Chapter 12: Premium and Discount Component Payments

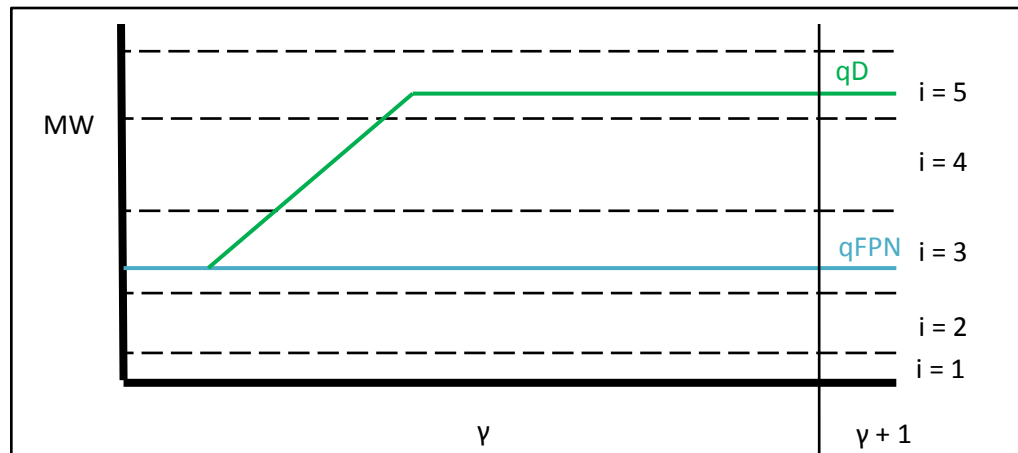# Premium and Discount Component Payments

- This element ensures that units whose Bid Offer Price is more beneficial than the Imbalance Settlement Price for their BOAs gets a payment which ensures that, through net settlement with the Imbalance Component, the unit is settled at the Bid Offer Price:

  - For Accepted Offer Quantities, if the Bid Offer Price is greater than the Imbalance Settlement Price, it should receive a Premium Component Payment, i.e. they get paid more;

  - For Accepted Bid Quantities, if the Bid Offer Price is less than the Imbalance Settlement Price, it should receive a Discount Component Payment, i.e. they have to pay back less.

- Any quantities which are not eligible for such treatment are subtracted from the Accepted Offer and Accepted Bid Quantities:

  - The maximum volume of the elements which are not eligible for a premium or discount are subtracted from the Bid Offer Acceptance Quantity;

  - This is done because the volume may be a component of multiple of these elements.

Premium and Discount Component Payments

- This approach of settling at the better price is taken to ensure that Participants can submit prices which reflect their costs without being disadvantaged by being taken for a non-energy action and only being paid-as-bid;

- For example, in a pure pay-as-bid approach, an action taken for non-energy reasons would be settled at the price they submit even if it is in-merit when compared with the Imbalance Settlement Price – in this scenario, the Participant would be incentivised to submit prices which reflect their expectation of the Imbalance Settlement Price, so that they can receive that price when they are in-merit whether they are used for energy or non-energy reasons;

- The approach taken of settling units at the better price means that they can submit prices reflecting their costs with a guarantee that if they are in-merit against the Imbalance Settlement Price then that will be the price used in its settlement – it won't be disadvantaged for having been used for non-energy balancing reasons rather than energy balancing reasons. This allows for the signals of the cost of generation to be more accurately reflected in price formation, encouraging the efficiencies that entails;

- Also, if the final Imbalance Settlement Price is adjusted away from a pure marginal level for some reason, for example through Price Average Referencing, this approach ensures that the Participant with the marginal energy action is not disadvantaged by this adjustment – its Bid Offer Price will be used for settlement rather than the Imbalance Settlement Price which now potentially does not reflect its costs.

Premium and Discount Component Payments

Calculate Bid Offer Acceptance Quantities and pay a premium or discount if their Bid Offer Price is better than the Imbalance Settlement Price:
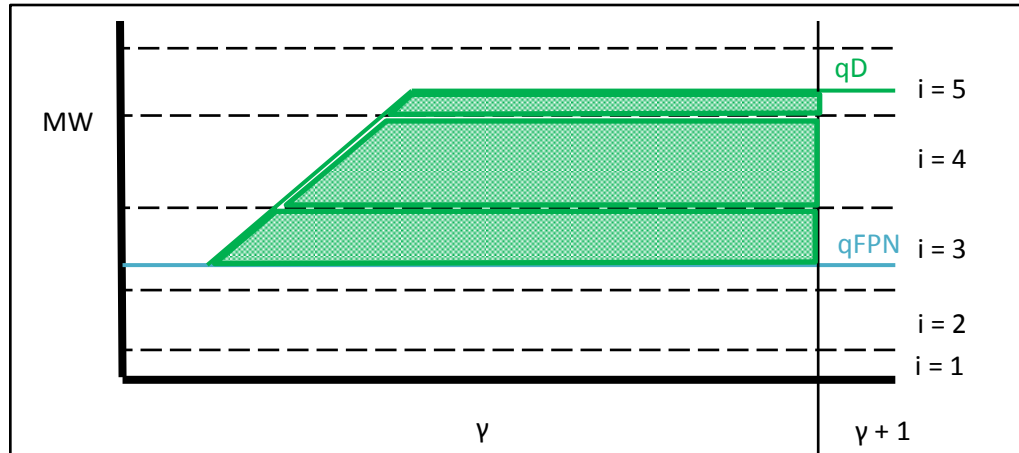

$$CPREMIUM_{u\gamma} = \sum_{o} \sum_{i} \left(Max\left(PBO_{uoi\gamma} - PIMB_{\gamma}, 0\right) \times \left(QAOLF_{uoi\gamma} - Max\left(QAOOPOLF_{uoi\gamma}, QAOBIAS_{uoi\gamma}, QAOUNDEL_{uoi\gamma}, QAOTOTSOLF_{uoi\gamma}\right)\right)\right)$$

$$CDISCOUNT_{u\gamma} = \sum_{o} \sum_{i} \left(Min\left(PBO_{uoi\gamma} - PIMB_{\gamma}, 0\right) \right.$$
$$\left. \times \left(QABLF_{uoi\gamma} - Min\left(QABBPOLF_{uoi\gamma}, QABBIAS_{uoi\gamma}, QABUNDEL_{uoi\gamma}, QABNFLF_{uoi\gamma}, QABCURLLF_{uoi\gamma}, QABTOTSOLF_{uoi\gamma}\right)\right)\right)$$

Premium and Discount Component Payments

Calculate Bid Offer Acceptance Quantities and pay a premium or discount if their Bid Offer Price is better than the Imbalance Settlement Price:

$$CPREMIUM_{u\gamma} = \sum_o \sum_i \Big(Max(PBO_{uoi\gamma} - PIMB_\gamma, 0) \times \big(QAOLF_{uoi\gamma} - Max(QAOOPOLF_{uoi\gamma}, QAOBIAS_{uoi\gamma}, QAOUNDEL_{uoi\gamma}, QAOTOTSOLF_{uoi\gamma})\big)\Big)$$

$$CDISCOUNT_{u\gamma} = \sum_o \sum_i \Big(Min(PBO_{uoi\gamma} - PIMB_\gamma, 0)$$
$$\times \big(QABLF_{uoi\gamma} - Min(QABBPOLF_{uoi\gamma}, QABBIAS_{uoi\gamma}, QABUNDEL_{uoi\gamma}, QABNFLF_{uoi\gamma}, QABCURLLF_{uoi\gamma}, QABTOTSOLF_{uoi\gamma})\big)\Big)$$