

Generators point of view on categorisation of Significant Grid Users

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Elia expert group implementation NC's

General comments

- Network Codes are a powerful tool to finalize the single European energy market. The main goal of the NC's is **harmonisation**. NC's are an opportunity to harmonise current regulation within (regions of) Europe and between best practices. Therefore,
 - It is irrelevant to make choices about NC implementation based on current regulation (grid codes, laws and decrees)
 - Coordination between similar member states and control areas is needed as much as possible. It makes logic sense that similar systems demand **similar requirements** of their grid users and it doesn't distort the **level playing field** for grid users.
- In the Elia proposal for categorisation of significant grid users, harmonisation doesn't seem to be considered in the argumentation. No reference is made to other Member States and there is only argumentation based on existing regulation in Belgium and its regions (+ the grid codes consider installed capacity whereas the NC considers connection capacity).
- the proposal should stay with the already largely debated capacity limits by grid operators across Europe

General comments

- We regret that there is no consensus first on how the **system as a whole** will be operated based on an agreed level of security and quality. These operational principles should have been defined first in the network codes for system operation before deriving requirements for connections of generating or demand facilities.
 - ❑ In the categorization of significant grid users these principles and proposals need nevertheless already to be taken into account as much as possible (Eg. E&R code may require communication installations for type B,C,D to be blackout proof)
- A **level playing field** between power generating facilities and demand facilities should be guaranteed.
 - ❑ In the Elia proposal for categorisation of significant grid users, a categorization criterion based on FCR, FRR and RR would require to have a similar categorization of demand facilities. We suggest, however, that these criteria are left out of the categorisation.

General comments

- **Technical and economic criteria** should be used as much as possible when implementing NC's. Cost-benefit analysis could accompany certain proposals/choices.
 - ❑ In the Elia proposal there is no technical and economic argumentation used for the categorisation. To divert from the already largely debated max. capacity limits set in the NC, this should be the case.
- **Impact on markets** should be limited.
 - ❑ In the Elia proposal criteria for categorisation shouldn't be based on whether facilities provide (certain) system services. It shouldn't be discouraged to deliver FCR, FRR, RR or black start – which is the case if this categorisation criteria would put a facility into a more requiring category than only based on its connection capacity.

General comments

- An **additional iterative step** in the discussion about categorisation of grid user might be necessary based on:
 - Developments of the other network codes (see previous)
 - The RfG code foresees in fact that no later than six months after its entry into force and thereafter every two years, the ENTSO-E shall provide non-binding guidance for the implementation of the RfG.
 - The choices made about the requirements that the RfG leaves open for national implementation, will impact greatly the effects of categorisation

Types	ENTSO-e Latitude	Draft proposal Elia	Draft Proposal Generators	Main specific arguments Generators
Type A	Maximum capacity $\geq 800W$ & PoC < 110 kV	$800W \leq P_{inst} < 250kVA$	$800W \leq P_{inst} < 1MW$	Not relevant to use 250kVA for harmonisation with Walloon grid Code. Why, in this reasoning, not 1MVA as in the Flemish code? → this is an arbitrary choice. Furthermore, NC's use connection thresholds, no installed power thresholds. 250kV is too low taking into account other NC's who demand services of types B, C and D. Eg E&R code may require communication installations for type B,C,D to be blackout proof
Type B	Maximum capacity $\geq XX$ but max 1MW & PoC < 110 kV	$250kVA \leq P_{inst} < 25MW$ Equipment certificate for DSO grids & LVRT	$1MW \leq P_{inst} < 50MW$	See arguments type A Not relevant to use 25MW for harmonisation with production permit or regional grid codes because no installed power threshold. Wind farms should be kept as much as possible in type B (eg Synthetic inertia (for C): possible for wind mills but developments are necessary, power oscillations (for C&D): a broad interpretation of the definition of power oscillations will give technical problems for wind turbine producers to fill in the requirement) → max. for lower threshold

Types	ENTSO-e Latitude	Draft proposal Elia	Draft Proposal Generators	Main specific arguments Generators
Type C	Maximum capacity \geq XX but max 50MW & PoC < 110 kV	25MW \leq Pinst < 75MW Or FCR, FRR, RR services	50MW \leq Pinst < 75MW	FCR, FRR, RR services can also be delivered by type B (eg. R1 by wind farms) \rightarrow should be no criterion for a given type
Type D	Maximum capacity \geq XX but max 75MW or PoC \geq 110 kV	Pinst \geq 75MW Or Blackstart Or Pinst \geq 25MW & PoC > 110 kV	Pinst \geq 75MW	According to RfGcode blackstart can also be Type C \rightarrow keep this open There is no added value to categorize based on voltage.