission Constraint’s contribution to the FMM value of the CRR Holder’s CRR portfolio for the peak-period hours that passed both criteria in Section 11.2.4.6(b), as applicable. The amount of the off-peak period adjustment will be the amount that the Transmission Constraint’s contribution to the Day-Ahead Market value of the CRR Holder’s CRR portfolio exceeds the Transmission Constraint’s contribution to the FMM value of the CRR Holder’s CRR portfolio for the off-peak period hours that passed both criteria in Section 11.2.4.6(b), as applicable.

All adjustments of CRR revenue calculated pursuant to Section 11.2.4.6 will be added to the Hourly CRR Congestion Fund for the applicable Transmission Constraint corresponding to the CRR payments that would have been made but for the revenue adjustment.

**11.2.4.7 Adjustment of CRR Revenue Related to Schedules that Source and Sink in the Same Balancing Authority Area**

The CAISO will adjust the revenue from the CRRs of a CRR Holder where the Scheduling Coordinator representing that CRR Holder has submitted Bids (including Self-Schedules), in violation of Section 30.5.5 and the resulting Schedule(s) impacts the value of the CRRs in the DAM held by that CRR Holder. Such adjustment will occur if the following circumstances are all met:

(a) A portion of the E-Tag that uses the CAISO Controlled Grid relates to a Schedule in the Day-Ahead Market;

(b) The scheduled MW on the portion of the E-Tag using the CAISO Controlled Grid has a positive PTDF on a congested transmission element, where that congestion is measured in the direction of the CRR; and

(c) The CRR Holder would receive payments from CRRs on the congested transmission element.

If such circumstances occur, the CAISO adjusts the CRR revenue in that Settlement Period so that the additional net CRR revenue that otherwise would be earned from the congestion created by the Schedule that results from the Bids submitted in violation of Section 30.5.5 is not paid to the CRR Holder. Instead, those funds are added to the Hourly CRR Congestion Fund for the applicable Transmission Constraint.

**\* \* \* \***

**11.29.5.3 Data Files**

Settlement Statements relating to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO will be accompanied by data files of supporting information that includes the following for each Settlement Period of the Trading Day:

(a) the aggregate quantity (in MWh) of Energy supplied or withdrawn by the Scheduling Coordinator Metered Entities represented by the Scheduling Coordinator;

(b) the aggregate quantity (in MW) and type of Ancillary Services capacity provided or purchased;

(c) the relevant prices that the CAISO has applied in its calculations;

(d) details of the scheduled quantities of Energy and Ancillary Services accepted by the CAISO in the Day-Ahead Market and the RTM;

(e) details of FMM Instructed Imbalance Energy or RTD Imbalance Energy and penalty payments;

(f) details of any payments or charges associated with the CRR Auctions; and

(g) detailed calculations of all fees, charges and payments allocated among Scheduling Coordinators and each Scheduling Coordinator’s share.

**\* \* \* \***

**36.2.1 CRR Obligations**

A CRR Obligation entitles its holder to receive a payment in the amount of the CRR’s Daily CRR Settlement Value, where such value is positive, and a Monthly CRR Make-Whole Payment as detailed in Sections 11.2.4.2.2 and 11.2.4.4, and obligates its holder to pay the CAISO the amount of the absolute value of the CRR’s Daily CRR Settlement Value, where such value is negative as detailed in Section 11.2.4.2.2.

**36.2.2 CRR Options**

A CRR Option entitles its holder to receive a payment in the amount of the CRR’s Daily CRR Settlement Value, where such value is positive, and a Monthly CRR Make-Whole Payment as detailed in Sections 11.2.4.2.1 and 11.2.4.4.

**\* \* \* \***

**36.2.8 Limitations on Funding of CRRs**

Payment of Daily CRR Settlement Values and Monthly CRR Make-Whole Payments may be suspended if a System Emergency as described in Section 7.7.4, an Uncontrollable Force as described in Section 14, or a Participating TO’s withdrawal of facilities or Entitlements from the CAISO Controlled Grid as described in Section 36.8.7 leaves the CAISO with inadequate revenues.

**\* \* \* \***

**36.4.1 Transmission Capacity for CRR Allocation and CRR Auction**

With the exception of the Tier LT, the CAISO makes available sixty-five percent (65%) of Seasonal Available CRR Capacity for the annual CRR Allocation and CRR Auction processes, and one hundred percent (100%) of Monthly Available CRR Capacity for the monthly CRR Allocation and CRR Auction processes. The CAISO makes available sixty percent (60%) of Seasonal Available CRR Capacity in the Tier LT. Available capacity at Scheduling Points shall be determined in accordance with Section 36.8.4.2 for the purposes of CRR Allocation and CRR Auction of CRRs that have a CRR Source identified at a Scheduling Point. Before commencing with the annual or monthly CRR Allocation and CRR Auction processes, the CAISO may distribute Merchant Transmission CRRs and will model those as fixed injections and withdrawals on the DC FNM to be used in the allocation and auction. These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test. Similarly, before commencing the annual or monthly CRR Allocation and CRR Auction processes, the CAISO will model any previously allocated Long Term CRRs as fixed injections and withdrawals on the DC FNM to be used in the CRR Allocation and CRR Auction. These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test, which will ensure no degradation of previously allocated and outstanding Long Term CRRs due to the CRR Allocation and CRR Auction processes. Maintaining the feasibility of allocated Long Term CRRs over the length of their terms also is accomplished through the transmission planning process in Section 24.1.3.

**\* \* \* \***

**Appendix A**

**Master Definition Supplement**

**\* \* \* \***

**- Congestion-Supported CRR Value**

The Notional CRR Value for a Settlement Period minus any revenue adjustments as provided in Section 11.2.4.4.

**\* \* \* \***

**\* \* \* \***

**- CRR Obligation**

A financial instrument that entitles the CRR Holder to a payment when Congestion is in the direction of the CRR Source to CRR Sink specification, and imposes a charge on the CRR Holder when Congestion is in the opposite direction of the CRR Source to CRR Sink specification as described in Section 11.2.4.

**\* \* \* \***

**\* \* \* \***

**- Daily CRR Congestion Fund**

The pool of funds, corresponding to a specific Transmission Constraint, held by the CAISO, that the CAISO uses to make Daily CRR Make-Whole Payments corresponding to that Transmission Constraint.

**\* \* \* \***

**- Daily CRR Make-Whole Value**

A payment, corresponding to a specific Transmission Constraint, the CAISO makes available to a CRR Holder as described in section 11.2.4.4.2.

**\* \* \* \***

**- Daily CRR Settlement Value**

The sum of an individual CRR’s Congestion-Supported CRR Values over a Trading Day and any Daily CRR Make-Whole Payments the CAISO may provide in that Trading Day. W

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**\* \* \* \***

**- Hourly CRR Congestion Fund**

The pool of funds the CAISO collects and holds pursuant to Section 11.2.4.1.2, corresponding to a specific Transmission Constraint and Settlement Period, that the CAISO has available to pay CRR Holders for the portion of their CRR that is modeled as having a PTDF on that Transmission Constraint.

**\* \* \* \***

**- Monthly CRR Congestion Fund**

The pool of funds the CAISO collects and holds, corresponding to a specific Transmission Constraint, to make Monthly CRR Make-Whole Payments corresponding to that Transmission Constraint.

**\* \* \* \***

**- Monthly CRR Make-Whole Payment**

A payment, corresponding to a specific Transmission Constraint, the CAISO makes to a CRR Holder as described in section 11.2.4.4.2.

**\* \* \* \***

**- Notional CRR Value**

For a given CRR in a Settlement Period, the product of: (A) the MCC at the CRR Sink minus the MCC at the CRR Source; and (B) the MW quantity of the CRR for that Settlement Period. The Notional CRR Value for a CRR Obligation can be a non-positive value for a Settlement Period. The CAISO sets the Notional CRR Value for a CRR Option in a given Settlement Period to zero (0) if the products of the MW quantity of the CRR Option and the difference between the MCC at the CRR Sink and MCC at the CRR Source is a negative amount.

**\* \* \* \***