

The maximum and minimum NP calculation should follow the logic given below:

$NP_max(n) <- \text{maximize}(NP(n))$

$NP_min(n) <- \text{minimize}(NP(n))$

Subject to the same following constraints:

*(Constraint 1: flow on significant CNECs) $PTDF_i$
 $\times NP \times RAM_i$, for each significant CNEC i*

(Constraint 2: allocation constraints for bidding zones)

$Alloc_j^{min} \leq NP_j \leq Alloc_j^{max}$, for each bidding zone j

(Constraint 3: balance of net positions in the Nordics) $\sum_{BZ \text{ in Nordics}} NP_{BZ} = 0$

(Constraint 4: balance of net positions in Jutland) $\sum_{BZ \text{ in Jutland}} NP_{Jutland} = 0$

(Const. 5: balance of net positions for virtual bidding zones) $NP(VBZ_i) = -NP(VBZ_j)$

For each Pair (i,j) of Coupled Virtual Bidding Zones

Coupled pairs of virtual bidding zones include:

(DK1_SK, NO2_SK)
 (DK1_KS, SE3_KS)
 (DK1_SB, DK2_SB)
 (SE3_SWL, SE4_SWL)
 (FI_FS, SE3_FS)

Bidding zones belonging to the “Jutland” area include all zones with name beginning with “DK1” the rest are placed in Nordics.”