Update of Difference Charge Calculation Logic

June 2024

Background

- A scenario was recently discovered whereby a unit could be charged Difference Charges without receiving corresponding Balancing payments.

- This is due to QAOUNDEL not being included in the calculation of incremental balancing trade volumes for Difference Charges, namely CDIFFCWD, while it in including in the volume calculation for CPREMIUM.

    - CDIFFCWD is a charge issued to generator units who receive revenue above the Strike Price (PSTR), up to their obligated capacity, in any within day market. It is to recover the revenue a generator unit received above the PSTR.

- Consequently, it is possible for a unit to be settled at a price above the PSTR but to not receive any revenue for this volume due to the QAO being considered an undelivered volume.

- However, the same volume without the QAOUNDEL will be considered for CDIFFCWD and therefore a generator could be charged while not receiving CPREMIUM for the same incremental volume.

Proposed Change

- The modification proposes to update F.18.5.2 to include QAOUNDEL volumes in the calculation of QAOLF' volumes.

- This will ensure both the quantity portion of CPREMIUM and the volume which will be considered for CDIFFCWD are consistent.

$$QAOLF'_{uoi\gamma}$$
$$= QAOLF_{uoi\gamma}$$
$$- Max\left(QAOOPOLF_{uoi\gamma}, QAOBIAS_{uoi\gamma}, QAOUNDEL_{uoi\gamma}, QAOTOTSOLF_{uoi\gamma}\right)$$

- For reference, CPREMIUM formula:

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

Questions?