

### Introduction



- Recent unavailability of nuclear power plants causes Security of Supply concerns in the Belgian Control Area.
- Relying on Strategic Reserve is excluded, as legal framework does not allow anymore its contractualization for the coming winter period.
- Elia has recently been approached by several market parties indicating that they would be able to
  mobilize some flexibility during the winter, but that this flexibility does not match the technical, legal
  or regulatory framework of the current market arrangements
  - To slow to be offered and activated for existing balancing products (" non reserved Bids on Bidladder", "R3")
  - No ToE yet in DA/ID
- Elia analyzed how to maximize the opportunity for available flexibility to be used when system needs would require it.

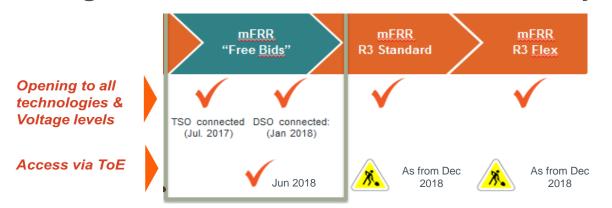
The current presentation describes a proposal of temporary solution for the coming winter.

Note: The ideas formulated in the slides are the result of preliminary thinking at Elia based on the signals received from several stakeholders. These ideas have not been formally discussed with the CREG yet. They have as sole purpose to fuel the discussion during the task force on 10/10/2018. They may under no circumstances be considered as firm proposal by Elia.



### Assumptions and constraints

Existing Framework for Demand Side Flexibility :





- Procedure to change ToE rules is, as foreseen by the law, complex and long → not an option
- Timing very limited: solution should be operational by November
  - Existing framework should be used
  - ⇒ Pragmatic solutions should be found (recycling of existing concepts, procedures and tools...)
  - ⇒ Number of alignments with stakeholders ( WG Bal) will be limited.



## Assumptions and constraints

Variable per industrial site

- Stakeholders' constraints:
  - Long Lead Time; min/max duration; min down time between two consecutive activations; max # of activations per winter
  - **ToE** is a pre-condition for some of them
- Targeted flexibility is flexibility that has not found its way to the market



## Proposed approach

- Extend the existing non CIPU Free bids ("bids on Bidladder") with a new SLA (Service Level Agreement)
  - This SLA is activated with a longer lead time and allows constraints
  - Those "slow non CIPU bids", are assimilated to slow start CIPU units, and used according to Balancing Rules when there is a risk that Balancing reserves are not sufficient
    - ✓ No competition with existing products (bids after DA GCT; R3 for capacity).
    - ✓ Variable constraints possible: BSP bids when he can and lead time is taken into account
    - ✓ ToE applicable
    - Existing Operational tools and procedures can be recycled

### Framework

- The proposed solution may be considered as an extension of existing non CIPU Free bids Ibids
  - ✓ so that ToE can be applicable
  - ✓ so that the Imb. Price is linked to the Ibid price

Those bids from non CIPU units are used in the same way as "slow start CIPU Units" or CIPU units with constraints

#### 4. CHAMP D'APPLICATION

Les Règles de Transfert d'énergie s'appliquent :

- Au segment de marché des services d'équilibrage pour la puissance de réglage tertiaire non réservée provenant d'unités techniques non-CIPU associées à un compteur quart-horaire dès le 1/6/2018.
   Actuellement les Points de livraison situés en basse tension sont exclus.
- Aux Points de livraison dont le prélèvement net moyen calculé sur une base annuelle est positif. Ce calcul sera effectué annuellement sous la responsabilité du gestionnaire du réseau de transport sur base des données de mesure quart-horaires collectées aux Point de livraison, tel que décrit dans la section 10.2.

#### 8.9 Merit order technico-économique

Le cas échéant, les unités qui ne sont pas capables d'activer la puissance demandée dans un délai de 15 minutes ou les unités qui sont soumises à des contraintes techniques (telles qu'une durée minimale d'activation de plusieurs quarts d'heure ou une durée minimale entre deux activations successives) seront activées en fonction des b

- Minor adaptations are necessary.
- Will be analyzed discussed with CREG in order to be introduced and approved on time
- Adaptation of Bal. Rules should be organized in a fast track



# Product Design

## **Product Design**



As already applicable for non CIPU I bids on Bidladder

- BSP Conditions for participation to R3 NR
  - 1. Open qualification procedure (prior to signature of the GFA): administrative and financial checks <a href="http://www.elia.be/en/suppliers/purchasing-categories/energy-purchases/Ancillary-services/How-to-candidate-make-offer">http://www.elia.be/en/suppliers/purchasing-categories/energy-purchases/Ancillary-services/How-to-candidate-make-offer</a>
  - 2. Signature of the GFA
  - 3. Designation of an ARPBSP

Modalities in CREGs decision 1677 (march 2018)

- 4. Bank guarantee in case of application of ToE for one or several DPs
- 5. Performance of a communication test
- Performance of a simulation test:

Pragmatic approach

- all steps of the procedure (bidding and activation) to be tested
- Only a small volume to be tested

## **Product Design**



As already applicable for non CIPU I bids on Bidladder

Delivery Point - Conditions for participation

- 1. GU declaration (including the maximal tertiary control power for the DP)
- 2. Regime for all offtake common DP's for each couple BSP supplier as well as associated documents/proofs:
  - Opt-out implicit

Common declaration of concerned actors (BSP - Supplier - BRPsource - BRPsp)

- Out-out explicit
- ToE with negotiated transfer price
- ToE with price by default (CREG decision)

Proof of agreement on transfer price or proof of a decision of CREG

Note: In application of Elaw, only DPs with a yearly average offtake are eligible to ToE

- 3. For DP connected to DSO grid, DP should be included in a BSP-DSO contract (and have a NFS)
- 4. Product exclusivity: a DP participating in classic Bidladder or in R3 may not participate to this SLA



### Main product characteristics

### No capacity reservation

### Bidding characteristics

- Volume [MW] (non divisible) for the requested period
- Fixed price [€/MW]
- Variable price [€/MWh]
- Prolongation possibility (for an indicated period) @ same variable price
- Repartition of volume per DP

- Applied on 1rst hour of activation (similar approach as for CIPU start costs)
- Remunerated even if "PREPARATION" is requested but "ACTIVATION" is not performed
- Proposed by BSP with a CAP@1000€/MW



### Main product characteristics

### - Activation:

Fixed in ToE Rules

- Baseline: Last qh before Activation Request (step 6 in operational process, see slide 16)

New: baseline check: in case Baseline value (last qh before ACTIVATION) > 20% value resulting from X high of Y calculation, a penalty is applied.

Penalty = Remuneration of activation

### Remuneration :

- Activation remuneration: Bid price [€/MWh] \* Volume[MW] \* effective activation duration [h]
- Compensation for Preparation in caze of no Activation: @ fixed price[€/MW]
- Penalties: Same as R3 NR → impact on perimeter of BRPBSP @Imb. Price

ТоЕ	Opt Out
BRPFSP : - [Ereq-Edel]	BRPFSP: - Ereq

Bid Price =
Fixed+Variable price for 1<sup>st</sup> hour
Variable price for the rest





2) Call for bids



1) Scarcity Risk Identification

- Based on Technical Trigger
- Info available starting from DA 18h
- Elia calls for bids for the Activation Period
- Two fixed timeslots:
  - 19 pm DA for morning peak
  - -8 am D for evening peak
- Publication: Call is sent by email/RSSFeed to all BRPs, BSPs and to any other who subscribes to the mailing list

**Activation Period** 



**Activation Period** 

2) Call for bids



1) Scarcity Risk Identification



3) Gate Closure Time for Free bids with constraints

- Two Time slots
  - @ 20:00 D-1 for morning peak
  - @ **10:00** D for evening peak
- Bids are sent by email (with template provided by Elia)
- Bid characteristics are simple (Volume [MW]; fixed and variable price [€/MWh] for the requested period + repartition per DP + possibility to prolongation)
- Bid Price (variable+fixed) is free with CAP according to Bal Rules; Fixed price is free with CAP@1000€/MW
- Bids are **firm**: any refusal at further steps will be considered as a failed activation (Edel = 0 MWh)
- Additional information could be requested as for example:
  - Preparation can be done later than 6h, and if yes till when?



**Activation Period** 



#### 4) **SELECTION**





3) GATE Closure Free bids

- After GCT following actions are executed :
  - Slow non CIPU I Bids are registered
  - Slow non CIPU I Bids are flagged in order not to be activated before R3
  - Need is verified in order to take into account updates (wind, solar, nominations)
  - Bids are ordered in a M.O. ("technico-economic merit order") till total volume covers need.
  - Publication: stakeholders are informed of the Total offered volume and the maximum price (though email/RSSFeed)



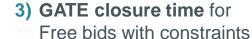
**Activation Period** 

2) Call for bids

4) **SELECTION** 



1) Scarcity Risk Identification

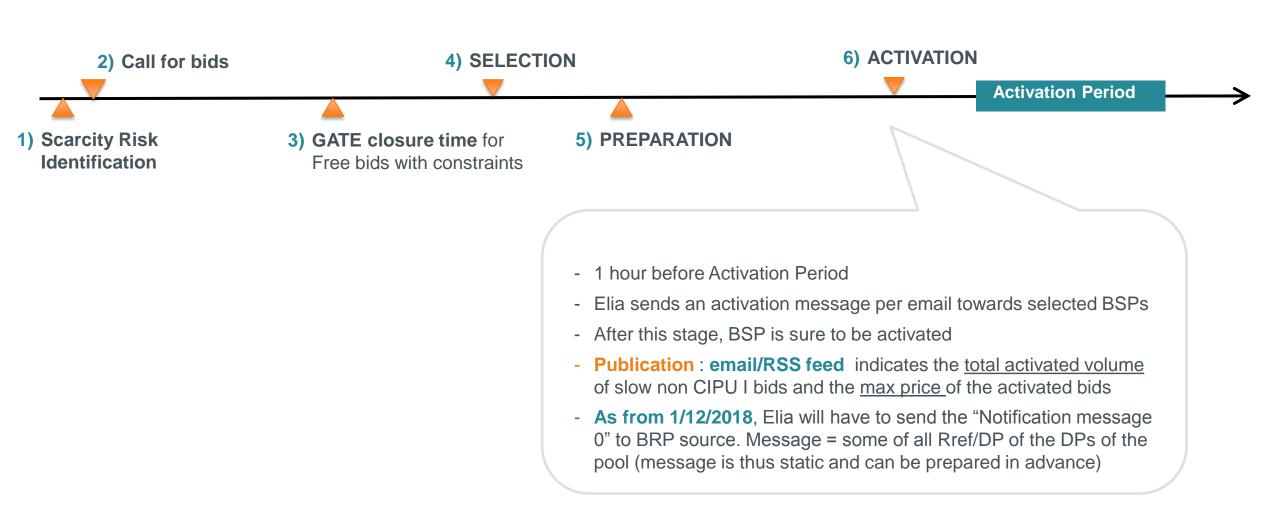




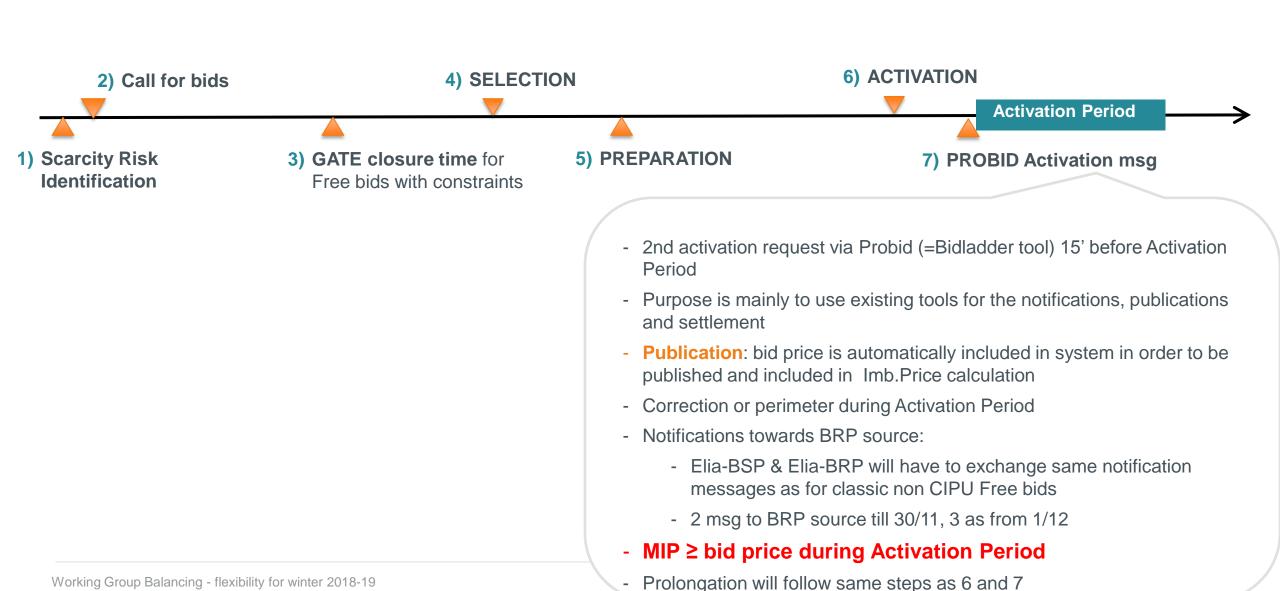


- 5 hours before Activation Period
- Elia sends a preparation message towards selected BSPs
- This preparation message is not a guarantee that the bid will be activated!
- If need remains confirmed 1houre before RT they will be activated
- If no activation, BSPs who have been requested to be prepared will receive a preparation compensation equal to the fixed price mentioned in their bid
- Publication: email/RSS feed is sent to indicate that a preparation message has been sent to stakeholders











Planning and Next Steps



### **Tentative Planning**





## Many thanks for your attention!

**Anna Tsiokanos** 

ELIA SYSTEM OPERATOR
Boulevard de l'Empereur 20
1000 Brussels

+32 2 546 70 11 info@ elia.be

www.elia.be
An Elia Group company