

Billing Issues Group (BIG) 272

Automation of Monthly Self-Correcting Adjustments

Overview of Self-Correcting (SC) Adjustments

- ◆ Description of SC adjustments
- ◆ Current manual process
- ◆ New automated process
- ◆ Invoice summary impacts
- ◆ Invoice email notification impacts
- ◆ DSS impacts
- ◆ Deployment schedule
- ◆ Summary of features

Description of SC Adjustments

- ◆ Self-Correcting adjustments are:
 - *Allocated adjustments which may be based upon:*
 - NYISO-wide withdrawals
 - Subzone withdrawals
 - Generator injections
 - *Reversal adjustments*
 - Principal and interest reversed on each subsequent invoicing cycle – based upon billing month
 - *Continually updated*
 - Amounts re-allocated based upon updated allocation basis for each subsequent invoicing cycle

Current Manual Process

- ◆ Initial invoice
 - *CS Staff manually enters parent reversal adjustment*
 - *NYISO application automatically generates set of child adjustments; one adjustment created for each organization identified by the assigned allocation*
- ◆ Each subsequent invoice containing billing month
 - *NYISO application automatically creates reversal adjustments corresponding to the previous set of child adjustments*
 - *CS staff manually enters a new parent adjustment; system creates new set of child adjustments*
 - *CS staff manually calculates and enters an interest adjustment for each affected organization – entering the interest in the adjustment amount field*

Manual Process Adjustment Totals

- ◆ Manual adjustments process is completed for each billing month on Invoice
- ◆ A range of 10-30 parent adjustments are manually processed for each billing month
- ◆ For a monthly invoicing cycle with 5 billing months, CS manually enters 5,000 – 15,000 adjustments

Automated Process: Self-Correcting Adjustments

- ◆ Initial invoice
 - *CS staff manually enters parent SC reversal adjustment*
 - *NYISO application automatically generates set of child adjustments; one adjustment created for each organization identified by the assigned allocation*
- ◆ Each subsequent invoice containing billing month
 - *NYISO application automatically creates reversal adjustments corresponding to the set of child adjustments; including principal and interest*
 - *NYISO application automatically creates new set of child adjustments; including calculation of interest where applicable*

BIG 272 – SC Interest Formula

Interest formula for SC adjustments based upon:

- **Principal:** *change in adjustment amount between current invoice and previous invoice*
- **Time:** *number of days between the effective date and the invoice banking date*
- **Interest:** *pro-rated based upon quarterly FERC interest rates for the Time period*
- ♦ Initial invoice, billing month version = 1
 - *No interest calculated*
- ♦ 4 month settlement, billing month version = 2
 - *$\{(4 \text{ month adjustment amount} - \text{initial adjustment amount}) * \text{pro-rated interest rate}\}$*
- ♦ 6 month settlement, billing month version = 3
 - *$\{[(6 \text{ month adjustment amount} - 4 \text{ month adjustment amount}) * \text{pro-rated interest rate}] + \text{interest from 4 month settlement}\}$*
- ♦ Final settlement, billing month version = 4
 - *$\{[(\text{final bill adjustment} - 6 \text{ month adjustment amount}) * \text{pro-rated interest rate}] + \text{interest from 6 month settlement}\}$*

Interest Example – Load Customer

SC Adjustments Timeline	Adjustment Amount	Pro-Rated Interest Rate	Interest Amount	Total Adjustment
Initial Month: New Adjustment	\$1000	n/a	\$0	\$1000
4-Month: Reversal of Initial	-\$1000		-\$0	\$1000
4-Month: New Adjustment	\$1100	.03	\$3	\$1103
6-Month: Reversal of 4-Month	-\$1100		-\$3	\$1103
6-Month: New Adjustment	\$1050	.05	\$.50	\$1050.5
Final Bill: Reversal of 6-Month	-\$1050		-\$0.50	\$1050.5
Final Bill: New Adjustment	\$1075	.07	\$2.25	\$1077.25

$$(\$1100 - \$1000) * .03 = \$3$$

$$((\$1050 - \$1100) * .05) + \$3 = -\$2.50 + \$3 = \$.50$$

$$((\$1075 - \$1050) * .07) + \$.50 = \$1.75 + \$.50 = \$2.25$$

Tracking Self-Correcting Adjustments

- ◆ Current process
 - *Manually tracked by CS Staff*
 - *Difficult and time consuming to manage due to volume of adjustments over multiple invoicing cycles*
- ◆ BIG 272 – Source Adjustment ID
 - *Adjustment ID of initial SC adjustment automatically associated with EACH reversal and child adjustment – from initial invoice to final bill closeout*
 - *Source adjustment ID column:*
 - added to the invoice summary
 - added to the DSS manual adjustments report
 - available for DSS ad hoc reporting
 - *Applies to SC adjustments entered after BIG 272 deployment*

Example with Adjustment IDs

SC Adjustments Timeline	Adjustment ID	Adjustment Amount	Pro-Rated Interest Rate	Interest Amount	Total Adjustment	Source Adjustment Id
Initial Month: New Adjustment	123456	\$1000	n/a	\$0	\$1000	123456
4-Month: Reversal of Initial	123456	-\$1000		-\$0	-\$1000	123456
4-Month: New Adjustment	234567	\$1100	.03	\$3	\$1103	123456
6-Month: Reversal of 4-Month	234567	-\$1100		-\$3	-\$1103	123456
6-Month: New Adjustment	345678	\$1050	.05	\$.50	\$1050.5	123456
Final Bill: Reversal of 6-Month	345678	-\$1050		-\$0.50	-\$1050.5	123456
Final Bill: New Adjustment	456789	\$1075	.07	\$2.25	\$1077.25	123456

Identifying Reversal Entries

- ◆ Current process
 - *Reversal entries automatically generated by the system during appropriate billing cycle*
 - *Reversal adjustments are included in the invoice summary, and DSS manual adjustments report*
 - *Reversals are not easily recognized from other adjustments*
- ◆ BIG 272 – Reversal flag
 - *System generated identifier associated with reversal entries*
 - *Reversal flag values:*
 - 'RS': reversal self-correcting adjustments
 - 'R': reversal adjustments
 - *Reversal flag column:*
 - added to the invoice summary
 - added to the DSS manual adjustments report
 - available for DSS ad hoc reporting
 - *Applies to all reversal adjustments, regardless of billing month and invoice date*

Example with Reversal Flag

SC Adjustments Timeline	Adjustment ID	Adjustment Amount	Pro-Rated Interest Rate	Interest Amount	Total Adjustment	Reversal Flag	Source Adjustment Id
Initial Month: New Adjustment	123456	\$1000	n/a	\$0	\$1000		123456
4-Month: Reversal of Initial	123456	-\$1000		-\$0	-\$1000	RS	123456
4-Month: New Adjustment	234567	\$1100	.03	\$3	\$1103		123456
6-Month: Reversal of 4-Month	234567	-\$1100		-\$3	-\$1103	RS	123456
6-Month: New Adjustment	345678	\$1050	.05	\$.50	\$1050.5		123456
Final Bill: Reversal of 6-Month	345678	-\$1050		-\$0.50	-\$1050.5	RS	123456
Final Bill: New Adjustment	456789	\$1075	.07	\$2.25	\$1077.25		123456

Identifying Load Ratio Share

- ◆ Current process
 - *Adjustment comment includes the total MWh load for adjustment*
 - *MP does not have access to the MWh amount of their share on the invoice summary*
- ◆ BIG 272 – Organization and Total MWh
 - *System generated identifier populated with the organization (Org) MWh*
 - *System generated identifier populated with the total MWh load*
 - *Org MWh and total MWh columns:*
 - added to the invoice summary
 - added to the DSS manual adjustments report
 - available for DSS ad hoc reporting
 - *Applies to all allocation based adjustments entered after BIG 272 deployment, regardless of billing month*

Example with Load Ratio Share Components

Parent Adjustment = \$10,000

SC Adjustments Timeline	Adjustment ID	Adjustment Amount	Total MWh	Org MWh	Interest Amount	Total Adjustment	Reversal Flag	Source Adj Id
Initial Month: New Adjustment	123456	\$1000	100,000	10,000	\$0	\$1000		123456
4-Month: Reversal of Initial	123456	-\$1000	100,000	10,000	-\$0	-\$1000	RS	123456
4-Month: New Adjustment	234567	\$1100	100,000	11,000	\$3	\$1103		123456
6-Month: Reversal of 4-Month	234567	-\$1100	100,000	11,000	-\$3	-\$1103	RS	123456
6-Month: New Adjustment	345678	\$1050	100,000	10,500	\$.50	\$1050.5		123456
Final Bill: Reversal of 6-Month	345678	-\$1050	100,000	10,500	-\$0.50	-\$1050.5	RS	123456
Final Bill: New Adjustment	456789	\$1075	100,000	10,750	\$2.25	\$1077.25		123456

Adjustment Comment Changes

- ◆ Improved content for adjustment comments
 - *\$ Amount of the NYISO parent adjustment*
 - *Adjustment reason*
 - *Billing month*
 - *Allocation basis*
 - *Billing code, if applicable*
- ◆ New Adjustment comments will no longer include an adjustment ID text string:
 - *Data elements included in text string are redundant or do not provide additional value*
 - *Example: Adjustment ID: 20060109-200508-SA1-009h.*
- ◆ New comment text applies to all adjustments beginning with the initial billing month on the invoice following BIG 272 deployment

Examples of New Comment Text

- ◆ EXAMPLE 1:
 - *Customers allocated \$ X of Ramapo Par facilities cost recovery per their ratio share of May 2007 NYISO-wide withdrawals*

- ◆ EXAMPLE 2:
 - *Customers credited \$ X to reimburse the cost of thunderstorm alerts in May 2006 based upon NYISO-wide withdrawals*

Marketplace: Invoice Summary

- ◆ Improved layout
 - *Larger font for data*
 - *Landscape layout*
 - *Fit to legal size paper*
- ◆ New columns added to adjustments section
 - *Total MWh*
 - *Org MWh*
 - *Reversal Flag*
 - *Source adjustment ID*
 - *Comments*
- ◆ Adjustments comments section removed
- ◆ New sorting criteria for adjustments
 - *1st criteria: Billing month*
 - *2nd criteria: Adjustment type*
 - *3rd criteria: Adjustment ID in ascending order*

Invoice Summary – Example with New Layout

July 2007 Invoice: 4-month adjustments for 2/2007

Adj ID	Billing Month	Eff Date	Total MWh	Org MWh	Adj Amount	Interest	Total Adjustment	Adjustment Type	Rev Flag	Src Adj ID	Comments
123456	02/2007	3/16/2007	100,000	10,000	(\$1,000.00)		(\$1,000)	Current Month Adjustment	RS	123456	Customers allocated \$10,000 in regards to Local Black Start Services for February 2007, allocated across Zone X withdrawals. Bill Code 808 applies.
234567	02/2007	3/16/2007	100,000	11,000	\$1,100.00	\$3.00	\$1,103.00	Current Month Adjustment		123456	Customers allocated \$10,000 in regards to Local Black Start Services for February 2007, allocated across Zone X withdrawals. Bill Code 808 applies.

Invoice Email Notification

- ◆ Current process
 - *Adjustment Text Summary (PDF file) included with the invoice posting announcement*
 - *Provides comment text for each adjustment, grouped by category*
- ◆ Following BIG 272 deployment
 - *Adjustment Text Summary will no longer be included with the invoice posting announcement*
 - *Detailed information moved from the adjustment comment field to the new columns identified with BIG 272*
 - *New data fields available on the invoice summary and DSS adjustments report*

DSS CS Data Mart – Manual Adjustments Report

- ◆ Improved layout
 - *Fit to legal size paper*
 - *Columns fit across top – no longer wrap*
- ◆ New columns added
 - *Total MWh*
 - *Org MWh*
 - *Reversal flag*
 - *Source adjustment ID*
- ◆ Existing columns removed
 - *Allocation type description - data included in comments*
 - *Adjustment reason description – data included in comments*
 - *Reversal invoice version – always billing version +1*

Manual Adjustments Report

- Report example with column updates (report split for viewing)

Invoice Billing Month-Version	Adjustment ID	Adjustment Type Desc	Effective Date	Payment Due Date	Reversal Month	Total MWh	Org MWh
Feb-2007 V2	123456	Current Month Adjustment	03/16/2007	07/16/2007	Feb-2007	100,000	10,000
Feb-2007 V2	234567	Current Month Adjustment	03/16/2007	07/16/2007	Feb-2007	100,000	11,000

Adj Stlmnt (\$)	Adj Interest Stlmnt (\$)	Total Adj Stlmnt (\$)	Reversal Flag	Source Adj ID	Adjustment Description
-1,000.00		-1,000.00	RS	123456	Customers allocated \$10,000 in regards to Local Black Start Services for February 2007, allocated across Zone X withdrawals. Bill Code 808 applies.
1,100.00	3.00	1,103.00		123456	Customers allocated \$10,000 in regards to Local Black Start Services for February 2007, allocated across Zone X withdrawals. Bill Code 808 applies.

DSS CS Data Mart – Ad Hoc Reporting

- ◆ New columns added for ad hoc reporting
 - *Total MWh*
 - *Org MWh*
 - *Reversal flag*
 - *Source adjustment ID*
- ◆ Data element change for ad hoc reporting
 - *Adjustment reason description; data only populated for adjustments entered prior to BIG 272 deployment*

Deployment Schedule

- ◆ Planned deployment date
 - *September 2007*
- ◆ 1st billing month with self-correcting adjustments enabled
 - *September 2007*
- ◆ BIG 272 features
 - *Enabled according to the Summary of Features on the next slide*

BIG 272 – Summary of Features

Invoice Date	Billing Month	Manual Allocated Adjustments Entered	Self-Correcting Adjustments Entered/Generated	Source Adjustment ID Populated	Adjustment Comment Changes	Reversal Flag Populated with Value of 'R' (Invoice & DSS)	Reversal Flag Populated with Value of 'RS' (Invoice & DSS)	Load Ratio Share Populated - Org and Total MWh (Invoice & DSS)	Invoice Summary Updates (Layout, Columns, Sorting)	DSS CS Data Mart Manual Adjustment Report Updates (Layout, Columns)	DSS CS Data Mart Ad Hoc - Adj Reason Populated	Invoice Email with Adjustment Text Summary
Previous Invoices		✓				✓			✓	✓	✓	✓
October 5, 2007	October 2005 - Closeout	✓				✓		Clearing Acct Adj Only	✓	✓	✓	✓
	February 2006 - Closeout	✓				✓		Clearing Acct Adj Only	✓	✓	✓	✓
October 9, 2007	September 2007 - Initial		✓	✓	✓			✓	✓	✓		
	May 2007 - 4-month	✓				✓		✓	✓	✓		
	March 2007 - 6-month	✓				✓		✓	✓	✓		
	September 2006 - 12 month	✓				✓		✓	✓	✓		
November 6, 2007	March 2006 - Closeout	✓				✓		✓	✓	✓		
November 7, 2007	October 2007 - Initial		✓	✓	✓			✓	✓	✓		
	June 2007 - 4-month	✓				✓		✓	✓	✓		
	April 2007 - 6-month	✓				✓		✓	✓	✓		
	October 2006 - 12-month	✓				✓		✓	✓	✓		
December 6, 2007	April 2006 - Closeout	✓				✓		✓	✓	✓		
	January 2007 - Closeout	✓				✓		✓	✓	✓		
December 7, 2007	November 2007 - Initial		✓	✓	✓			✓	✓	✓		
	July 2007 - 4-month	✓				✓		✓	✓	✓		
	May 2007 - 6-month	✓				✓		✓	✓	✓		
	November 2006 - 12-month	✓				✓		✓	✓	✓		
January 8, 2008	December 2007 - Initial		✓	✓	✓			✓	✓	✓		
February 7, 2008	January 2008 - Initial		✓	✓	✓			✓	✓	✓		
	Sept 2007 - 4-month		✓	✓	✓	✓	✓	✓	✓	✓		