Questionnaire on FRT capability of Type A power generating modules

Summary of outcomes

FRT capability – requirements existing and needed

Requirements existing

- 7 TSOs claim to already have in their current connection rules FRT requirements applicable to power generating modules, which would be of Type A according to the national choice for the RfG A/B-threshold
- 19 TSOs do not have such requirements

Need of application

- 7 TSOs consider that there is an immediate technical need from the system engineering perspective to apply FRT requirements to power generating modules, which would be of Type A according to the national choice for the RfG A/B-threshold (4 of them have such requirements already)
- 19 TSOs do not observe an immediate technical need (3 of them have requirements already although)

FRT capability – technical details (I)

Potential benefits

- High potential of rapid development of type A RES power generation modules in the near near future (mainly PV connected at LV).
- Risk of disconnection of a huge amount Type A generation during fault in HV grid, which may cause huge active power imbalance is mitigated.
- Fostering RES penetration (preventive curtailment of Type A to limit maximum generation loss in case of a HV fault can be avoided)

Coverage

- The majority of respondents considers FRT requirement for Type A Power Park Modules (PPMs) – most Type A generators are considered to be PPMs
- A number of respondents also considers FRT requirement for type A Synchronous Power Generator Modules (SPGMs) – equitable performance/behaviour of SPGMs and PPMs
- A few respondents may still evaluate the coverage depending on near/future system needs / development of the generation portfolio

FRT capability – technical details (II)

Specifications

- 2/3 of the respondents, who see an immediate technical need, are considering to apply the same voltage-against-time profile for Type A power generating modules as for type B
- 35% of the respondents intend to use different/dedicated settings
- Reasons given for dedicated settings are mainly technical specificities/limitations of smaller power generating modules, particularly of SPGMs

FRT capability – procedural/legal aspects

Timing of Implementation

- Most of the respondents, who see an immediate technical need for FRT requirements for Type A power generating modules, intend to introduce the requirement together with the NC RfG implementation
- A few respondents consider the timing to depend on the evolvement of the volume of Type A power generating modules

Need of amendment of NC RfG

- The vast majority of respondents considers an amendment of NC RfG not necessary for introducing FRT requirements for Type A power generating modules
- In figures (percentage of responses on applicability of the legal framework):
  - Amendment not necessary: 87,50%
  - Amendment necessary: 12,50%
- One third however would consider an amendment helpful to achieve better legal certainty on the matter.
  - Amendment helpful: 31,25%