 CALIFORNIA ISO <small>California Independent System Operator</small>	Settlements / Rerun	Version No.	1.4
		AMENDMENT 51 Energy Exchange Issue No. 7	Version Date
		Effective Date	01/16/04

PURPOSE

The Energy Exchange Program (EEP) identifies the energy obtained by the CAISO through exchange arrangements with other Control Areas, and shifts the financial impact of those transactions from the market, as a whole, to the actual consumers of the energy.

The CAISO will identify the positive and negative power flow during the “receiving” and “returning” exchange periods and place it in the ISO Energy Exchange Program (EEP) Holding Account. (Exchanges that took place during the months of November and December 2000, and June 2001 have already been identified during the PG&E Rerun but not yet allocated)


The CAISO will also allocate the net costs of the exchanges to Scheduling Coordinators in proportion to their net negative deviations during the “receiving” periods.

BACKGROUND

During the energy crisis at the end of 2000 and the beginning of 2001, there was a general shortage of energy. To maintain the reliability of the CAISO Grid during system emergencies, the CAISO arranged power exchanges to acquire needed energy. This arrangement was called the Energy Exchange Program (EEP). Under EEP, the CAISO receives energy in one time period, and later returns the energy in another time period. The amount of energy being returned is the amount of energy obtained, multiplied by an EEP Ratio. Since incoming and outgoing EEP quantities differ, are dispatched in different time periods, and the market-clearing prices are usually different, there will be a cost mismatch. EEP Schedules, as a reliability component of the CAISO grid, are exempt from GMC, Wheeling, UFE, Neutrality, and Ancillary Service charges.

Typically, incoming exchange energy creates a positive cash flow for the CAISO while the outbound exchange energy creates a negative cash flow (during the receive period, energy comes into the CAISO “free of charge”, while during the return period, the CAISO must “purchase” the return energy). These transactions were originally allowed to flow through market neutrality accounts. This approach benefits the users in the receive period by undercharging them for the true cost of the EEP transaction in the incoming timeframe, and penalizes the market participants during the return period. Further, with the advent of Amendment 33, effective December 8, 2000, the excess costs were allocated to the net uninstructed deviations in the return period (Charge Type 1010 from December 8 through December 11, 2000 and Charge Type 487 beginning December 12, 2000). In some cases SCs were assigned with several thousands of dollars per MWh. Between the CAISO Tariff Amendment 33 and the large volume of energy obtained under EEP, the true cost should be charged to market participants that benefited from the exchange arrangements.

The Energy Exchange mechanism, to make these corrections, was the topic of filings at FERC. The new software will take back excess charges in the return period and allocate them to the net uninstructed deviators in the receive period, the consumers of the energy exchange. Each control area was assigned an EEP account for exchanges with the CAISO. When an Energy Exchange

 CALIFORNIA ISO <small>California Independent System Operator</small>	Settlements / Rerun	Version No.	1.4
		AMENDMENT 51	
Energy Exchange Issue No. 7		Effective Date	01/16/04

account is closed or reaches a zero MWh balance,¹ the incurred net costs are calculated and allocated to the SC based on their total negative Uninstructed Energy over those intervals in which the incoming schedules took place. The CAISO created Charge Type 1487 to allocate the net cost of the Energy Exchange accounts. Charge Type 1487 may not appear on every statement, only when an EEP account is closed or reaches a zero balance

Example:

Load Scheduling Entity (LSE) Alpha was under scheduled for December 20, 2000 and Control Area Bravo provided the 100 MW, which appears free of charge in the receive period.

The energy is returned by the CAISO to Control Area Bravo on January 6, 7, and 29 at a quantity usually greater than a one-to-one ratio. Originally, during the return period, the CAISO procured the extra energy in the imbalance market and charged the additional cost to the uninstructed deviations on that day. With the new Energy Exchange accounting, those costs for January 6, 7, and 29 are accumulated, and because the EEP account for Control Area Bravo “zeroed”¹ from the MW standpoint on January 29, the combined costs for January 6, 7, and 29 are charged after the January 29 to LSE Alpha.

The conclusion is that although the energy exchange was initiated on December 20, LSE Alpha will not see the charge for December 20 until after the January 29 statement.

The CAISO began this process during the PG&E rerun in June through August 2001 and was forced to abandon it pending completion of software. So during November, December 2000, and June 2001, the CAISO credited the net negative deviators of the return periods, but this was not charged to the receive period. During the rerun, the CAISO will reverse the adjustments for November, December 2000, and June 2001 so the charges will appear as they did after the original settlement, and then the new software will totally reverse the charges and apply them to the receive periods.

OUTLINE


- 1 Calculate EEP Net Cost
- 2 Determine Users of EEP
- 3 Allocate Additional (Net) Costs to Users

PROCESS DESCRIPTION

All processes are completed by the CAISO unless otherwise stated.

- 1 Calculate EEP Net Cost
 - 1.1 Gather all the data pertaining to the Exchanges (i.e. Price, Amounts, Intervals)

¹EEP account “closed”, “Zero MWh balance”, or “Crossing Zero” is defined as an exchange account reaching a completely repaid status at the end of any trade date.

 CALIFORNIA ISO <small>California Independent System Operator</small>	Settlements / Rerun	Version No.	1.4
		AMENDMENT 51	
Energy Exchange Issue No. 7		Effective Date	01/16/04


- 1.2 Multiply the MWs Received by the Exchange Ratio to get the MWs Returned
- 1.3 Assign the price and place in the Holding Account (BA2970)
- 1.4 Calculate the net cost of the exchange
- 2 Determine Users of EEP
 - 2.1 Gather all the data pertaining to Negative Deviations in the incoming period (i.e. Consumers)
 - 2.2 Add the negative UE of Non-Regulation Units (netted by BA and by Sub Hour) to the Positive UE of Regulation Units (netted by BA, Sub Hour), during the Incoming Hour to determine the billable quantity.
- 3 Allocate Additional (Net) Costs to Users
 - 3.1 Gather all the necessary data
 - 3.2 Divide the net EEP cost into the MW used by each EEP user

REFERENCES

- 1 CAISO's Amendment No. 51 filing in Docket No. ER03-746, and other pleadings filed by the CAISO in that Docket
- 2 FERC March 26, 2003 Order (Docket Nos. EL00-95, et al.)
- 3 Market Notice August 10, 2001 (CAISO Notification – CT 1487 – Energy Exchange Program Neutrality Adjustment)
- 4 Letter Of Agreement between BPA and CAISO is FERC Docket ER01-2886 (RIMS document #2200559 and acceptance #2216418).

ASSUMPTIONS

- 1 Date range is ascertained when the MWh amounts cross to zero¹ for an EEP account.
- 2 EEP allocation will be verifiable to EEP Users.
- 3 Settlement Detail Comments will include the total dollars of the exchange, the EEP User MWs and the overall period of the exchange.
 - 3.1 Example: "ENERGY EXCHANGE PROGRAM FOR ACCOUNT PACW_CISO_EXCH FROM 10-DEC-2000 TO 31-DEC-2000. TOTAL AMOUNT = 3008137.53; TOTAL UE = -147451.7089"
- 4 All manual reversals will be identified as Imbalance Energy delta transactions (Charge Types 401, 407, 481, 487, 1010, 1210)

 CALIFORNIA ISO <small>California Independent System Operator</small>	Settlements / Rerun	Version No.	1.4
		AMENDMENT 51 Energy Exchange Issue No. 7	Version Date
		Effective Date	01/16/04

AFFECTED CHARGE TYPES

The following is a list of potentially affected Charge Types

- 487
- 1010
- 1487

EXPECTED IMPACT

- 1 Any manual adjustments associated with Energy Exchange made during the PG&E rerun, June through August 2001, will be reversed during the Preparatory Rerun
- 2 During the “receiving” period, previous over payments in Charge Type 1010 are returned (due) to CAISO
- 3 Under-resourced SCs with Negative Uninstructed Energy charges during the “receiving” period are allocated their portion of the EEP costs in the new Charge Type 1487
- 4 During the “returning” period, previous over charges in Charge Type 1010 are returned (due) to SC
- 5 Charges in Charge Type 487 in the “returning” period, will decrease as the Energy Exchange MWh will pay their prorata share of the costs
- 6 Scheduling Coordinators can review the BA 2970 account to identify the receiving period (Charge Type 401) transactions and returning period (Charge Type 407) transactions