

Report meeting 03/07/23

In the framework of the incentive *Cost-Benefit Analysis On Requirements For Generators Applicable On Existing And New Generating Units Between 1 And 25 MW*, Elia organized on 03/07/23 a meeting with its stakeholders to discuss (and challenge) the results of the phase 1 of the incentive (preparation of work). This preparation of work includes among others:

- an inventory of the existing and new PGMs (power generating modules) connected to Elia grid with a nominal power between 1 & 25 MW (not included)
- a comparison and a gap analysis between the requirements applicable to existing and new PGMs connected to Elia grid with a nominal power between 1 & 25 MW (not included)
- a selection of relevant requirements to be further evaluated through a qualitative CBA
- for the selected requirements, an evaluation of the benefits for the grid and a high level estimation of costs to be taken into account for the upgrade to the new requirements
- a methodology for qualitative CBA of applying the requirements of new type B PGMs to existing type B PGMs.

The second objective of this meeting was also to request inputs from the market parties for the cost evaluation for existing PGMs for the upgrade needed in order to be compliant with the new requirements.

The main industrial federations were represented and some of their members also joined the meeting.

List of registered participants : Michaël Van Bossuyt (Febeliec), Jean-François Waignier (Febeg), Ruben Laleman (Engie), Matteo Menschaert (Engie), Etienne Burniat (Engie), Frank Buyse (Engie), Quentin Renoy (Engie), Karim Karoui (Engie), Wout Vanheusden (Eon), Michaël Gay (Eon), Tom de Waele (Eneco), Dave Vercruyse (Aspiravi), Erik Devis (Eneria), Keith Chambers (Caterpillar), Jean Marc Saliez (Eneria), Freddy Eduardo Alcazar Barrientos (Innio), Stefan Reyniers (Cogenvlaanderen), Thomas Holderbeke (Luminus), Chris Celis (Ode).

List of participants: Buyse Franck (Engie), Chris Celis (ODE), Dave Vercruyse (Aspiravi), de Waele Tom (Eneco), Decoster Luc, Erik Devis (Eneria), Gay Michaël (Eon), Hans Vandersyppe, Holderbeke Thomas (Luminus), Jean-François Waignier (Febeg), Jean-Marc Saliez (Eneria), Keith Chambers (Caterpillar), Laleman Ruben (Engie), Stefan Reyniers (Cogenvlaanderen), Van Bossuyt Michaël (Febeliec), Nicolas Bragard (Elia), Olivier Bronckart (Elia), Clément Hoedenaeken (Elia).

Consequences and scope of this incentive

A first concern was raised about the consequences of this incentive. Elia reminded the stakeholders that a positive Cost Benefit Analysis will not automatically lead to a retrofit of the requirement concerned to the existing PGMs. According to the stakeholders, the way to introduce possible settings changes will also have impact on the cost of these changes. Executing the changes outside the natural maintenance cycles of the PGMs could lead to an increase of the costs.

The stakeholders wanted to clarify that the gap analysis is done between the requirements applicable to existing PGMs and the requirements applicable to new PGMs in the sense of the RfG of 14 April 2016. The gap with the second version of the RfG (not yet published) is not in the scope of this incentive.

The stakeholders were also curious about the amount of PGMs connected to the DSO networks. Considering that many small PGMs are also connected to the DSO network, the stakeholders wondered if there was an added value to impose some changes only to a subset of all the PGMs between 1 and 25MW connected to the network.

Feedback on the qualitative cost assessment done by Elia

The feedback from the stakeholders was rather positive. The costs estimated by Elia for the implementation of each requirement were not rejected upfront but the stakeholders often mentioned the need to split the PGMs into different families and to evaluate the costs per family. The following divisions were proposed:

- Split based on the type of technology (SPGM/PPM). Ex: costs may be different for inverter-based technologies than for synchronous machines
- Split based on the technology. Ex: cost may be different for a wind turbine or for a PV park
- Split based on the size of the PGM. Ex: costs may be different for a 1MW or 24.9 MW PGM
- Split based on the age of the technology. Ex: costs may be different for a 20 years old PGM or for a 5 years old PGM

This last remark stressed the need to also have the information on the age of the PGMs in the final report of this incentive.

The stakeholders explained that the age of the PGM is an important information because those assets follow reinvestment cycles. At the end of a cycle they are either decommissioned or a new investment is done. The repowered PGMs may then be in the scope of the substantial modernization process and as consequence, they could already become compliant with some or all the requirements applicable to new PGMs.

The stakeholders understood the high-level categorization of the costs. The stakeholders and Elia agreed that there is a difference between putting an available capability in an existing PGM at disposal of the grid (ex. changing some settings in a controller) and actually building a capability that was not designed and foreseen in the existing PGM. The latter being most likely to induce high costs or to lead to the decommissioning of the PGM. However, the stakeholders also mentioned that even a low cost change may not always be easy to execute. Some industrial companies have a limited knowledge on the installations running in their facilities (e.g.: when the PGM is linked to a maintenance contract) and sometimes, the manufacturer of the equipment's does not exist anymore. In that case the cost assessment would only make sense on a case-by-case basis.

Feedback on the next steps (quantitative CBA)

Based on all the elements described above, the stakeholders expressed their doubts concerning the ability of Elia to realize a reliable quantitative CBA for applying new requirements to existing PGMs. The costs may differ greatly between different categories of PGMs (see split on different criteria hereinabove) and collecting numerical data about the costs for all these categories will be difficult (or even impossible). The stakeholders doubt that Elia could get a numerical result on the CBA with a reasonable error range.

For this reason, the stakeholders do not see the added value for Elia to perform a quantitative CBA while a qualitative CBA complemented by a cost collection from market parties can lead already to interesting and more robust findings.

Questionnaire

However, Elia and the stakeholders agreed that Elia will send a questionnaire to the stakeholders to collect as much numerical information as possible on the costs side of the CBA. The questionnaire seems to be the best solution because a cost evaluation takes a lot of time.

This questionnaire will contain the following requests :

- As detailed as possible cost evaluation for each requirement
- A list of the requirements which are technically impossible to implement

- A selection of the easiest requirements to implement // a ranking of the requirements by feasibility
- A comment section for each requirement and for the whole process
- Questions on the maintenance and reinvestment cycles

The results collected through this questionnaire will be part of the final report of this incentive to the CREG.