Balancing Market Transmission Usage Charges – NYCA Internal Transactions

Bilateral transactions between suppliers and loads located within the NYCA are purely financial in nature and are not usually subject to curtailment. Curtailments are usually a result of generators' inability to fulfill specific contractual obligations to physically serve the contract rather than purchasing energy from the spot market to cover the contracts.

Qualified PURPA facilities are contractually required to physically serve their "PURPA" bilateral contracts. When PURPA generators offer these resources at prices where DAM economics result in their not being scheduled to serve those contracts in the DAM, those generators will purchase energy from the DAM to cover those commitments; thus jeopardizing their Qualified Facilities status.

PURPA generators are often cogeneration facilities which operate to supply steam to manufacturing processes. Since actual steam demand may vary in real-time, the generators' MWh output may vary. In order to accommodate this issue, DAM versus real-time market economics differences, and system re-dispatch, a mechanism has been created within the settlements system that will either increase or decrease the PURPA bilateral transactions' MWh to match the output of the PURPA generator, avoiding exposing their Qualified Facilities status.

SCD interval Settlement

SCD Interval Settlement Inputs

SCD_POI_of_Losses:	SCD interval Point of Injection LBMP losses component
SCD_POI_Price_of_Congestion:	SCD interval Point of Injection LBMP congestion component
SCD_POW_of_Losses:	SCD interval Point of Withdrawal LBMP losses component
SCD_POW_Price_of_Congestion:	SCD interval Point of Withdrawal LBMP congestion component
DAM_Int_Trans_MWh:	Hourly DAM transmission service scheduled
RT_Int_Trans_MWh:	SCD interval transmission service scheduled
SCD_Interval	SCD interval length in seconds

SCD Interval Settlement Outputs

SCD_Bal_Int_Trans_MWh:	SCD interval transaction balancing energy
SCD_Int_Trans_Losses_$:	SCD interval Transmission Usage Charge losses settlement
SCD_Int_Trans_Congestion_$:	SCD interval Transmission Usage Charge congestion settlement

SCD Interval Settlement

Point of Injection is not a NYISO external proxy bus or the NYISO Reference bus

Point of Withdrawal is not a NYISO external proxy bus or the NYISO Reference bus

$$SCD\_Bal\_Int\_Trans\_MWh = \{ RT\_Int\_Trans\_MWh - DAM\_Int\_Trans\_MWh \} \times SCD\_Interval \div 3600 \text{ seconds}$$

$$SCD\_Int\_Trans\_Losses\_\$ = SCD\_Bal\_Int\_Trans\_MWh \times (SCD\_POW\_Price\_of\_Losses - SCD\_POI\_Price\_of\_Losses) \times SCD\_Interval \div 3600 \text{ seconds}$$

$$SCD\_Int\_Trans\_Congestion\_\$ = SCD\_Bal\_Int\_Trans\_MWh \times \{-1 \times (SCD\_POW\_Price\_of\_Congestion - SCD\_POI\_Price\_of\_Congestion)\} \times SCD\_Interval \div 3600 \text{ seconds}$$

Hourly interval Settlement

Hourly Settlement Inputs

SCD_Bal_Int_Trans_MWh: SCD interval transaction balancing energy
SCD_Int_Trans_Losses_$:   SCD interval Transmission Usage Charge losses settlement
SCD_Int_Trans_Congestion_$:   SCD interval Transmission Usage Charge congestion settlement

Hourly Settlement Outputs

Hr_RT_Bal_Int_Trans_MWh: Hourly Balancing transaction energy
Hr_RT_Int_Trans_Losses_$:   Hourly Balancing Transmission Usage Charge losses settlement
Hr_RT_Int_Trans_Congestion_$:   Hourly Balancing Transmission Usage Charge congestion settlement
Hr_RT_Int_Trans_TUC_$:   Total Hourly Balancing Transmission Usage Charge settlement

Hourly Settlement

$$Hr\_RT\_Bal\_Int\_Trans\_MWh = \sum\{ SCD\_Bal\_Int\_Trans\_MWh\}$$

$$Hr\_RT\_Int\_Trans\_Losses\_\$ = \sum\{SCD\_Int\_Trans\_Losses\_\$\}$$

$$Hr\_RT\_Int\_Trans\_Congestion\_\$ = \sum\{SCD\_Int\_Trans\_Congestion\_\$\}$$

$$Hr\_RT\_Int\_Trans\_TUC\_\$ = Hr\_RT\_Int\_Trans\_Losses\_\$ + Hr\_RT\_Int\_Trans\_Congestion\_\$$$

Hourly Settlement Reported

Hr_RT_Bal_Int_Trans_MWh: Hourly Advisory Statement Billing Code: 505
Hr_RT_Int_Trans_Losses_$:   Hourly Advisory Statement Billing Code: 506
Hr_RT_Int_Trans_Congestion_$:   Hourly Advisory Statement Billing Code: 507
Hr_RT_Int_Trans_TUC_$:   Hourly Advisory Statement Billing Code: 508

Daily Settlement

Daily Settlement Inputs

Hr_RT_Bal_Int_Trans_MWh: Hourly Balancing transaction energy
Hr_RT_Int_Trans_Losses_$:   Hourly Balancing Transmission Usage Charge losses settlement
Hr_RT_Int_Trans_Congestion_$:   Hourly Balancing Transmission Usage Charge congestion settlement
Hr_RT_Int_Trans_TUC_$:   Total Hourly Balancing Transmission Usage Charge settlement

Daily Settlement Outputs

Daily_RT_Bal_Int_Trans_MWh: Daily Balancing transaction energy scheduled
Daily_RT_Int_Trans_Losses_$:   Daily Balancing Transmission Usage Charge losses settlement
Daily_RT_Int_Trans_Congestion_$: Daily Balancing Transmission Usage Charge congestion settlement
Daily_RT_Int_Trans_TUC_$:   Total Daily Balancing Transmission Usage Charge settlement

Daily Settlement

$$Daily\_RT\_Bal\_Int\_Trans\_MWh = \sum\{Hr\_RT\_Bal\_Int\_Trans\_MWh\}$$

Daily_RT_Int_Trans_Losses_$ = $\sum$\{Hr_RT_Int_Trans_Losses_$\}

Daily_RT_Int_Trans_Congestion_$ = $\sum$\{Hr_RT_Int_Trans_Congestion_$\}

Daily_RT_Int_Trans_TUC_$ = $\sum$\{Hr_RT_Int_Trans_TUC_$\}

Daily Settlement Reported

Daily_RT_Int_Trans_MWHr:	Daily Advisory Billing Statement – Billing Code 754
Daily_RT_Int_Trans_Losses_$:	Daily Advisory Billing Statement – Billing Code 755
Daily_RT_Int_Trans_Congestion_$:	Daily Advisory Billing Statement – Billing Code 756
Daily_RT_Int_Trans_TUC_$:	Daily Advisory Billing Statement – Billing Code 757

Monthly Settlement

Monthly Settlement Inputs

Daily_RT_LBMP_Imp_Losses_$:	Daily RT LBMP import energy - losses settlement [Billing Code 765]
Daily_RT_LBMP_Imp_Congestion_$:	Daily RT LBMP import energy - congestion settlement [Billing Code 766]
Daily_RT_LBMP_Exp_Losses_$:	Daily RT LBMP export energy - losses settlement [Billing Code 765]
Daily_RT_LBMP_Exp_Congestion_$:	Daily RT LBMP export energy - congestion settlement [Billing Code 766]
Daily_RT_Rep_Losses_$:	Daily RT LBMP replacement energy for curtailed imports [Billing Code 765]
Daily_RT_Rep_Congestion_$:	Daily RT LBMP replacement energy for curtailed imports [Billing Code 766]
Daily_RT_Int_Trans_Losses_$:	Daily RT Internal Transaction losses settlement [Billing Code 755]
Daily_RT_Int_Trans_Congestion_$:	Daily RT Internal Transaction congestion settlement [Billing Code 756]
Daily_RT_Imp_Trans_Losses_$:	Daily RT Import Transaction losses settlement [Billing Code 755]
Daily_RT_Imp_Trans_Congestion_$:	Daily RT ImportTransaction congestion settlement [Billing Code 756]
Daily_RT_Exp_Trans_Losses_$:	Daily RT Export Transaction losses settlement [Billing Code 755]
Daily_RT_Exp_Trans_Congestion_$:	Daily RT Export Transaction congestion settlement [Billing Code 756]
Daily_RT_WT_Trans_Losses_$:	Daily RT Wheel Transaction losses settlement [Billing Code 755]
Daily_RT_WT_Trans_Congestion_$:	Daily RT Wheel Transaction congestion settlement [Billing Code 756]

Monthly Settlement Outputs

Monthly_DA_TUC_Losses_$:	Monthly RT losses Transmission Usage Charge settlement
Monthly_DA_TUC_Congestion_$:	Monthly RT congestion Transmission Usage Charge settlement

Monthly Settlement

Monthly_RT_TUC_Losses_$ = $\sum$\{ Daily_RT_LBMP_Imp_Losses_$ + Daily_RT_LBMP_Exp_Losses_$ + Daily_RT_Rep_Losses_$ + Daily_RT_Imp_Trans_Losses_$: Daily_RT_Exp_Trans_Losses_$: Daily_RT_WT_Trans_Losses_$\}

Monthly_RT_TUC_Congestion_$ = $\sum$\{ Daily_RT_LBMP_Imp_Congestion_$ + Daily_RT_LBMP_Exp_Congestion_$ + Daily_RT_Rep_Congestion_$ + Daily_RT_Imp_Trans_Congestion_$ + Daily_RT_Exp_Trans_Congestion_$ + Daily_RT_WT_Trans_Congestion_$\}