

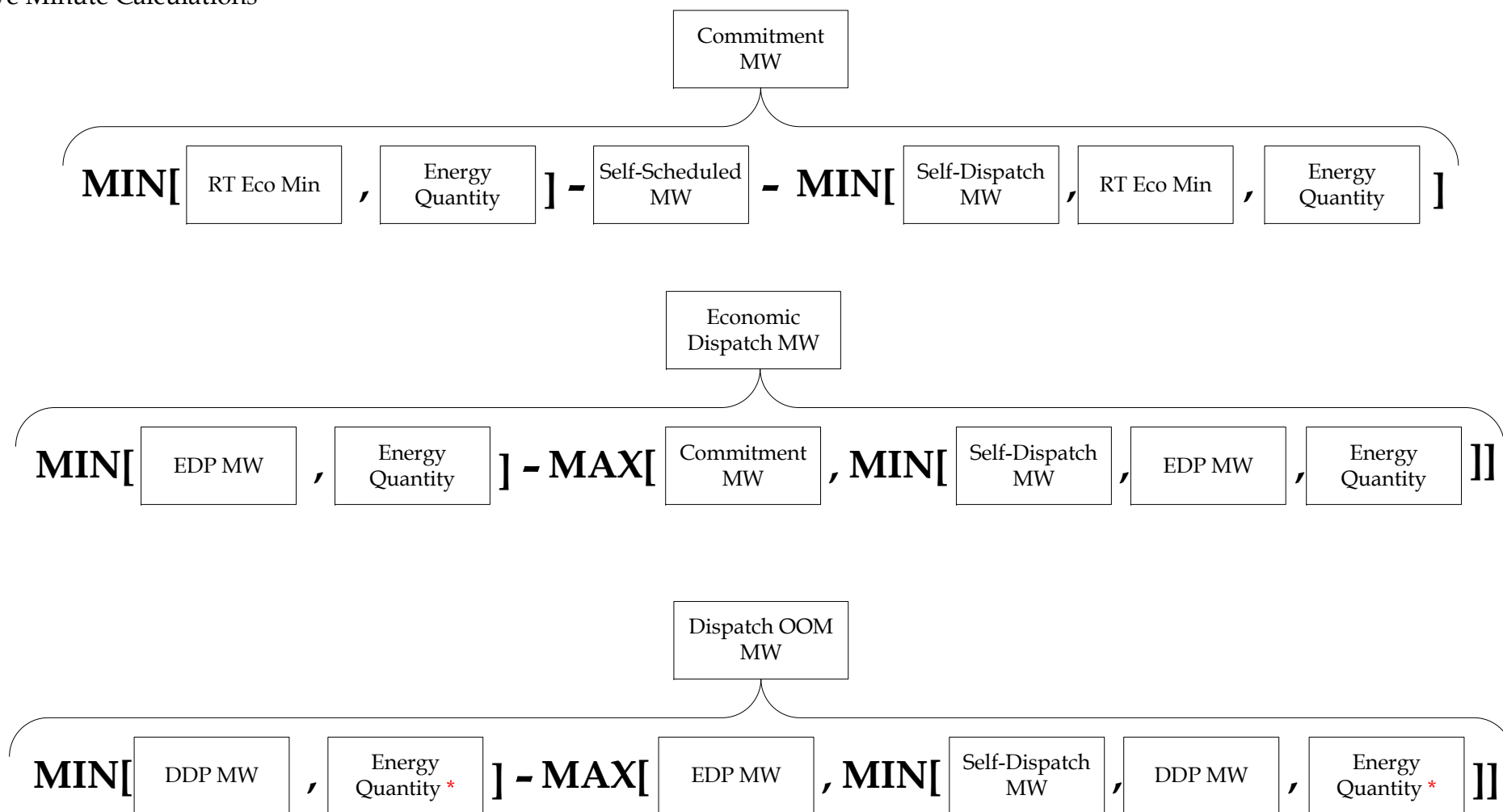
Note: The relevant ISO New England Markets, Services and Transmission Tariff and the relevant Market Manuals, Operating Procedures and Planning Procedures shall govern.

Acronyms			
Acronym	Definition	Acronym	Definition
CA	Charge Allocation	ET	External Transaction
CP	Clearing Price	GPA	Generator Performance Audit
DA	Day-Ahead	HV VAR	High Voltage VAR
DALO	Day-Ahead Load Obligation	LEG	Limited Energy Generator
DARD	Dispatchable Asset Related Demand	LMP	Locational Marginal Price
DDP	Desired Dispatch Point	LSCPR	Local Second Contingency Protection Resource
DLOC	Dispatch Lost Opportunity Cost	LV VAR	Low Voltage VAR
DRPA	Demand Response Performance Audit	MGE	Minimum Generation Emergency
DRR	Demand Response Resource	NCPC	Net Commitment Period Compensation
EDBD	Effective Demand Bid for Dispatch	OOM	Out of Merit
EDBP	Effective Demand Bid When Postured (DARD)	RR	Reliability Region
EDP	Economic Dispatch Point	RRPOC	Rapid Response Pricing Opportunity Cost
EOC	Effective Offer for Commitment	RT	Real-Time
EOD	Effective Offer for Dispatch	RTLO	Real-Time Load Obligation
EOP	Effective Offer When Postured (Generator)	SCR	Special Constraint Resource
EOWP	Effective Offer When Postured (DARD)	TMOR	Thirty Minute Operating Reserve
ESD	Energy Storage Device	TMSR	Ten-Minute Spinning Reserve

Related Calculation Summaries	
Calculation Summary	Related Market
DA_NCPC_Calculation_Summary	Day-Ahead NCPC
energy_market_calc_sum	Energy Market
Related Market Information Server (MIS)	
Report Code	Report Long Name
SD_RTNCPCCS	Real-Time NCPC Cancelled Start Credit Report
SD_RTNCPCDARD5MIN	Real-Time DARD Commitment and Dispatch Report
SD_RTNCPCDARDPYMT5MIN	Real-Time Net Commitment Period Compensation DARD Five Minute Payment Report
SD_RTNCPCDARDPYMTHR	Real-Time Net Commitment Period Compensation DARD Payment Report
SD_RTNCPCDDLOC	Real-Time Net Commitment Period Compensation DARD Dispatch LOC Payment Report
SD_RTNCPCDLOC	Real-Time Net Commitment Period Compensation Dispatch LOC Report
SD_RTNCPCDRR5MIN	Real-Time Demand Response Resource Commitment and Dispatch Report
SD_RTNCPCDRRCS	Real-Time NCPC Demand Response Resource Cancelled Start Credit
SD_RTNCPCDRRDLOC	Real-Time Net Commitment Period Compensation Demand Response Resource Dispatch LOC Report
SD_RTNCPCDRRPYMT5MIN	Real-Time Net Commitment Period Compensation Demand Response Resource Five Minute Payment Report
SD_RTNCPCDRRPYMTHR	Real-Time Net Commitment Period Compensation Demand Response Resource Payment Report
SD_RTNCPCGEN5MIN	Real-Time Generator Commitment and Dispatch Report
SD_RTNCPCHS	Real-Time NCPC Hourly Shortfall Payment Report
SD_RTNCPCHSDARD	Real-Time Net Commitment Period Compensation DARD Hourly Shortfall Payment Report
SD_RTNCPCHSDRR	Real-Time Net Commitment Period Compensation Demand Response Resource Hourly Shortfall Payment Report
SD_RTNCPCPOSTGEN	Real-Time NCPC Generator Posturing Credit Report
SD_RTNCPCPYMT5MIN	Real-Time Net Commitment Period Compensation Five Minute Payment Report
SD_RTNCPCPYMTHR	Real-Time Net Commitment Period Compensation Payment Report
SD_RTNCPCREALLOCATE	Real-Time NCPC Positive Deviation Economic Charge Reallocation Details Report
SR_RTNCPCSTLMNTSUM	Real-Time NCPC Settlement Summary Report

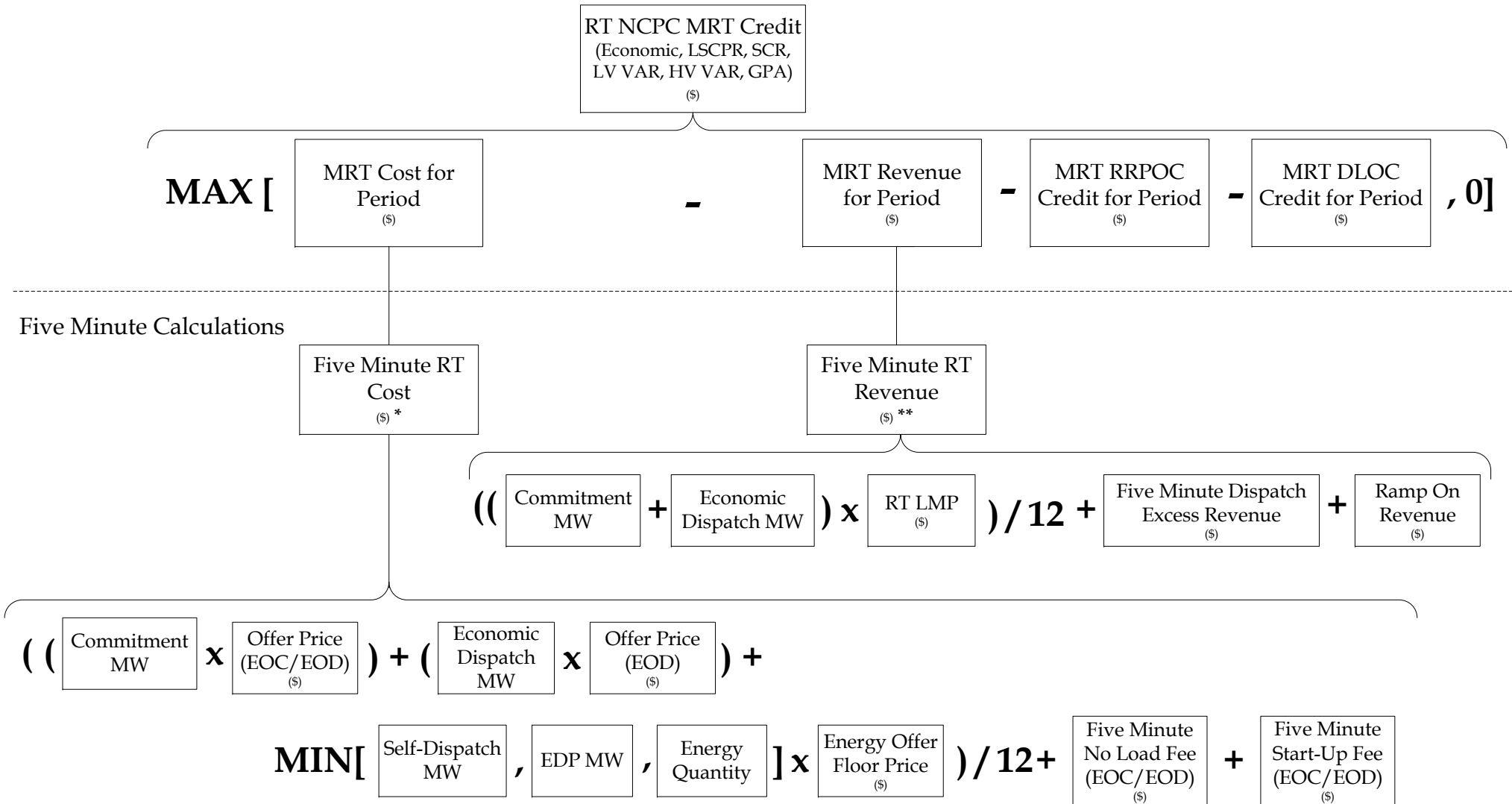
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5	RT NCPC Generator Commitment OOM MRT Credit
6	RT NCPC Generator Commitment OOM Post MRT Credit
7	RT NCPC Generator Dispatch OOM Credit
8	RT NCPC Generator DLOC and RRPOC Credit
9	RT NCPC Generator Cancelled Start Credit
10	RT NCPC Generator Hourly Shortfall Credit
11	RT NCPC LEG Generator Posturing Credit
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32	RT NCPC Generator Performance Audit Charges
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34	RT NCPC Dispatch Lost Opportunity Cost Charges
35	RT NCPC Rapid Response Pricing Opportunity Cost Charges

Five Minute Calculations



* If ESD is regulating, then Energy Quantity is not used in the calculation

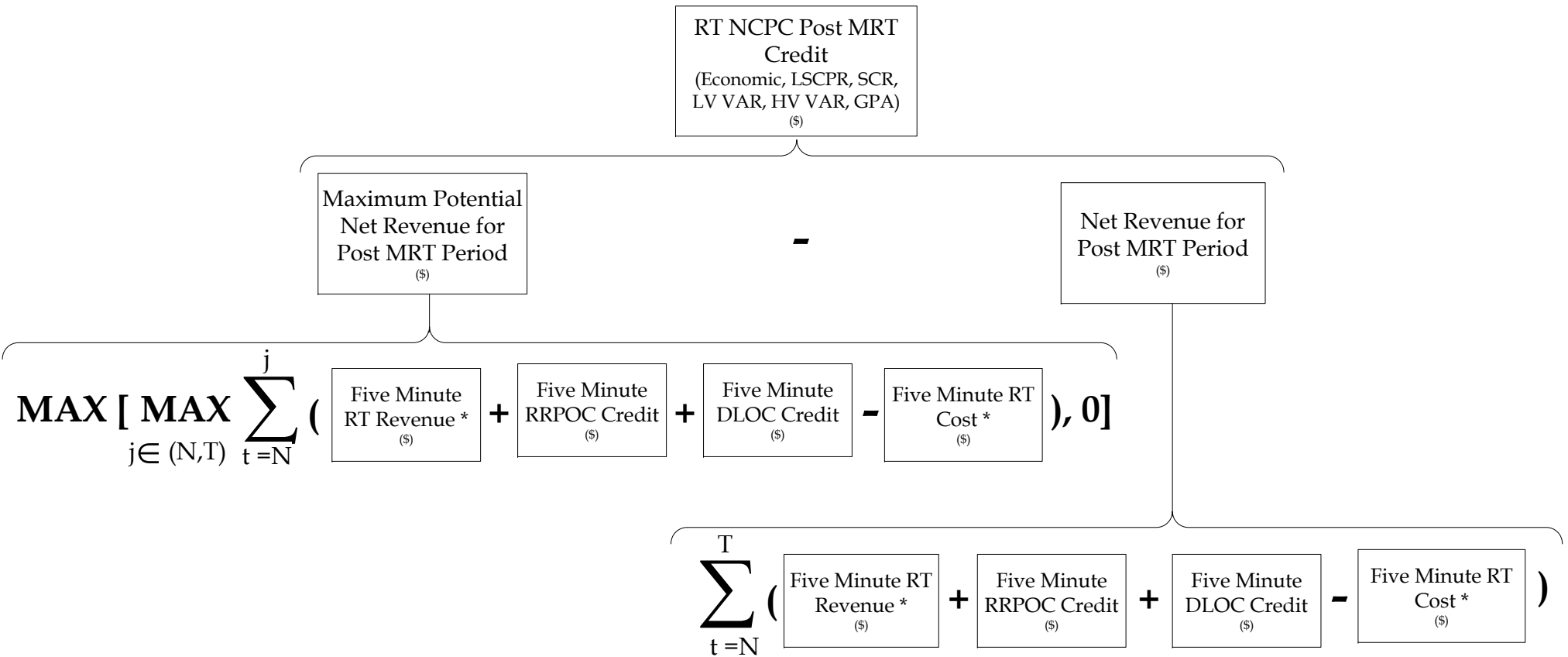
Credit Calculation for Minimum Run Time (MRT) Period



* For any interval that corresponds to a Day-Ahead cleared hour, the Start-Up Fee, No Load Fee, and Energy price parameter for output up to the Resource's Economic Minimum Limit shall be set to \$0 for the hour.

** For any interval that corresponds to a Day-Ahead cleared hour, the revenue for output up to the Resource's Economic Minimum Limit shall be set to \$0 for the interval if such revenue is less than \$0.

Credit Calculation for Post MRT Period



Where:

(t, T) = Interval of contiguous five minute intervals contained in the settlement period.

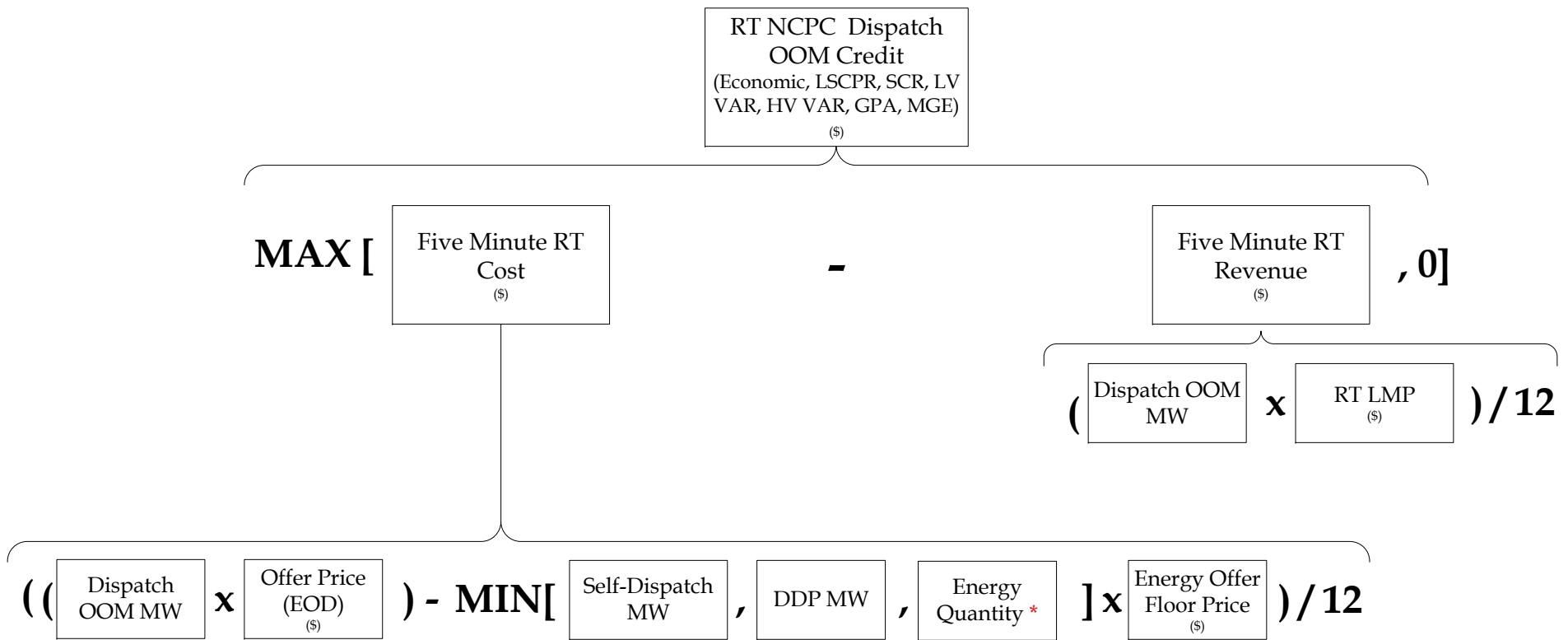
N = Interval after the last interval of the minimum run time.

j – Integer for intervals between the interval after the last interval of the minimum run time and the end of the settlement period.

∈ - Is element of

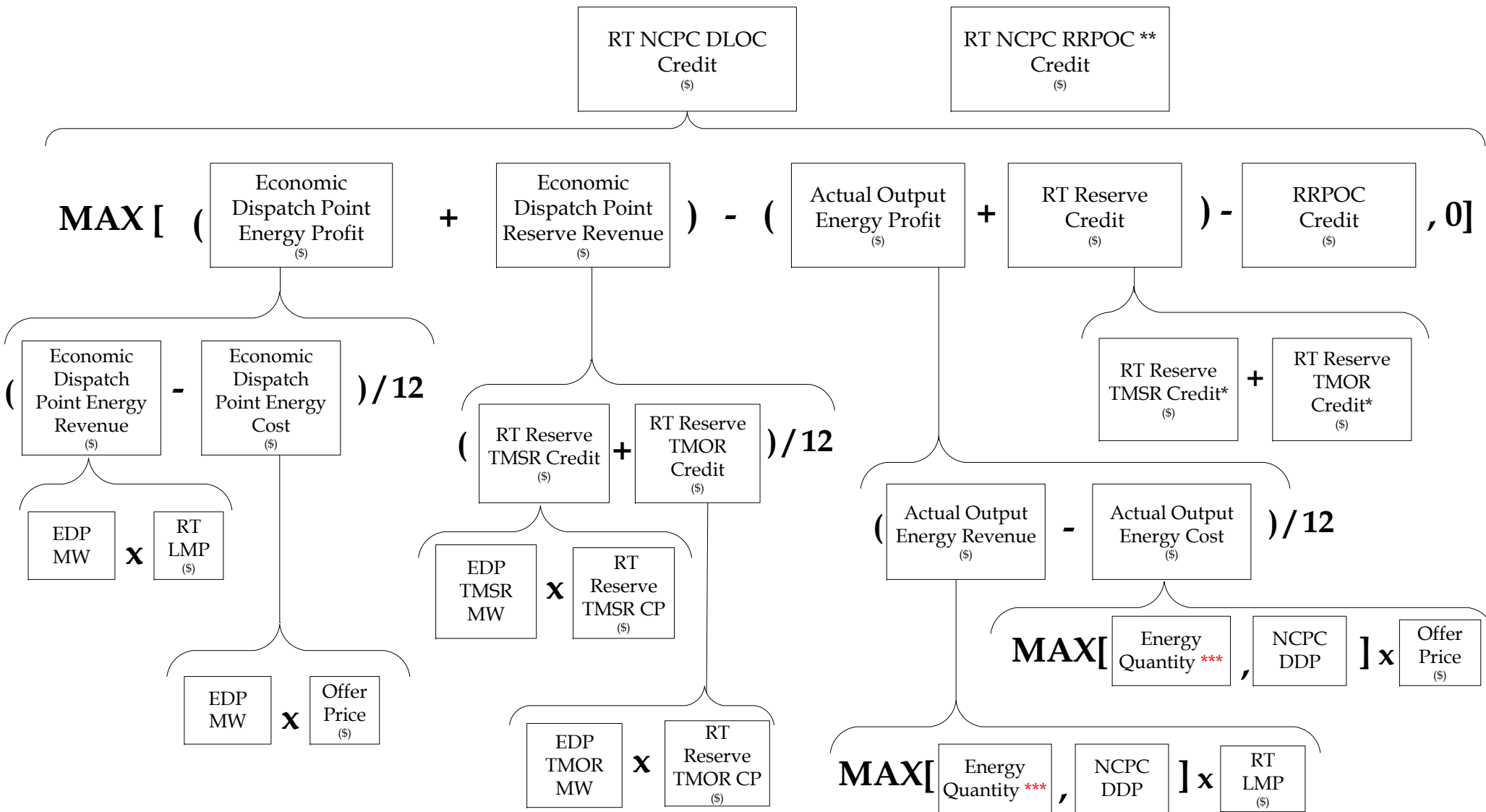
* Five Minute RT Revenue and Five Minute RT Cost calculations are shown on the RT NCPC Generator Commitment OOM MRT Credit calculation summary.

Credit Calculation for Intervals Dispatched Above EDP



* If ESD is regulating, then Energy Quantity is not used in the calculation

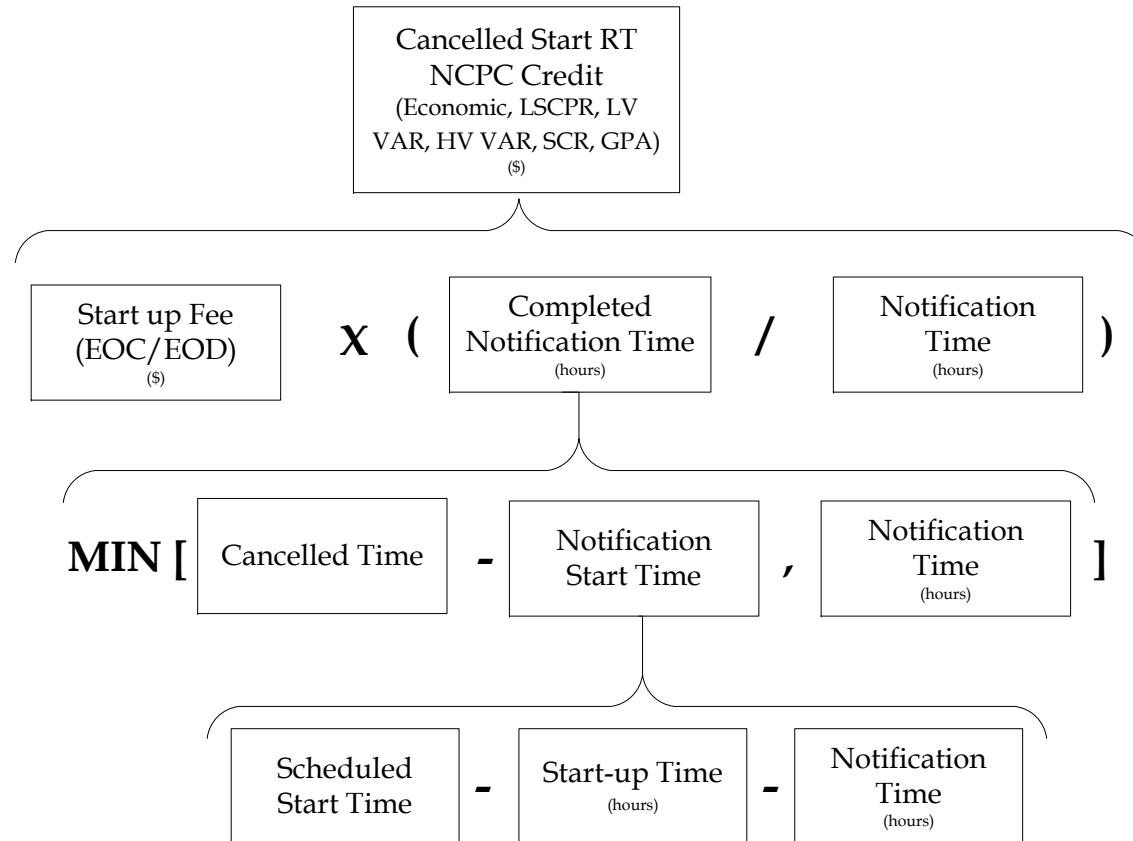
Five Minute Calculations

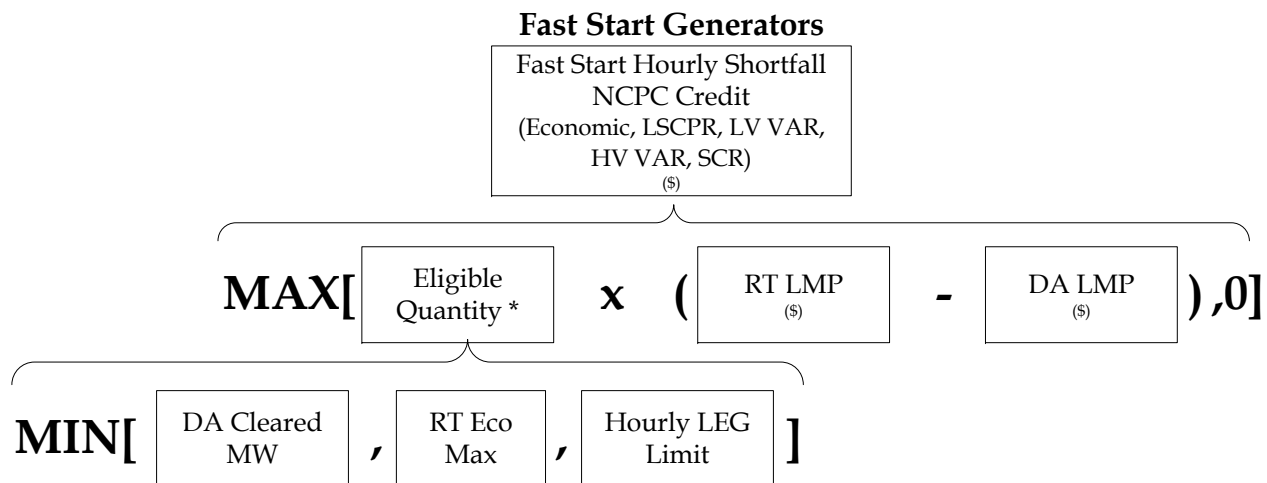


* From the Reserve Market Settlement.

** Determined by the ISO's Locational Marginal Price Program

*** If ESD is regulating, then the Energy Quantity is not used in the calculation



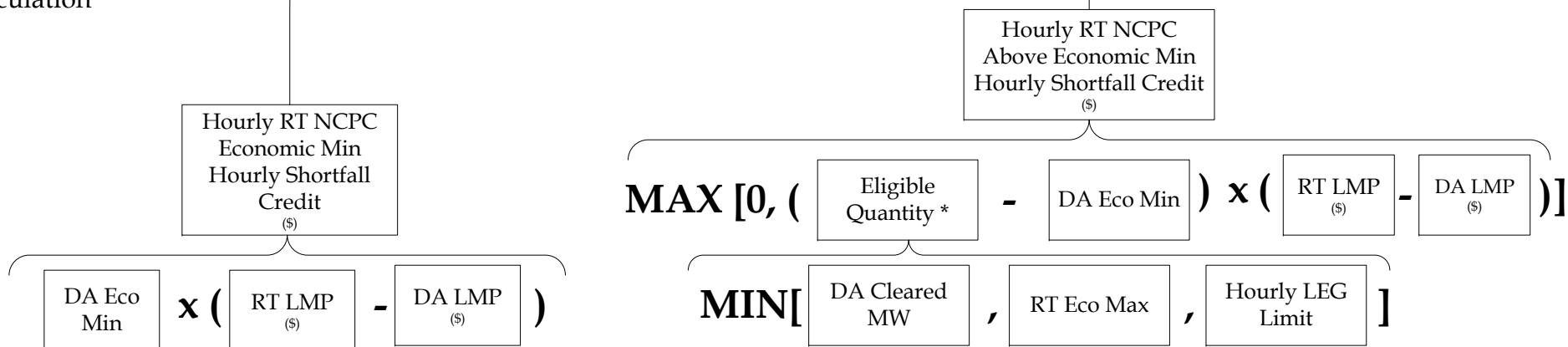


Settlement Period Calculation

Non-Fast Start Generators

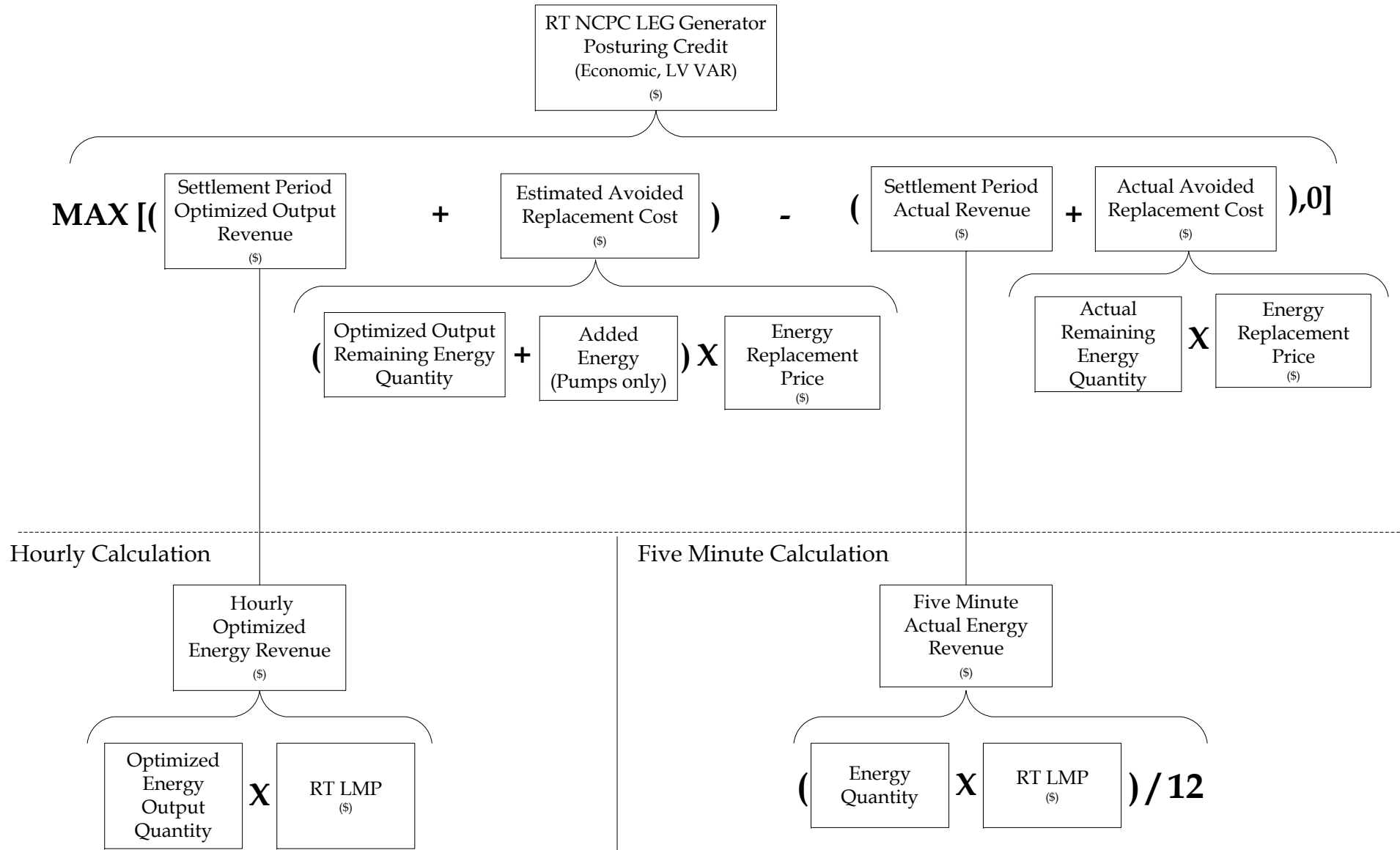


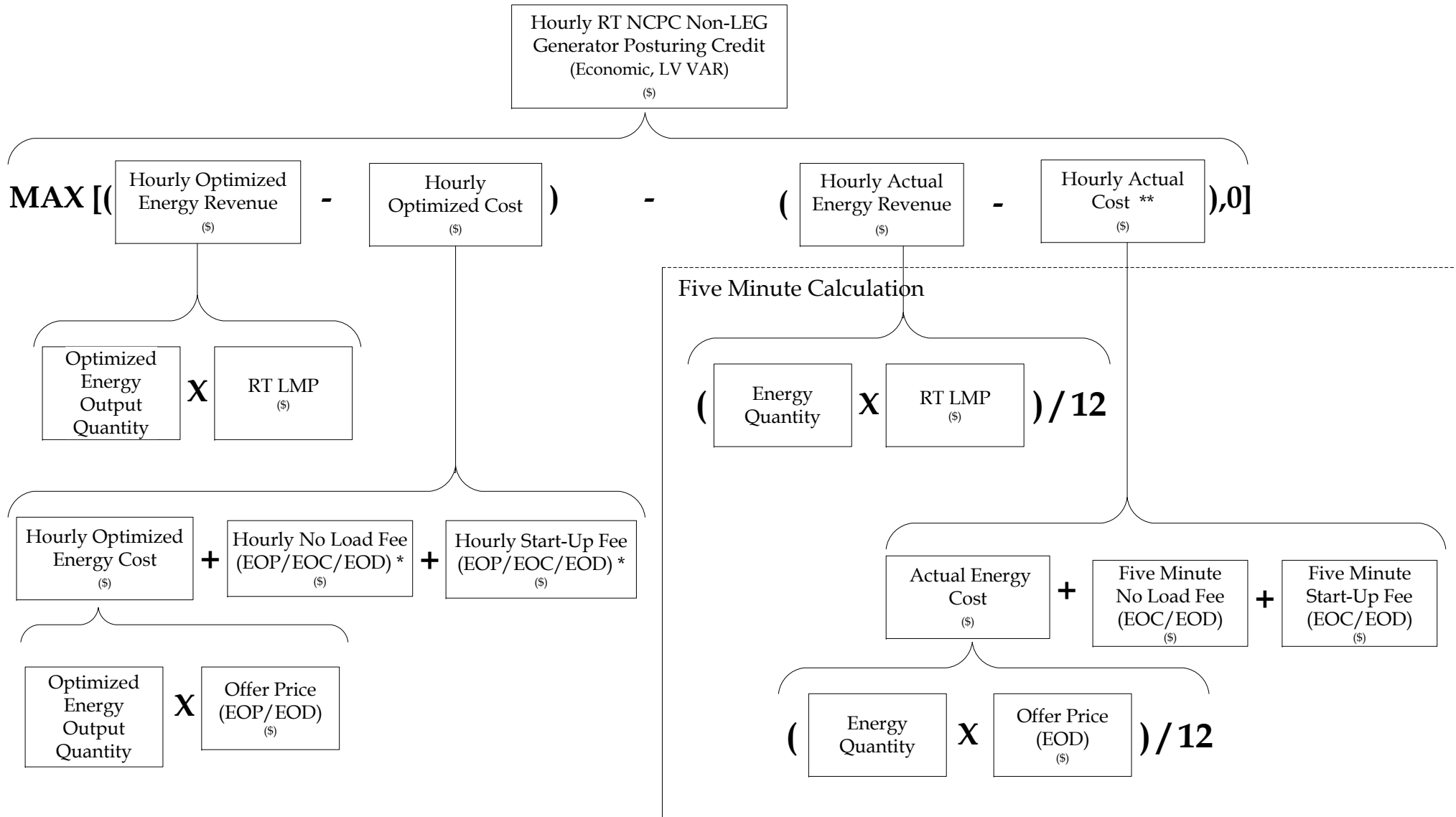
Hourly Calculation



* If prices were increased on the RT Effective Offer for Dispatch then the DA Economic Min MW is used for the Eligible Quantity for non-fast start generators, and zero is used for fast start generators.

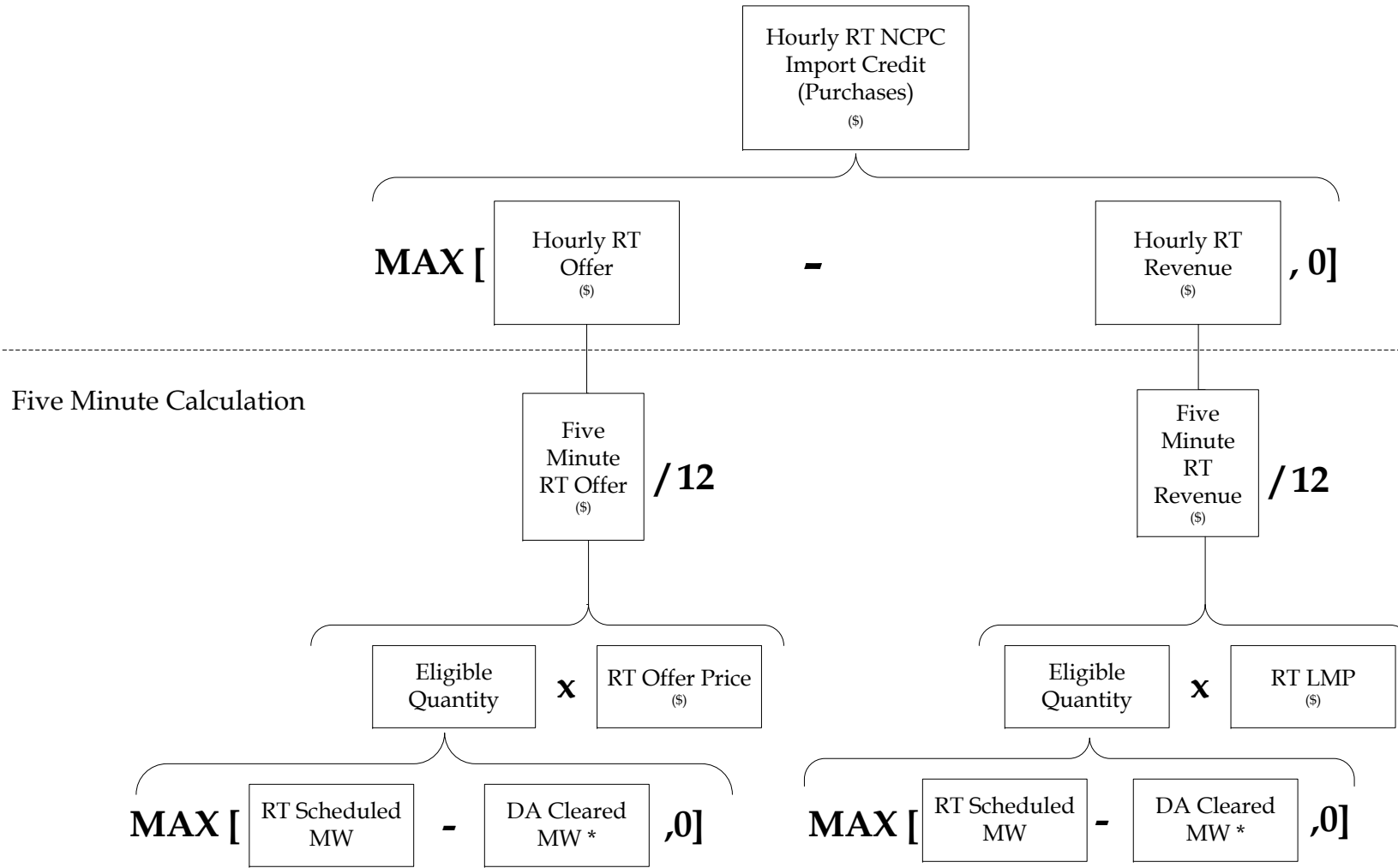
Settlement Period Calculation



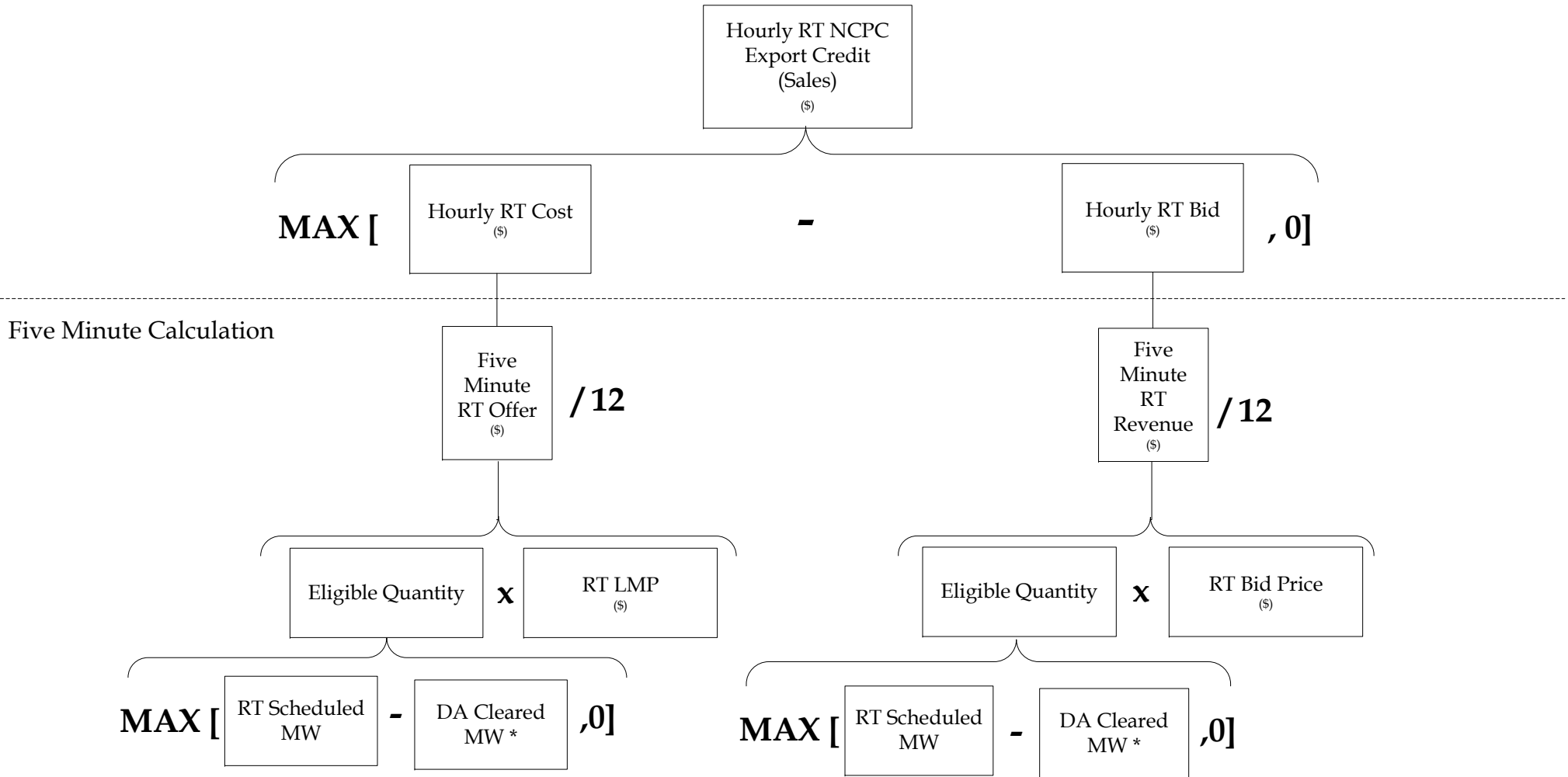


* If postured to remain on line but reduce output, the lesser of the EOC and EOD fee is used. If postured off line, the fee from the EOP is used.

** The hourly actual offer cost for a resource postured offline is zero.

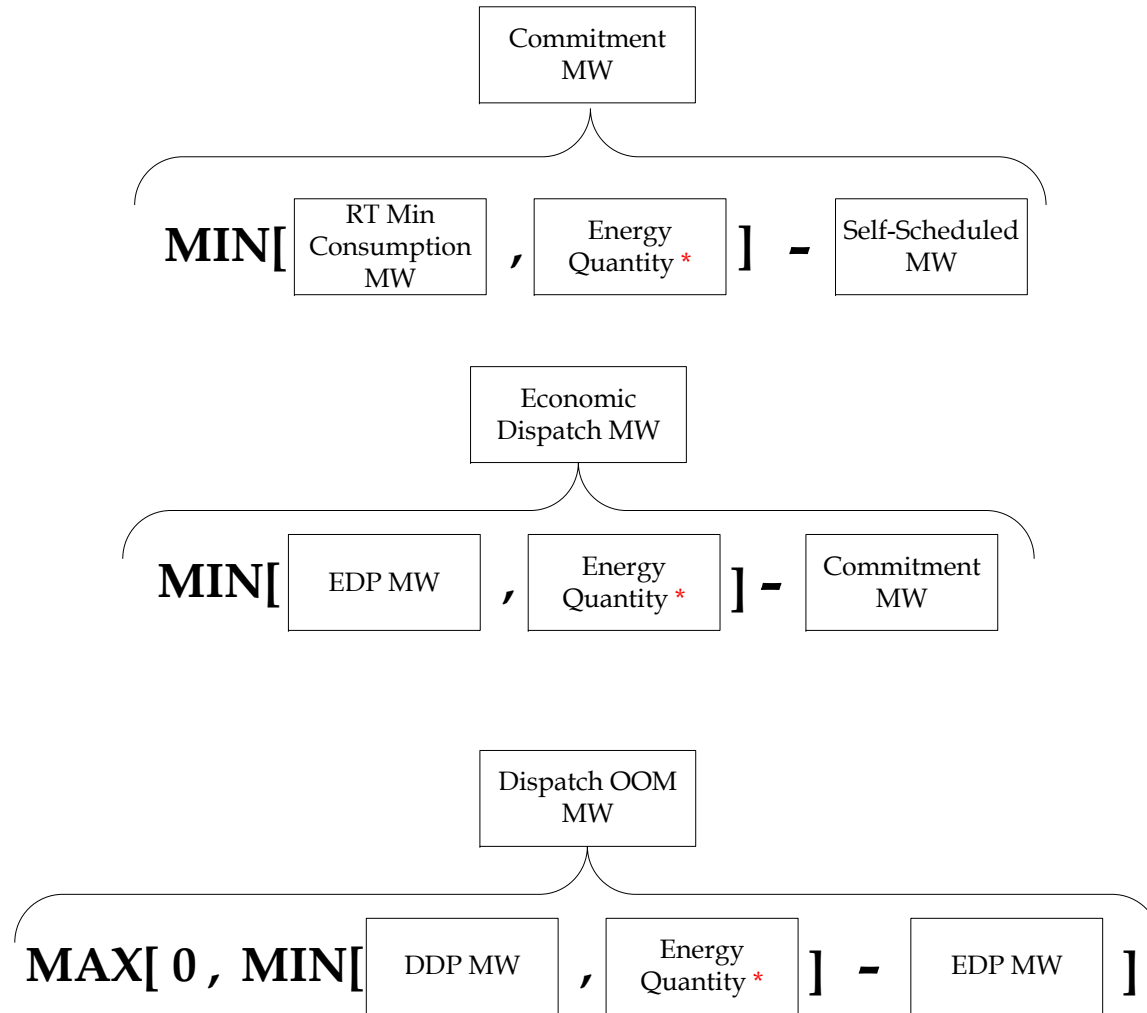


* DA Cleared MW are zero if the transaction price was revised in the re-offer period.



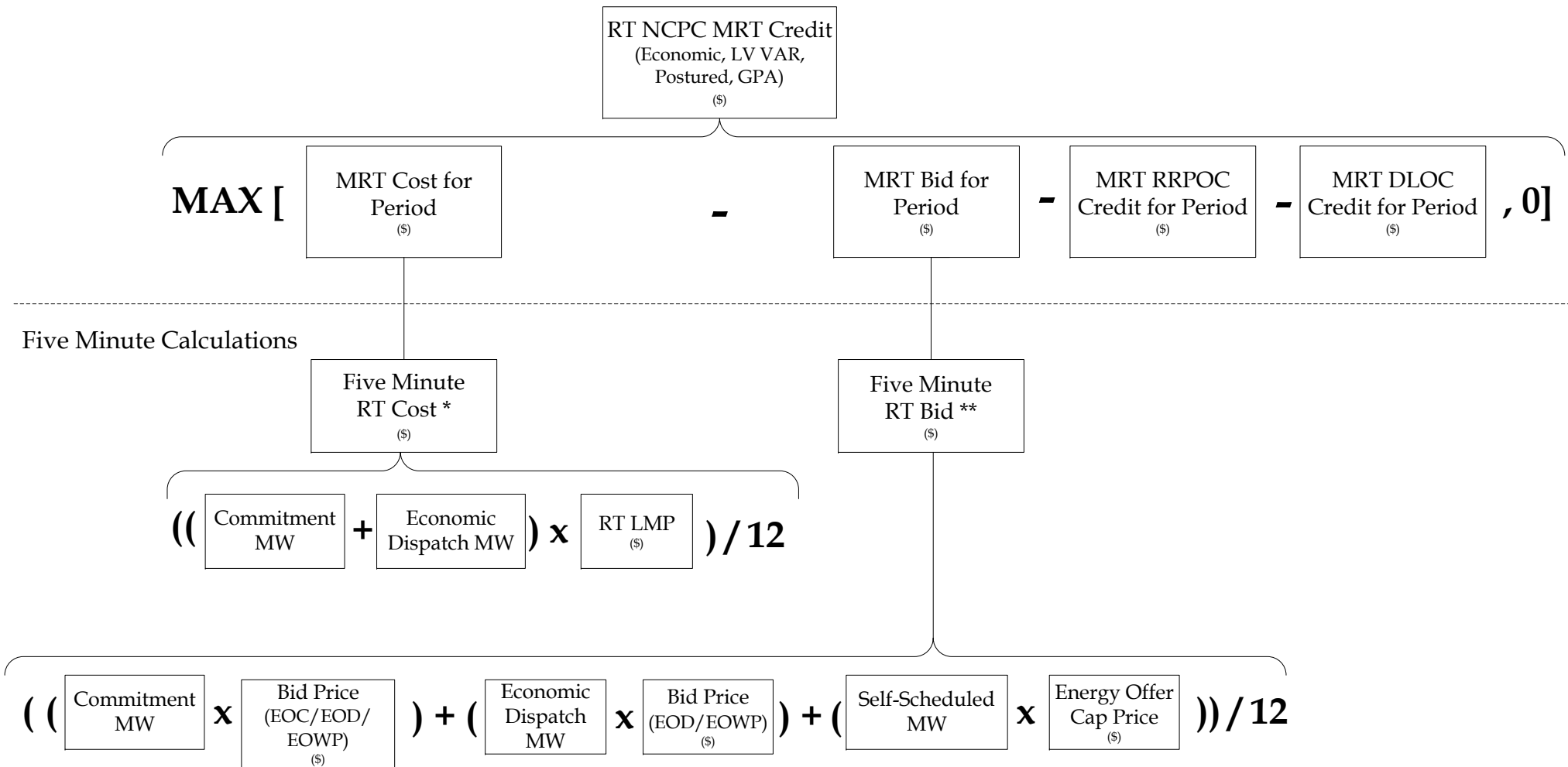
* DA Cleared MW are zero if the transaction price was revised in the re-offer period.

Five Minute Calculations



* If ESD is regulating, then Energy Quantity is not used in the calculation

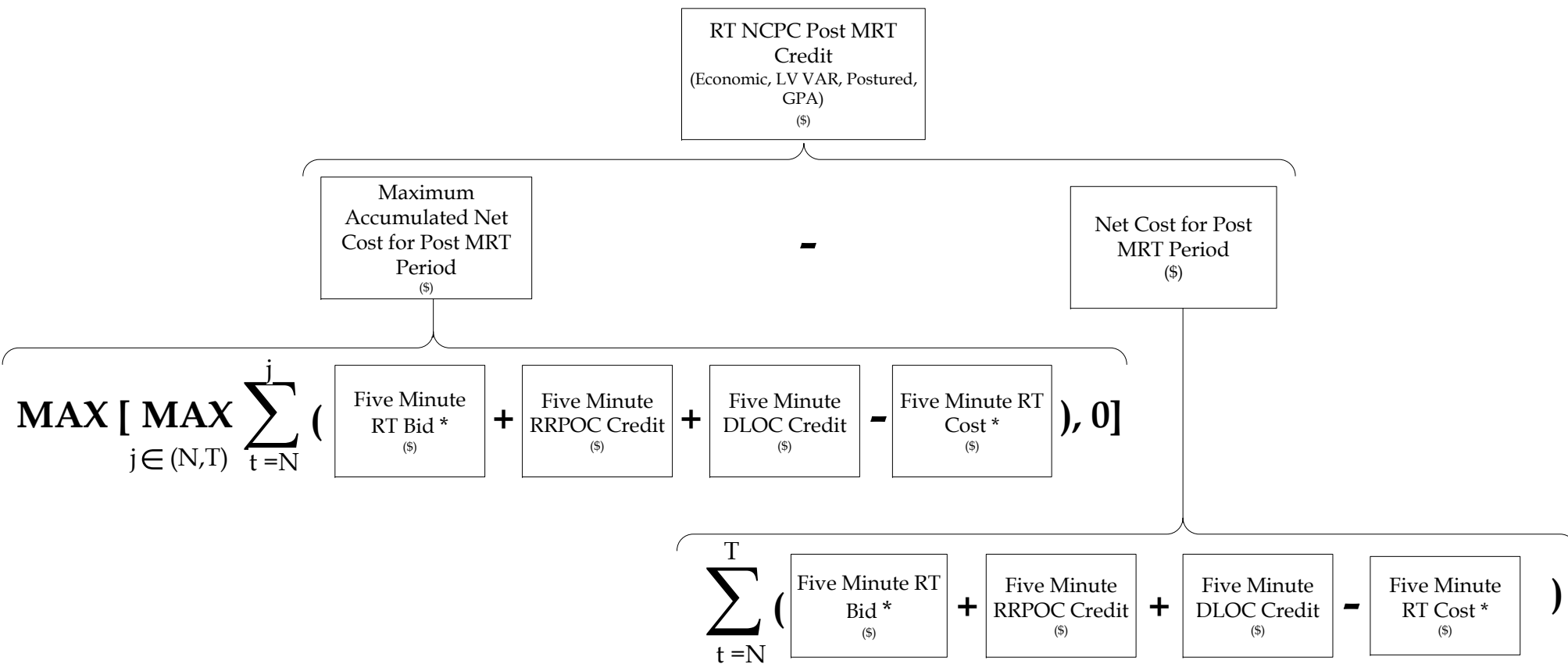
Credit Calculation for Minimum Run Time (MRT) Period



* For any interval that corresponds to a Day-Ahead cleared hour, the Start-Up Fee, No Load Fee, and Energy price parameter for output up to the Resource's Economic Minimum Limit shall be set to \$0 for the hour.

** For any interval that corresponds to a Day-Ahead cleared hour, the revenue for output up to the Resource's Economic Minimum Limit shall be set to \$0 for the interval if such revenue is less than \$0.

Credit Calculation for Post MRT Period



Where:

(t, T) = Interval of contiguous five minute intervals contained in the settlement period.

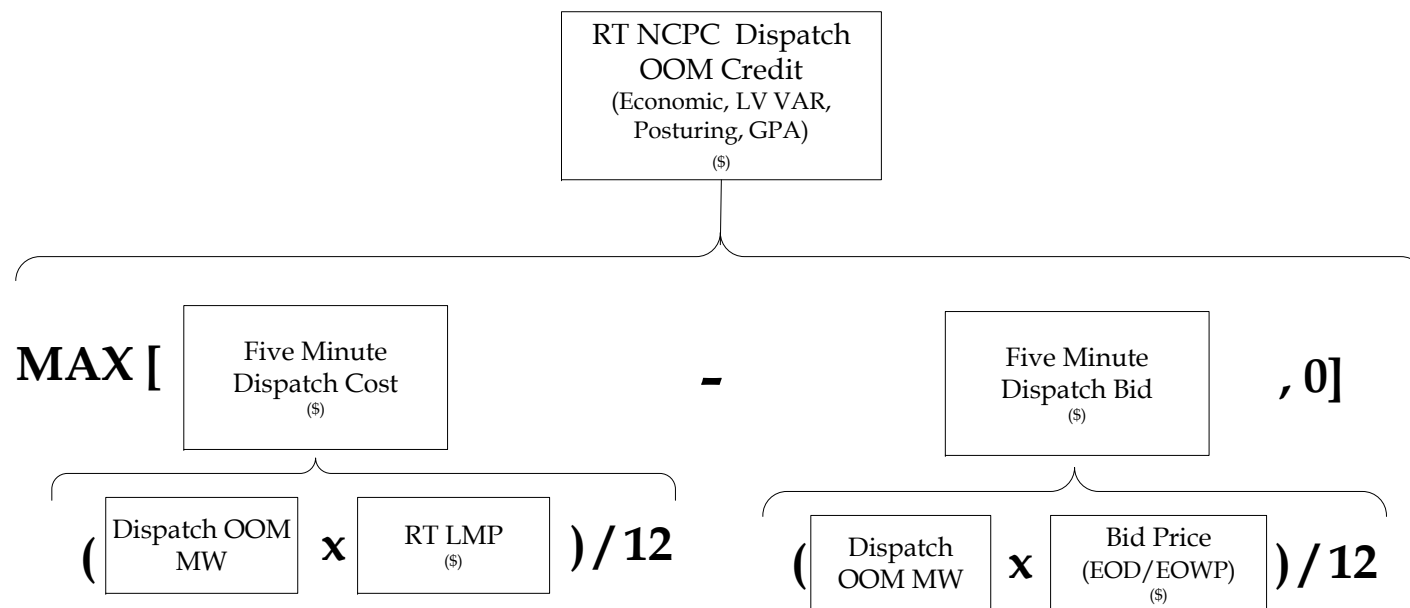
N = Interval after the last interval of the minimum run time.

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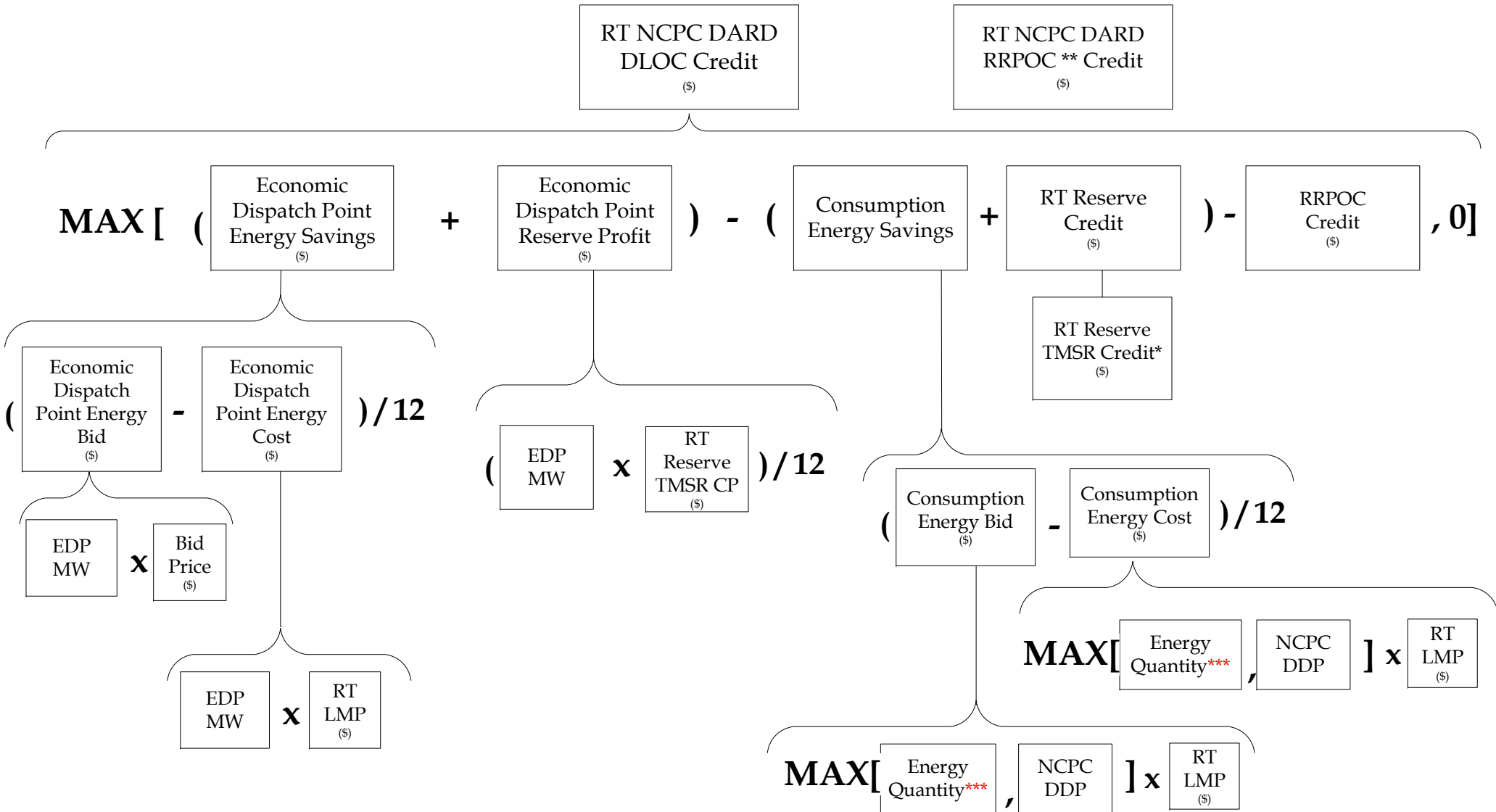
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* Five Minute RT Bid and Five Minute RT Cost calculations are shown on the RT NCPC DARD Commitment OOM MRT Credit calculation summary.

Credit Calculation for Intervals Dispatched Above EDP



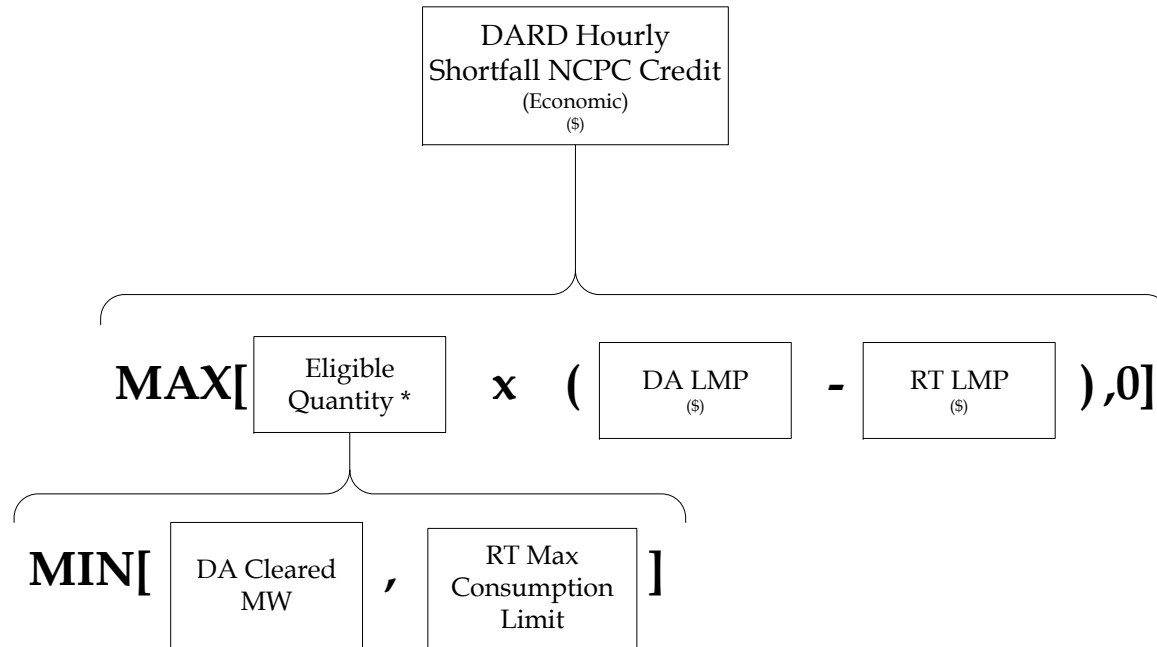
Five Minute Calculations



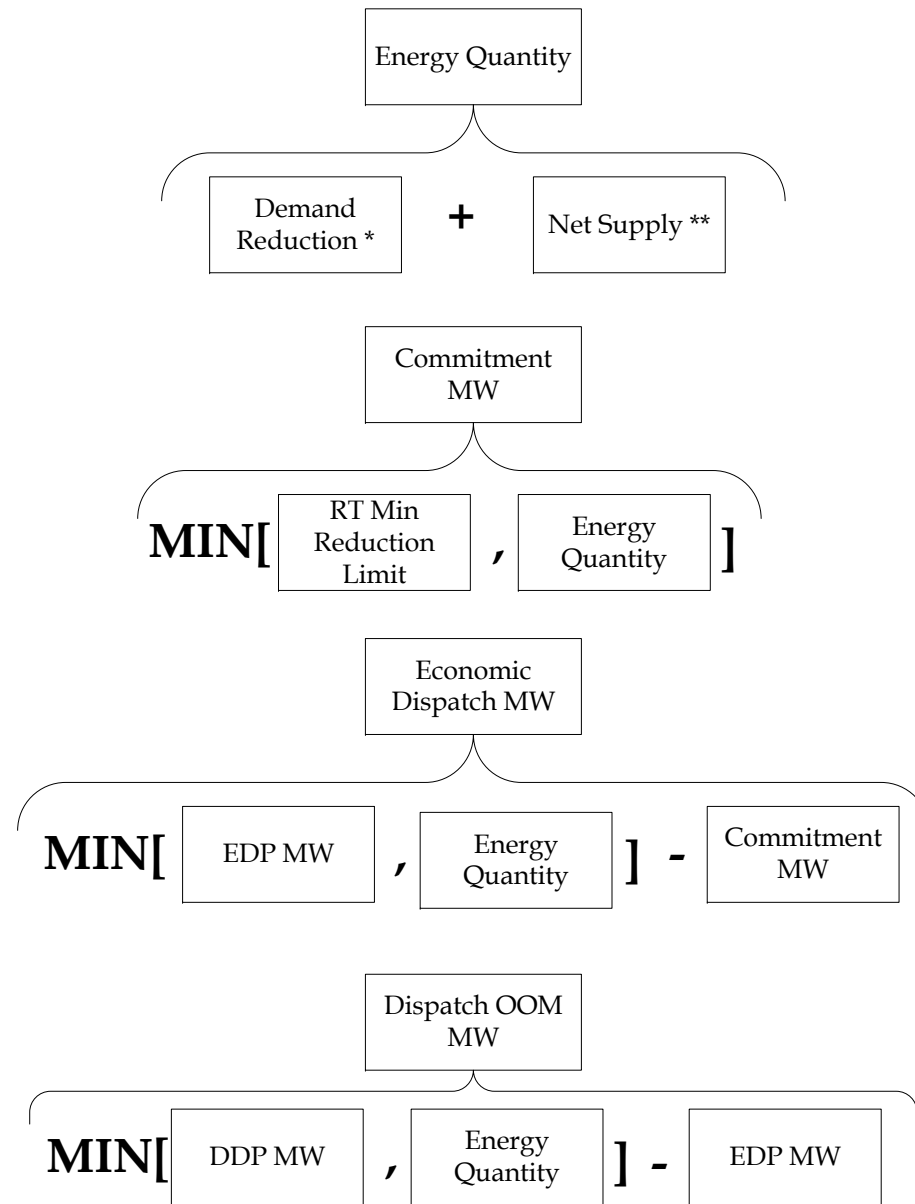
* From the Reserve Market Settlement.

** Determined by the ISO's Locational Marginal Price Program

*** If ESD is regulating, then the Energy Quantity is not used in the calculation



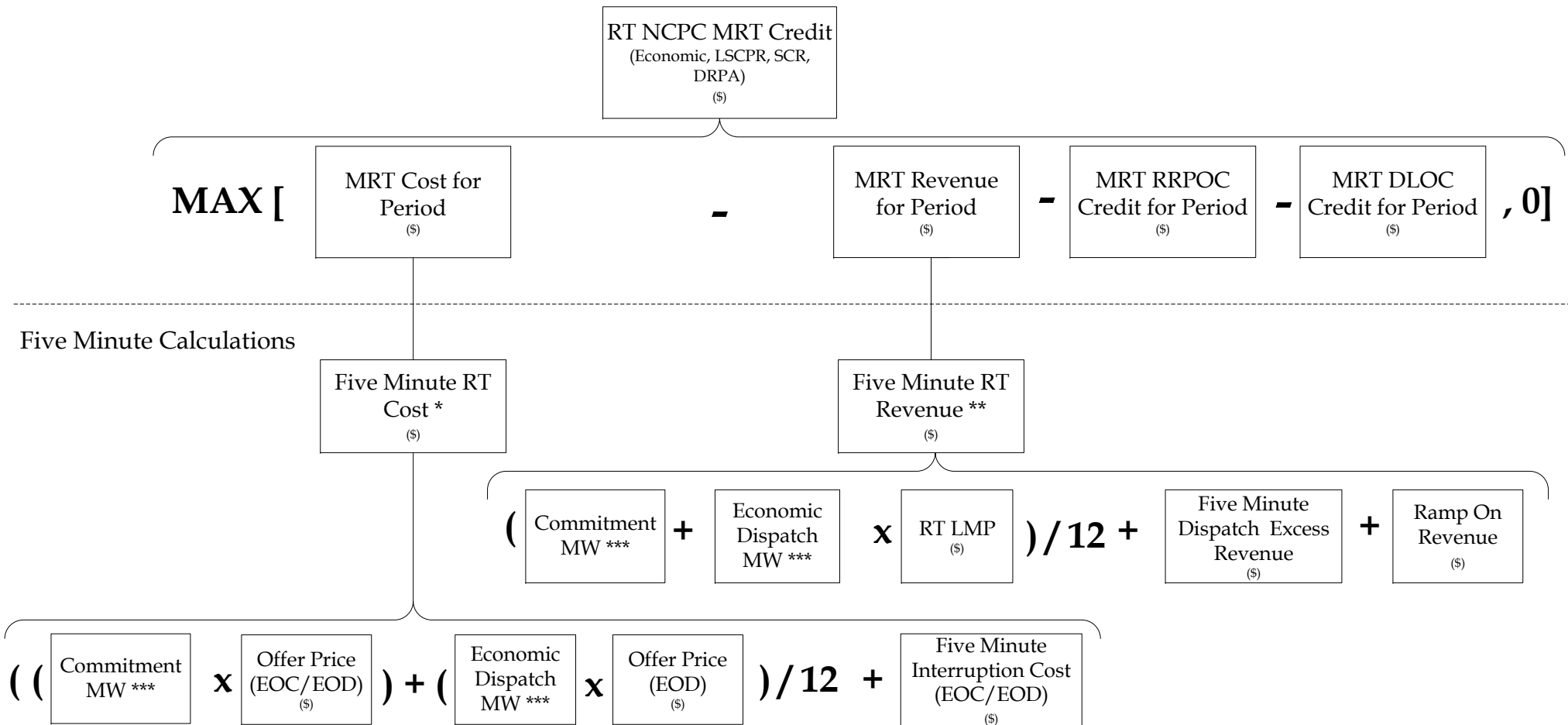
Five Minute Calculations



*The cost or revenue for the portion of Energy Quantity MWs that is associated with Demand Reductions will be increased by the Pool Distribution Loss Factor (current value is 0.055).

**The cost or revenue for the portion of Energy Quantity MWs that is associated with Net Supply will be not increased by the Pool Distribution Loss Factor.

Credit Calculation for Minimum Run Time (MRT) Period

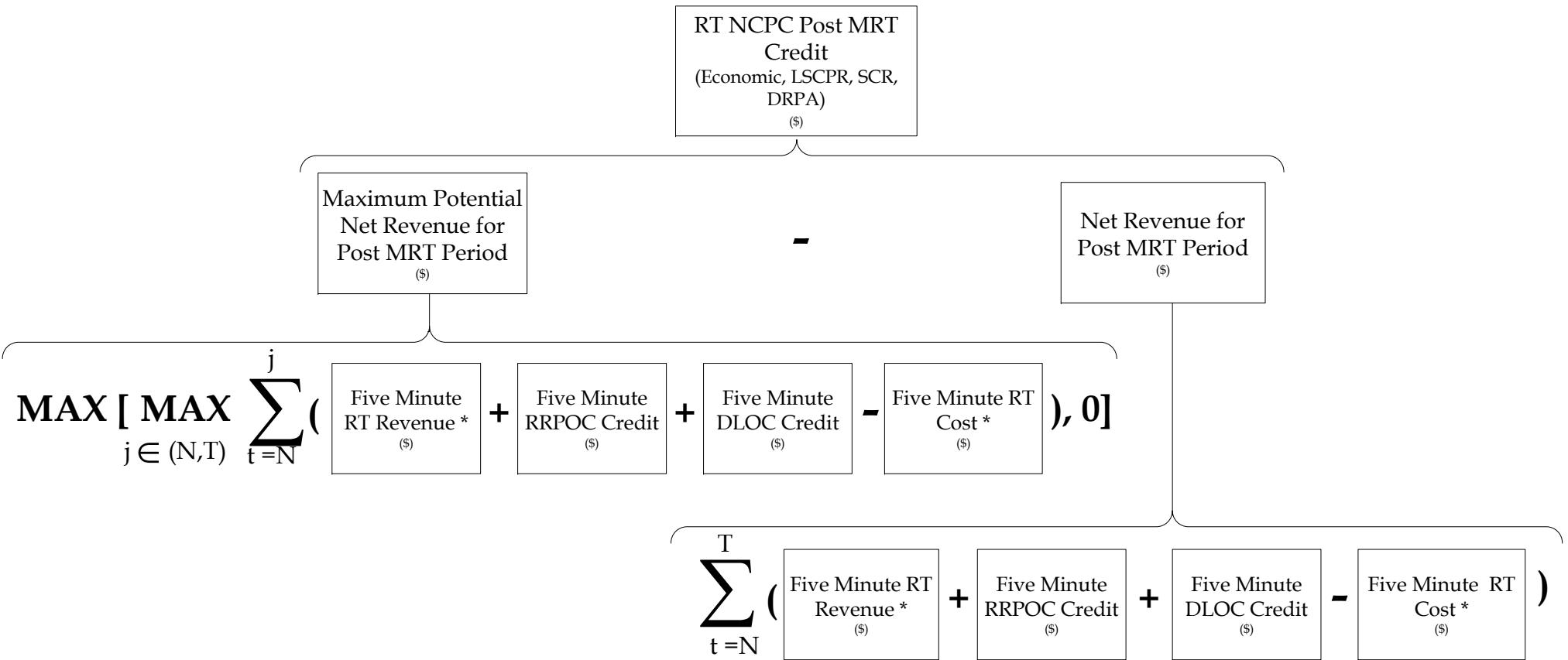


* For any interval that corresponds to a Day-Ahead cleared hour, the Interruption Cost and Energy price parameter for output up to the Resource’s Minimum Reduction Limit shall be set to \$0 for the hour.

** For any interval that corresponds to a Day-Ahead cleared hour, the revenue for output up to the Resource’s Minimum Reduction Limit shall be set to \$0 for the interval if such revenue is less than \$0.

*** The cost/revenue for the portion of MWs that is associated with Demand Reductions will be increased by the Pool Distribution Loss Factor (current value is 0.055). The cost/revenue for the portion of MWs that is associated with Net Supply will not be increased by the Pool Distribution Loss Factor.

Credit Calculation for Post MRT Period



Where:

(t, T) = Interval of contiguous five minute intervals contained in the settlement period.

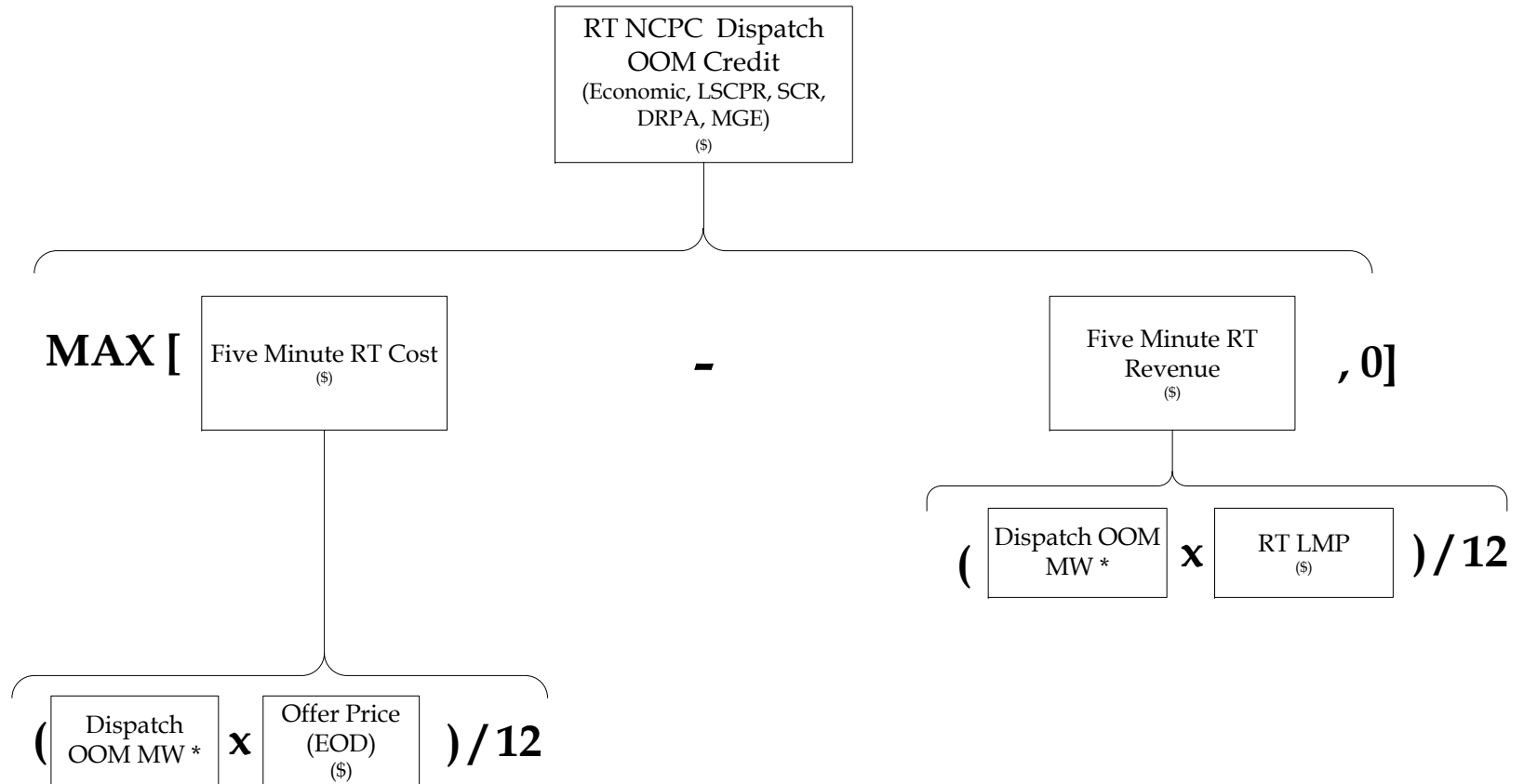
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j - Integer for intervals between the interval after the last interval of the minimum run time and the end of the settlement period.

- Is element of

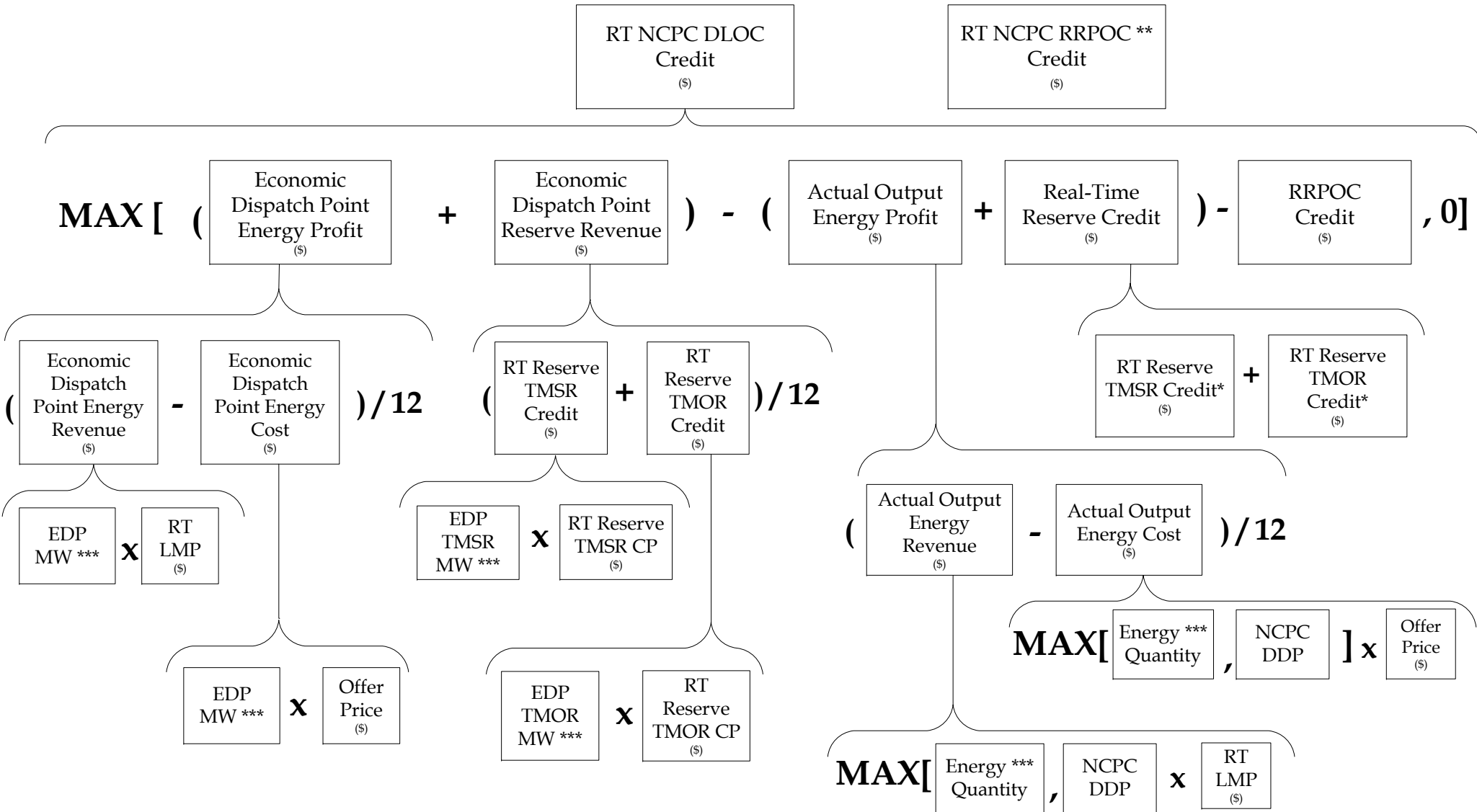
* Five Minute RT Revenue and Five Minute RT Cost calculations are shown on the RT NCPC Generator Commitment OOM MRT Credit calculation summary.

Credit Calculation for Intervals Dispatched Above EDP



*The cost/revenue for the portion of MWs that is associated with Demand Reductions will be increased by the Pool Distribution Loss Factor (current value is 0.055). The cost/revenue for the portion of MWs that is associated with Net Supply will not be increased by the Pool Distribution Loss Factor.

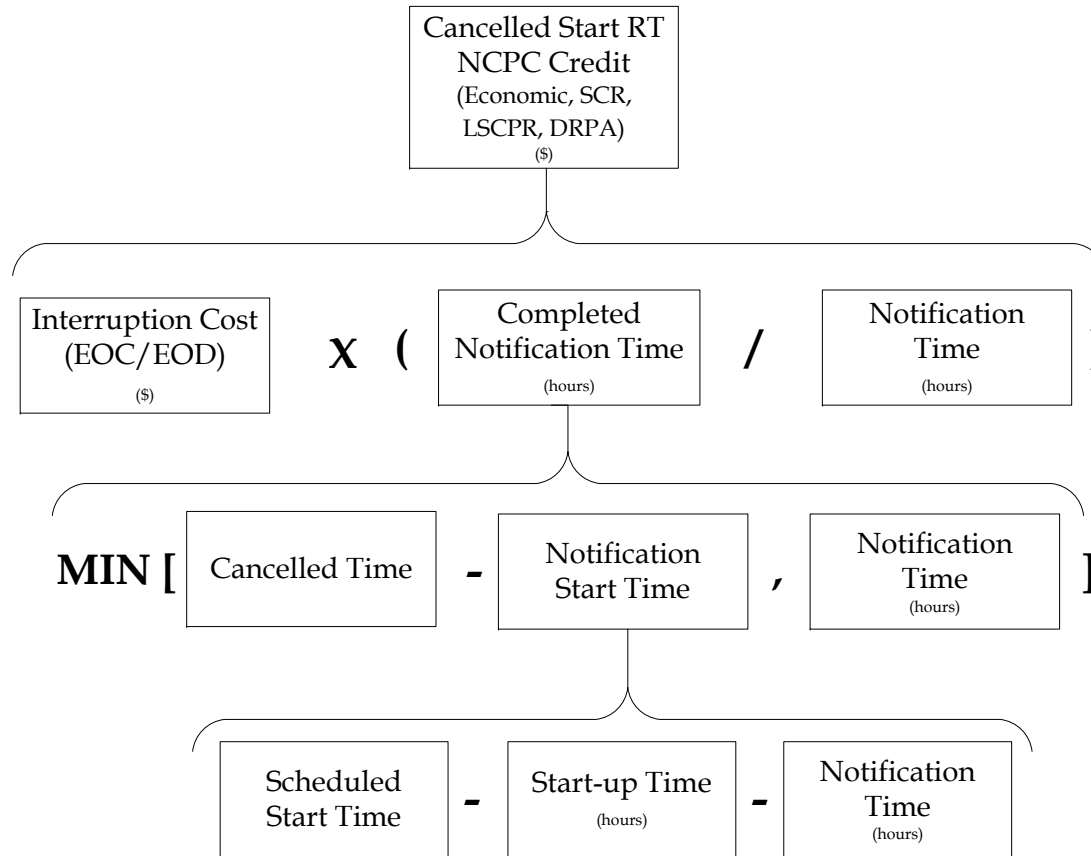
Five Minute Calculations



* From the Reserve Market Settlement.

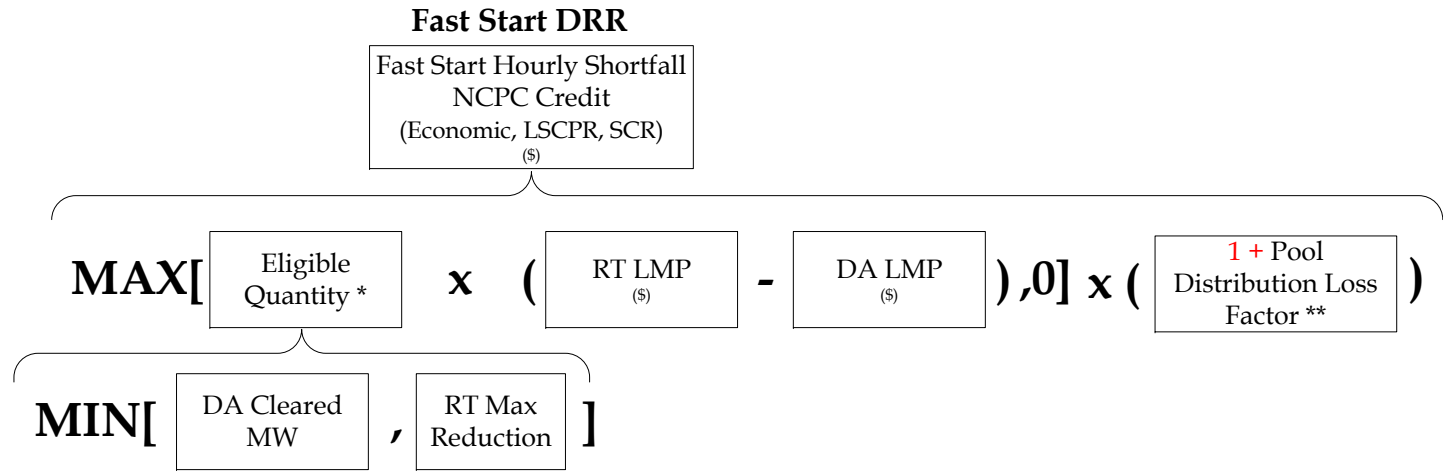
** Determined by the ISO's Locational Marginal Price Program

*** The cost/revenue for the portion of MWs that is associated with Demand Reductions will be increased by the Pool Distribution Loss Factor (current value is 0.055). The cost/revenue for the portion of MWs that is associated with Net Supply will not be increased by the Pool Distribution Loss Factor.



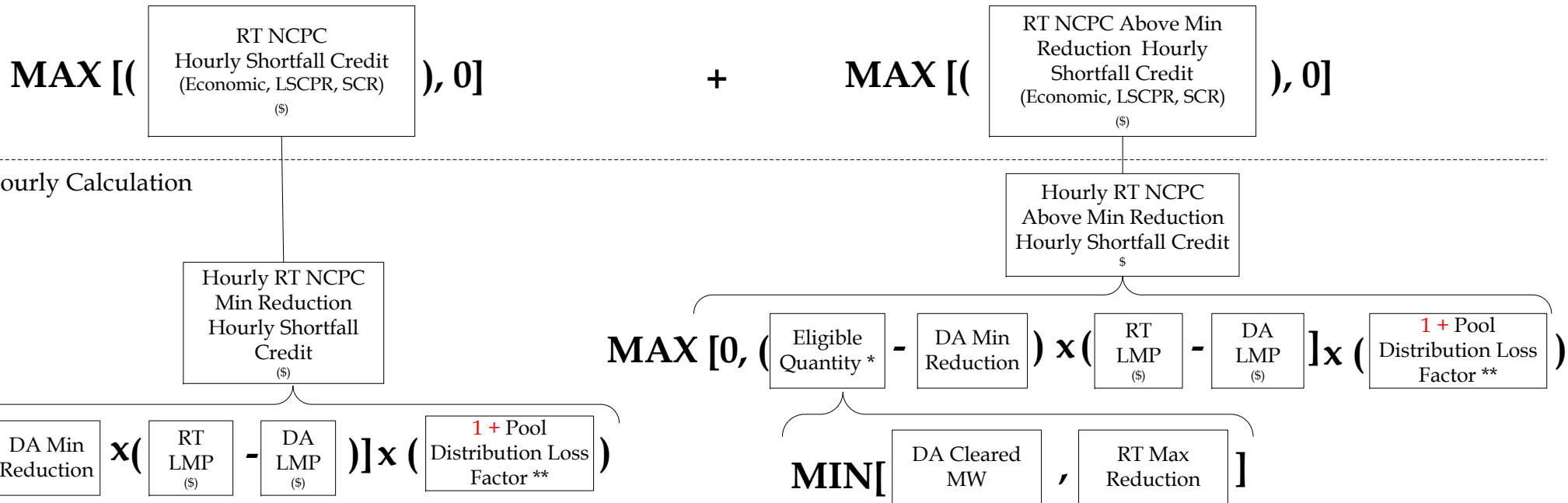
Note: The relevant ISO New England Markets, Services and Transmission Tariff and the relevant Market Manuals, Operating Procedures and Planning Procedures shall govern.

RT NCPC DRR Hourly Shortfall Credit ISO New England Calculation Summary



Settlement Period Calculation

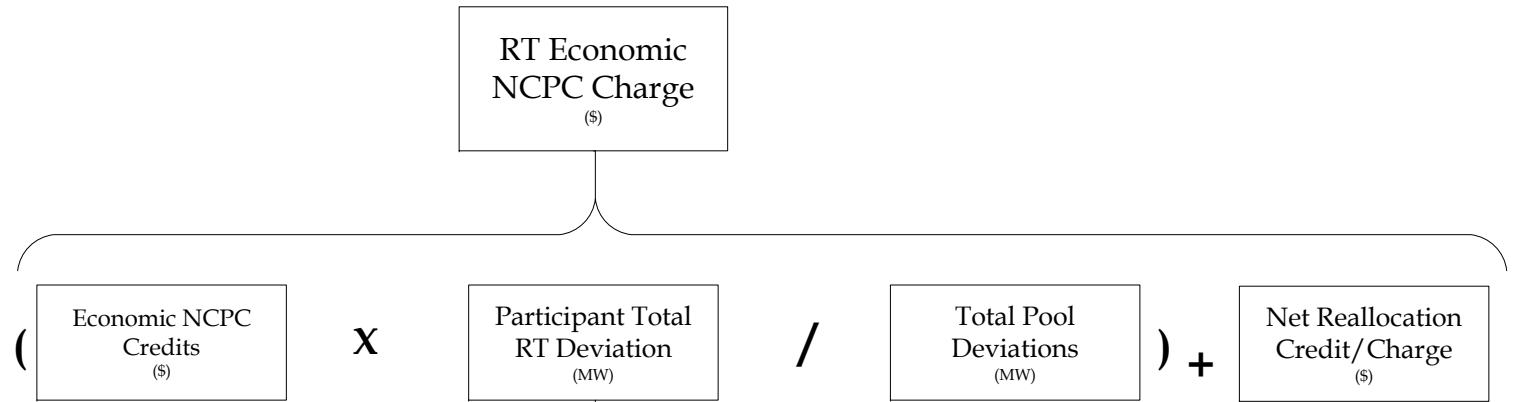
Non-Fast Start DRR



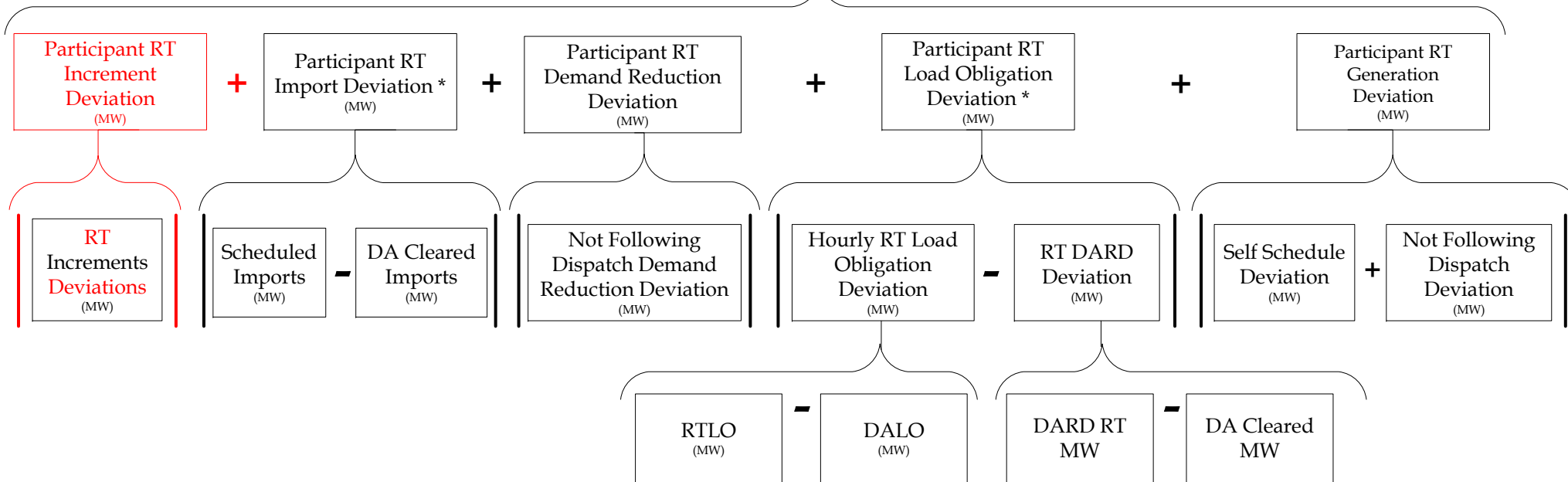
* If prices were increased on the RT Effective Offer for Dispatch then the DA Min Reduction Limit MW is used for the Eligible Quantity for non-fast start demand response resource, and zero is used for fast start demand response resource.

** Current value is 0.055

Daily Calculations



Hourly Calculation



* ISO Curtailed External Transaction and Coordinated External Transactions are excluded from these values

Daily Calculations

Net Reallocation
Credit/Charge
(\$)

Daily Reallocation
Credit
(\$)

+

Daily Reallocation
Charge
(\$)

Hourly Calculation

Positive Deviation
Reallocation Credit
(\$)

Hourly RTLO
Reallocation
Charge
(\$)

(Positive Deviation
MW for
Reallocation (\$) x RT NCPC
Economic Charge
Rate (\$/MW))

MIN[Positive Net Load and
Export Deviation for
all Affected Zones (MW) , Total Participant Positive
Net Load and Export
Deviations for all zones (MW)]

MAX[Net Load and
Export Deviations (MW) , 0] MAX[All Zones Net
Load and Export
Deviations (MW) , 0]

Reallocation Flag=Yes

Load Zone Calculation

Net Load and
Export Deviation
(MW)

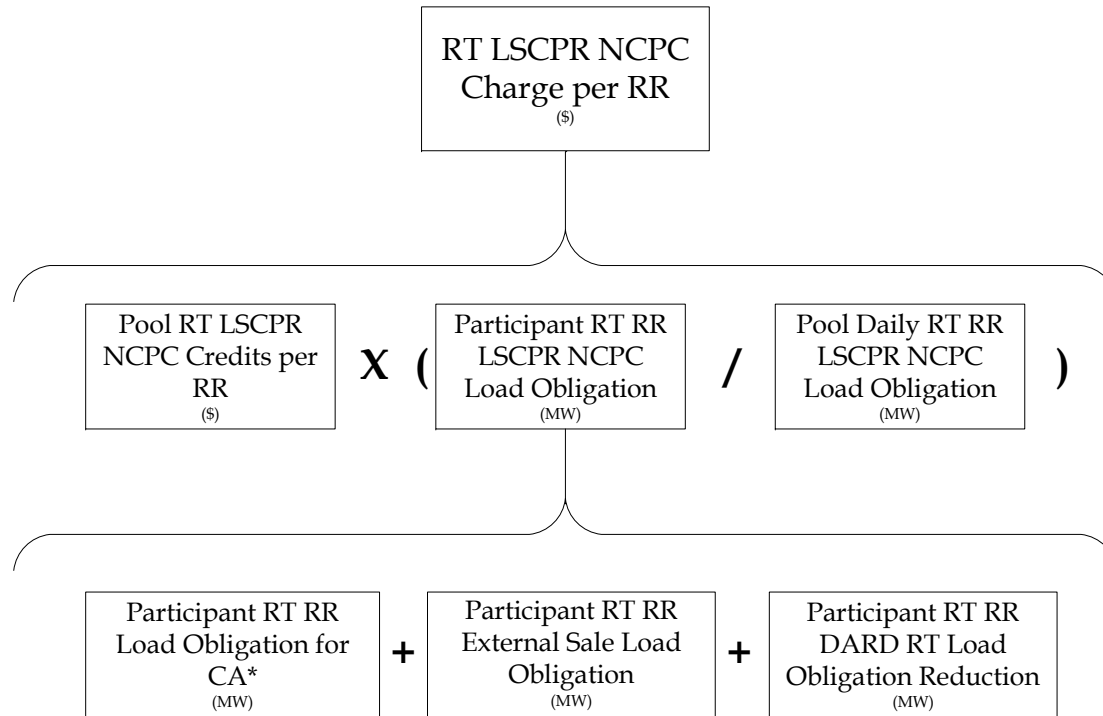
Export
Deviation (MW) + Decrement
Deviation (MW) + Exempt DARD
Deviation (MW) + RTLO
Deviation (MW)

For All Affected Load Zones

Net Load and
Export RTLO
(MW)

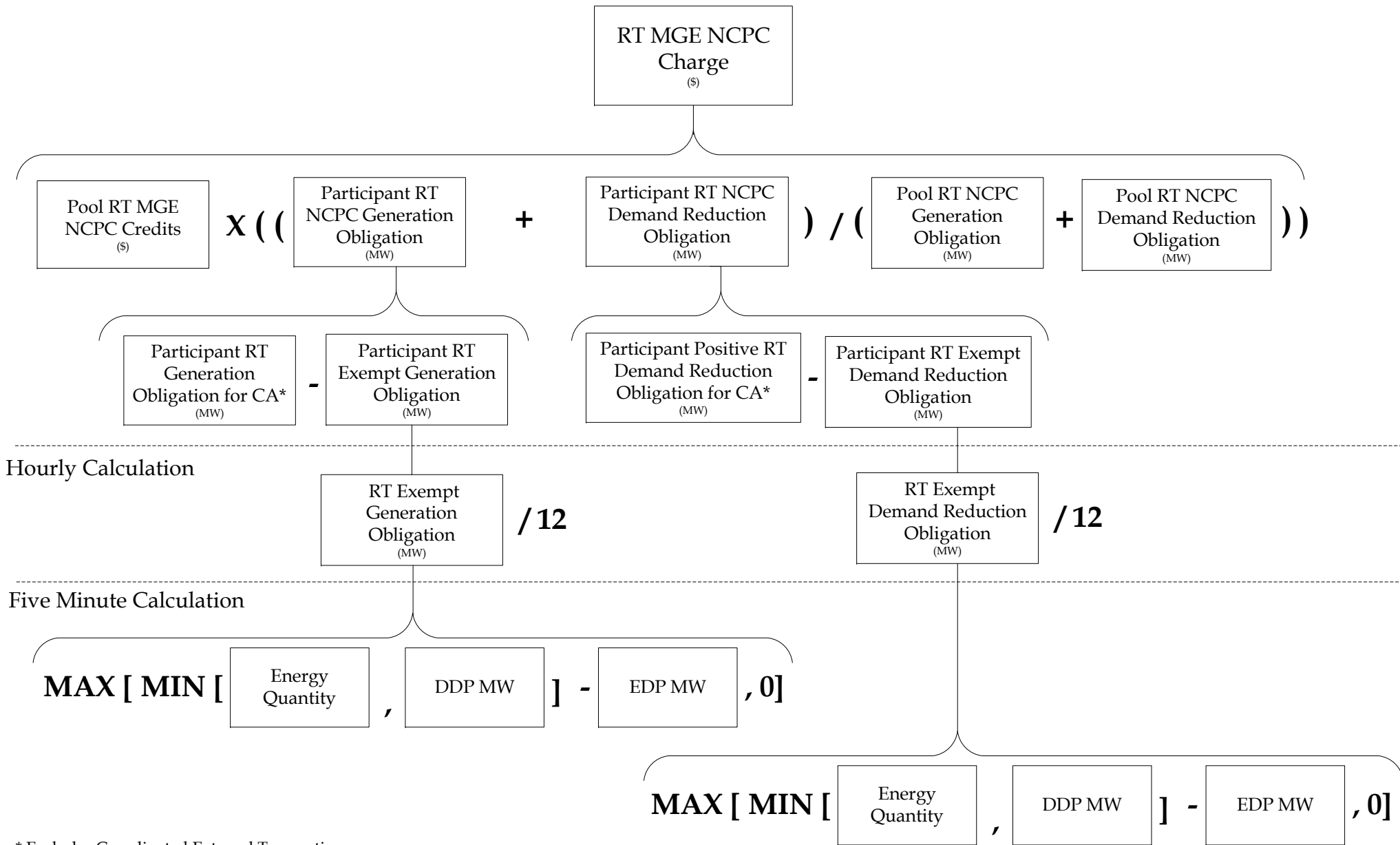
Export
RTLO (MW) + Exempt
DARD
RTLO (MW) + RTLO
(MW)

Daily Calculations



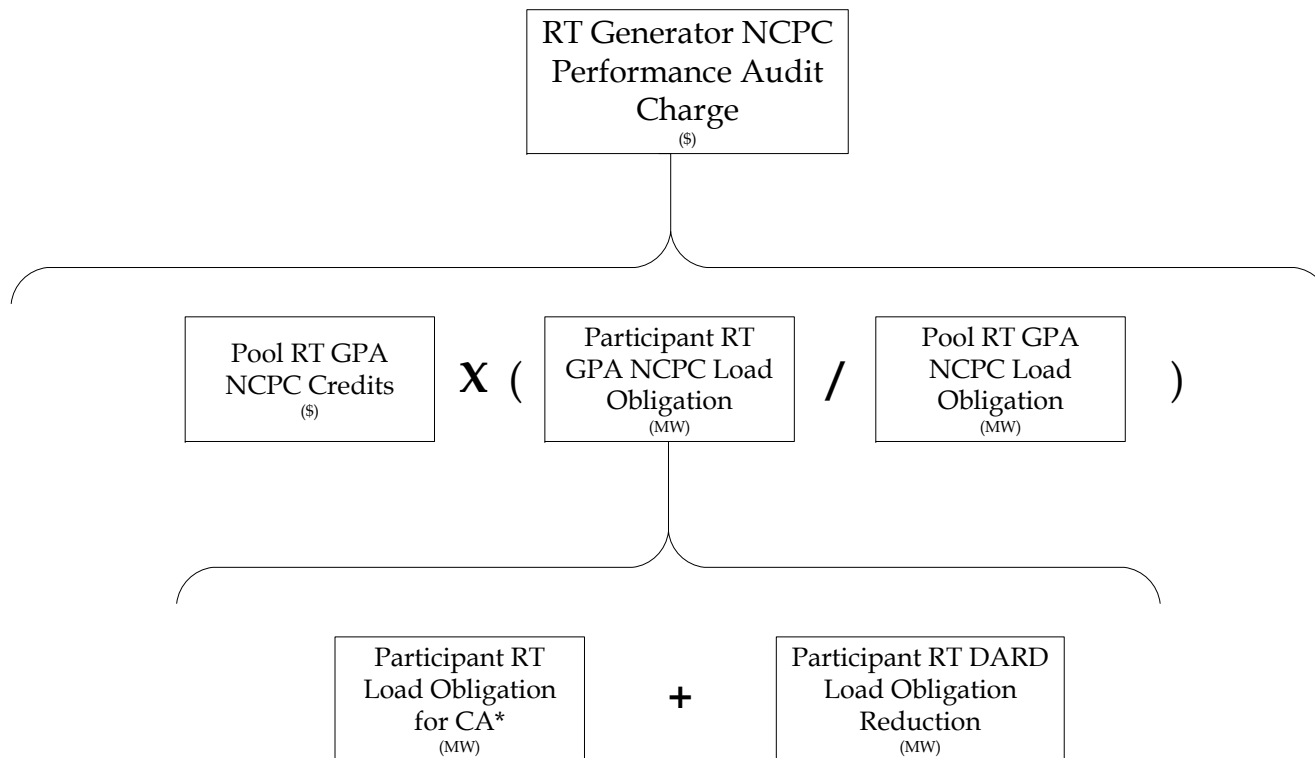
* Excludes Coordinated External Transactions

Minimum Generation Emergency Period Calculations



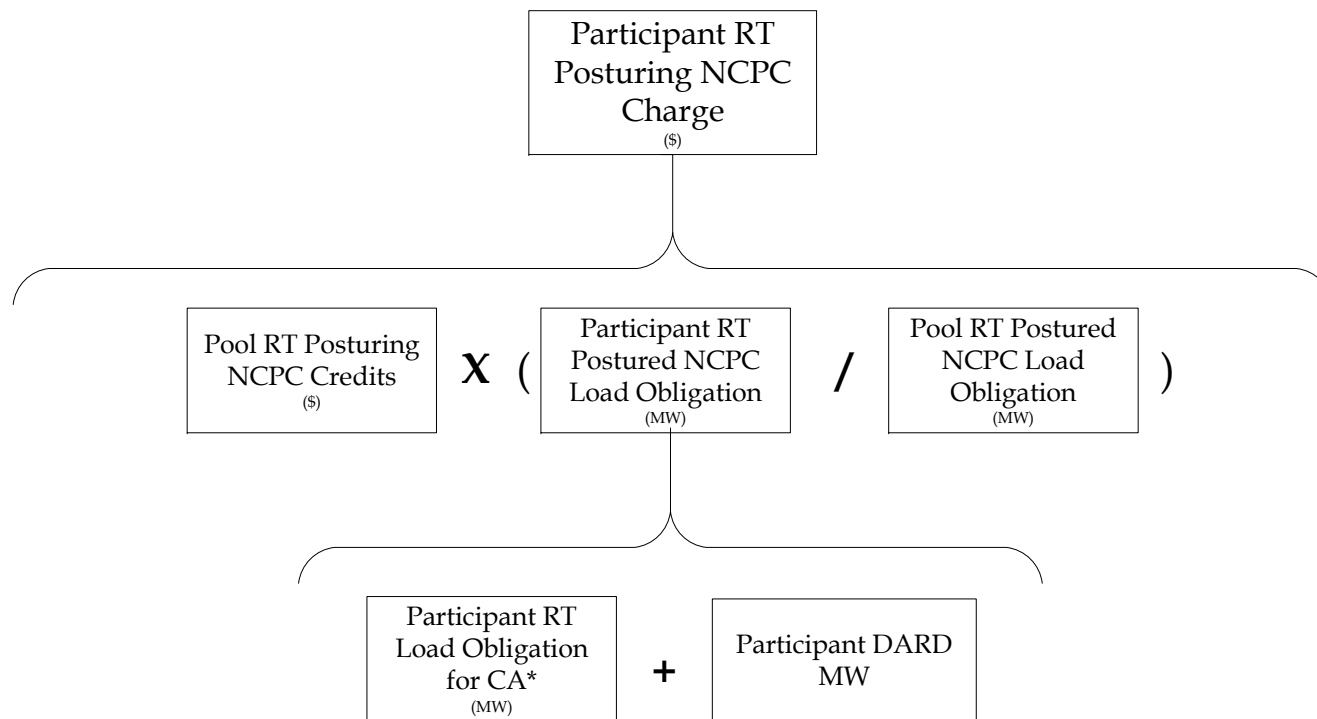
* Excludes Coordinated External Transactions

Daily Calculations



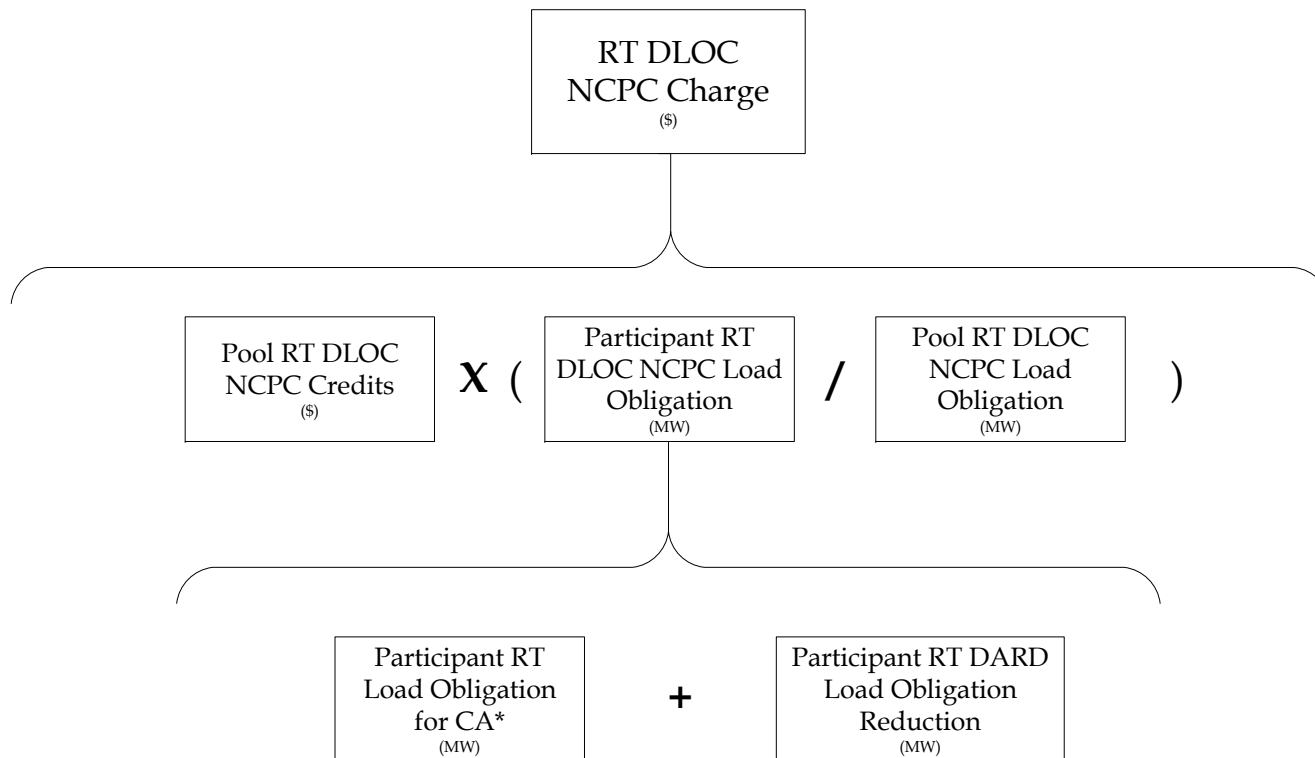
* Excludes Coordinated External Transactions

Daily Calculations



* Excludes Coordinated External Transactions

Daily Calculations

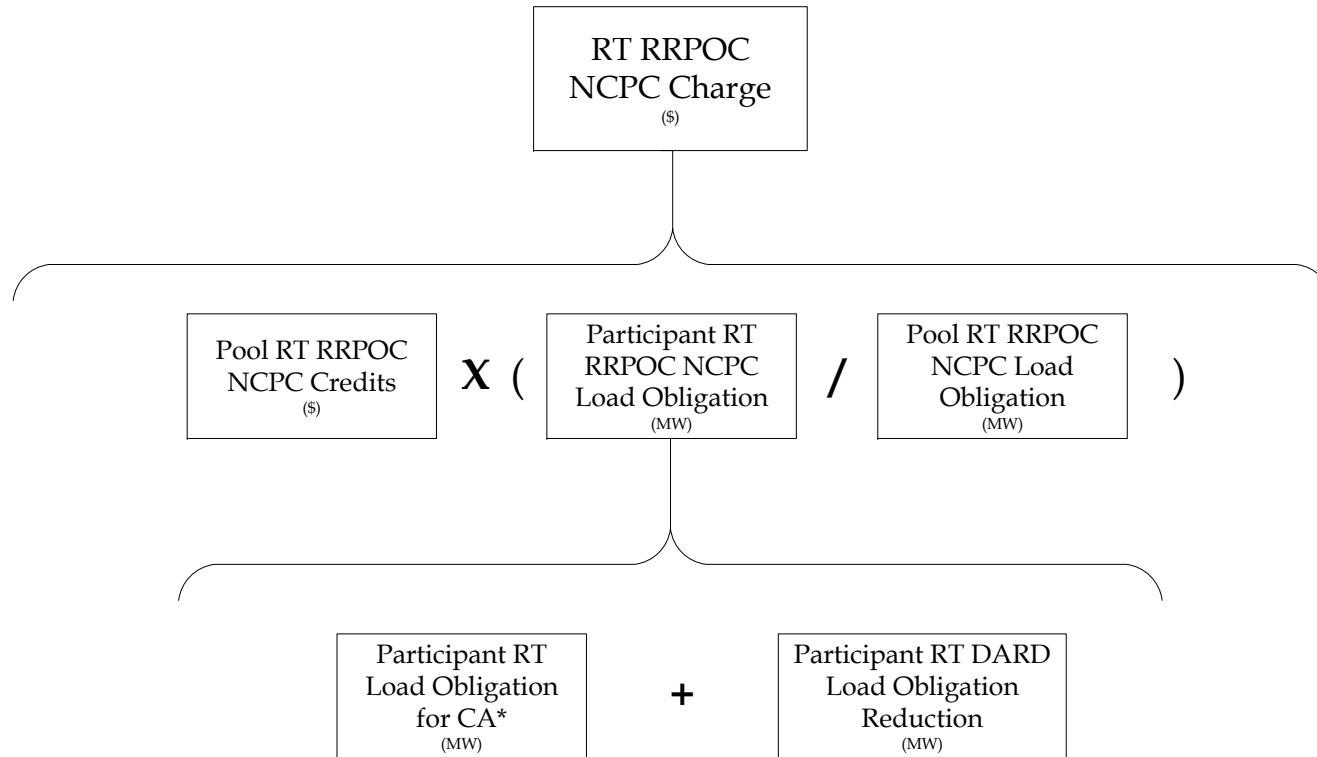


* Excludes Coordinated External Transactions

Note: The relevant ISO New England Markets, Services and Transmission Tariff and the relevant Market Manuals, Operating Procedures and Planning Procedures shall govern.

RT NCPC Rapid Response Pricing Opportunity Cost Charge ISO New England Calculation Summary

Daily Calculations



* Excludes Coordinated External Transactions