CWE TSOs answers on MPP and EFET concerns related to new DE/AT GSK

1st October 2015

Conference call CWE TSOs, MPP and EFET members

Agenda

1. **Scope of the new DE/AT GSK (clarification on the method)**
   - These slides were already discussed with NRAs
2. **Changes in the past vs. new DE/AT GSK**
   - Already today input files are kept up to date in order to consider the latest information available
3. **What improves with the new DE/AT GSK?**
4. **Letters from market participates**
   - Issues raised from the market participants
   - TSO answers

1. What changes with the new DE/AT GSK? Scope of the new DE/AT GSK

DE/AT GSK report:

- A technical analysis with the aim to assess the impact of the new DE/AT GSK on the CWE PTDF and the market coupling results was performed
- The result of the technical analysis on the new DE/AT GSK was summarized in an end report (incl. annexes)
- This end report refers to both:
  - "GSK old": DE GSK currently used in operation
  - "GSK new": DE/AT GSK to be implemented
- Both terms („GSK old" and „GSK new") are described in more detail on the two following slides

Current status („GSK old"):

- Today each German TSOs creates his individual GSK-files → 4 files
- In order to create a common German GSK-file a fixed sharing key is defined among the 4 German TSOs
  (for example: TransnetBW: 14%, TTG: 32% Amprion: 35%, 50Hzt: 19% → in total 100%)
- This sharing key differs for defined timeframes (e.g. week day, weekend, peak, off-peak)
- According to the sharing key the 4 individual GSK-files are merged into a common GSK-file which is used in the daily capacity calculation process for the German hub in the CWE region
- Currently Austria (APG) is not considered in the common GSK-file for the common bidding zone Germany/Austria

1. Improvement in the creation of the new DE/AT GSK

Target status („GSK new“)

- In order to take the Austrian generation structure into account in the common GSK-file (of the bidding zone Germany/Austria) the GSK-file of APG needs to be considered in the merging process
- In the future 5 individual GSK-files (of the 4 German TSOs and APG) are going to be merged to the common GSK-file (of the bidding zone Germany/Austria)
- This file will be used in the daily capacity calculation process of the CWE region
- In order to create the common GSK-file a fixed sharing key between the 4 German TSOs and APG needs to be defined

  (for example: TransnetBW: 14%, TTG: 18% Amprion: 38%, 50Hzt: 12% , APG: 18% ➔ in total 100%)

  1. With the addition of APG the sharing key would have need to be adapted anyway (in total always 100%)
  2. Due to the recent changes in the generation structure in Germany (decommissioning of power plants) the inner German sharing needs to be adapted accordingly (regardless of the APG integration)

     In the future the sharing key is based on the generation pattern of DE/AT instead of a load distribution
- Now those two issues are gathered in the “**new DE/AT GSK**”
- The sharing key differs for defined timeframes (e.g. week day, weekend, peak, off-peak)
- **The method how the individual GSK-files are created does not change!**
- Therefore the provisions of the approval package are still applicable and do not need to be adapted

➔Consequently as the methodology as such remains unchanged, CWE TSOs share the position that no NRA approval is be required

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2. Already today input files are kept up to date in order to consider the latest information available

CWE TSOs have the intention to model Flow Based always as close as possible to reality in order to ensure SoS

PTDFs are calculated daily based on the input files (D2CF and GSK)

Input files are complied daily taking into account the latest information on:

- maintenance of internal lines, interconnectors and PSTs and
- changes in the generation structure (maintenance, commissioning or decommissioning of a power plant)

➔ The method as such remains the same but the input files are prepared based on the latest information (changes in the input files are considered immediately)

➔ Thus GSKs were updated already in the past in order to consider the latest generation structure (without involvement of the market parties)

This was done to model Flow Based as close as possible to reality

➔ Same situation exists for the new DE/AT GSK

GSK method as such remains the same but PTDF are calculated based on latest inputs

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3. What improves with the new DE/AT GSK? 1/2

Brings Flow Based closer to reality → improvement of the CWE FB CC:

- Market Coupling calculates common results for the bidding zone Germany/Austria
- But at the moment Austria is not fully considered in the CWE capacity calculation process; in fact Austria is currently not taken into account in the GSK-file for Germany/Austria (models solely Germany)
- Furthermore the generation structure in Germany changed recently (e.g. decommissioning of a 2 GW unit)
- Both issues described above are no yet considered in the weighting of the individual GSK-files used currently in operation

→ Consequently the weighting of the individual GSK-files needs to be adapted. Both issues are considered in the new DE/AT GSK which thereby models Flow Based as close as possible to reality

- Once the new DE/AT GSK is used in operation it will be considered also in the FRM evaluation process which is supposed to result in the reduction of security margins
- On the other hand a less precise GSK means a less precise input and consequently higher uncertainties/risks which results in the need for higher security margins

→ The new DE/AT GSK models FB closer to reality and thus ensures to allocate the maximum of capacities

A delay of the new DE/AT GSK means performing capacity calculation with outdated input files (e.g. decommissioning of a 2 GW unit already several month ago); this implies results which are not as good as they could possibly be (as not the maximum of capacities could be allocated)

3. What improves with the new DE/AT GSK? 2/2

Fulfill regulatory requirements:

- Together with the approval of the CWE FB MC Go-Live NRAs submitted to TSOs a concrete list with further improvement requests. One of these issues refers to the GSK and the request to improve it were possible. ("*With the current implementation of FB, there is room for improvement of the GSK determination. … Seek a good level of representativeness of effective power shift*….")
- Similar requirements are defined in Article 24 of the CACM GL ("*The generation shift keys shall represent the best forecast* …").

➔ The new DE/AT GSK fulfills these requests

Further step to enable CWE extension:

- Previously for the DE/AT different GSKs were used in the CWE and CEE region
- In order to enable the extension of FB capacity calculation between those two regions it is necessary to align the GSKs as well

➔ The new DE/AT GSK fulfills this precondition and is consequently foreseen to be used in both regions

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4. Issues raised from market participants

MPP:

1. To extend the parallel run study to a longer period than the 10 days in the current assessment, even if they cover various situations (wind, solar, load, temperature, etc.). The 10 days that have been calculated do not reveal all the dynamics of this change.
2. To publish a clear description of the methodologies used for computing the different GSKs and as already proposed in the measure to increase transparency.
3. To have regulatory approval for this change, given the variations of the impact.

EFET:

1. The proposed change should be submitted to a regulatory approval. (= MPP #3)
2. The parallel run assessment should be expanded with more samples and should be continuous for at least a week before go--live. Not all effects of the GSK change can be discovered with a 10-day only analysis. (= MPP #1)
3. With regards to transparency, a detailed documentation on the GSK methodologies should be published, including the operational GSK day-to-day-data. (= MPP #2)

➔ MPP and EFET raised in principle the same issues

4. TSO answers

EFET request #1:

The proposed change should be submitted to a regulatory approval. (= MPP #3)

TSO answers:

With the implementation of the new DE/AT GSK the GSK methodology as such is not changed (for further explanation see issue #3). In that light NRAs stated their comfort that no regulatory approval is required. In TSO opinion a regulatory approval would only result in an unnecessary administrative burden and consequently a further delay.

EFET request #3:

With regards to transparency, a detailed documentation on the GSK methodologies should be published, including the operational GSK day-to-day-data. (= MPP #2)

TSO answers:

Documents will be provided and published which clarify the scope of the new DE/AT GSK. (see chapter “scope of the new DE/AT GSK” of this presentation)

4. TSO answers

EFET request #2:

The parallel run assessment should be expanded with more samples and should be continuous for at least a week before go-live. Not all effects of the GSK change can be discovered with a 10-day only analysis. (= MPP #1)

TSO answers:

- Analysis of additional days: TSO would like to understand better the concerns from market parties and get a clearer picture on which scenarios are not covered by the GSK report. The selected 10 days allow sound analysis of the impact of the new GSK and therefore enables an implementation in the near future
- Parallel run: it would be impossible to organize a full parallel run before the go-live of the new DE/AT GSK. Especially when it comes to the coordination of remedial actions (qualification / verification process) it is impossible to perform this process in parallel.
- As illustrated in this presentation, the update of the GSK DE/AT is an update of the reflected data, rather than an update of the methodology.