

ADMINISTRATIVE AND TECHNICAL OBSTACLES RELATED WITH DEVELOPMENT OF RES PROJECTS

Kaloyan Kanev, 2EC

PRIORITY GRID CONNECTION - IN THEORY



Fundamentals

According to Art. 9, T.4 from the RES Act one of the main conditions for stimulating of the "green" energy production is *mandatory grid connection* of RES producers.

The transmission and distribution companies should include in their yearly investment and maintenance programs the respective financial resources necessary for the grid development related with the incentives of the electricity production from RES (Art. 13. par.1).

The transmission and/or distribution companies are obliged to connect **preferentially** any producer of electricity from RES, that meet the specific technical requirements for grid connection, as provided for in the Grid Connection Ordinance (Ordinance №6) and Grid Codes - (Art. 13. par.2).

Procedures and terms

Obtaining of position – respectively **30 days** for the distribution companies and **60 days** for NEK from submission of the application.

Preliminary connection agreement – up to *15 days* from the submission of the respective application.

The dead-line for physical grid connection is specified in the final connection agreement but not later than the date of commencement (put in operation of the installation).

Penalties:

A penalty of BGN 50 000 (EUR 25 560) is to be imposed on energy companies failing to meet their obligation to connect with priority new RES electricity producers. In case of second failure the initial penalty would be tripled.

The term for the connection shall not exceed the term, specified by the producer for commencing the RES power plant. A penalty amounting to BGN 30 000 (EUR 15 340) is to be imposed on energy companies failing to meet the term for connection.



GRID CONNECTION - MAIN PROBLEMS

Legislative and administrative:

- Lack of transparency and enough information about available capacities in the respective regions;
- Discrepancies between different legislative documents /for example Territorial Dev. Act and Ordinance №6/;
- Lack of criteria and instruments needed for identification and separation of the "phantom" projects and limitation/prohibition of the fragmentation of the big projects into a number of 5 MW small projects;
- Necessity of more effective communication and co-ordination between ESO, NEK and distribution companies.

Financial and infrastructural

- ➤ The financial obligation of the investors and grid owners in respect to the grid development are not well-regulated;
- There is a high concentration of RES projects in certain regions where the available capacity is insufficient /no strategy, postponed rehabilitation of the grid, etc./

GRID CONNECTION – DIFFERENT POSITIONS



Investors

- Uncertainty the procedure for grid connection is estimated as risky;
- Lack of transparency and enough information;
- Procedures delay;

Grid operators

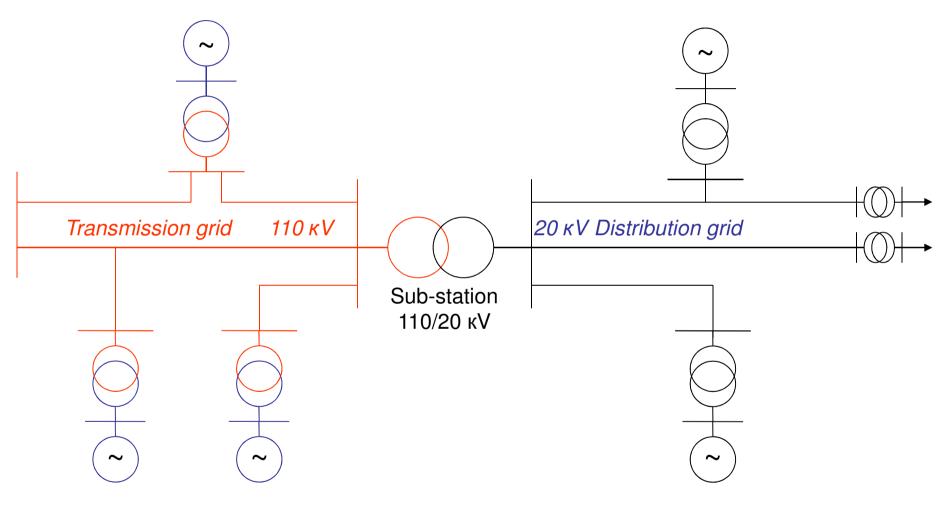
- ➤ Big investments for grid development that are not compensated enough by the connection fees paid by investors;
- Lack of financial engagements from the investors' side at the stage of preliminary agreement (everybody could apply for capacity).

ESO

- Congestions in the region with high concentration of RES installations (possible urgent decision: administrative limitation! principles?);
- Necessity of additional balancing energy sources (especially for real-time balancing of the wind farms);

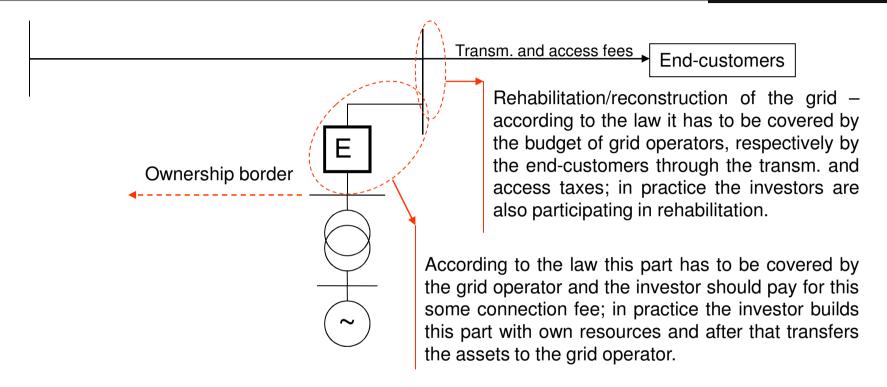
TYPES OF GRID CONNECTION







TAXES AND FEES – WHO PAYS?



Possible changes in the regulatory framework (proposed by BPVA):

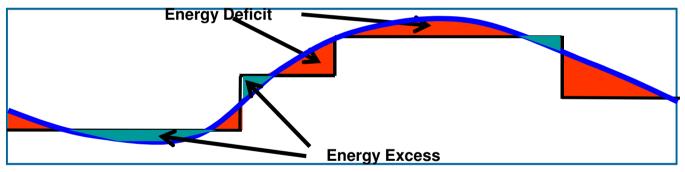
- > Designing and construction of the interconnections between the installation and point of connection to the grid has to become formally an obligation of the investors;
- ➤ in case a RES project causes excessive investment for grid development/reconstruction, the investor should participate with a certain amount (it could be implemented only in combination of clear criteria and rules for estimation and calculation).

ENERGY BALANCING OF RES PRODUCERS



Fundamentals of balancing

ESO is responsible for the real-time balancing of the power system by using different instruments (generating reserve provided by producers – HPPs and TPPs). Purchasing and activation of the power reserves (secondary, tertiary) have respective prices and ESO should cover the costs from the market players (producers, customers, traders) that have energy imbalances (difference between real production/consumption and physical nominations/schedules).



According to the current legislation (Market Rules) the RES producers and co-generators are subject to balancing only if they sell electricity on the free market.

The proposed by ESO draft of the new Market Rules (Chapter 11) that is expected to come into force next year will implement a balance group model according to which all the balance group coordinators will be subject to balancing. In this regard the large-scale RES installations will be required to submit their production schedules to respective coordinator of the special balance group (usually the parties that purchase the electricity – NEK and End-retailers).





Requirements

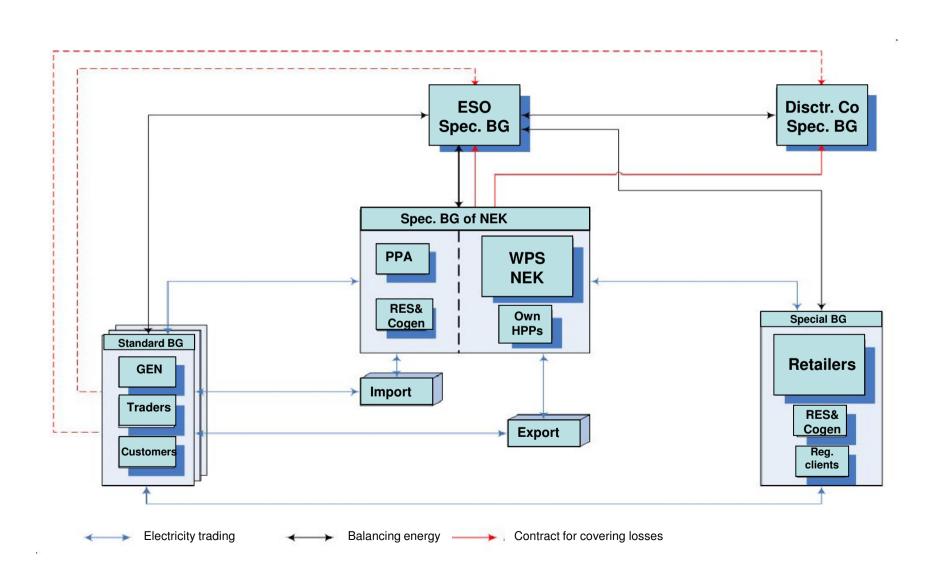
- RES producers with install capacity > 1 MW should submit daily production schedules to the respective balance group coordinator;
- The imbalances of the respective balance group will be calculated as sum of the imbalances of all the group members (netting);
- The balance groups will be charged for the imbalances if they exceed 20% (imbalances are calculated on hourly basis);
- The RES producers will not be allowed to operate on both market segments regulated and non-regulated in parallel;

Consequences from balancing

- There is a significant risk for RES that are not predictable (especially wind parks) to pay penalties for their energy imbalances;
- > NEK and distribution companies as coordinators of special balance groups have fears about the possibilities to cover the costs for balancing.









THANK YOU FOR YOUR ATTENTION!

Contacts:

Kaloyan Kanev, managing partner Euro Energy Consulting 101, G.S.Rakovski Str.; fl.1; 1000 Sofia T: +359 2 923 00 93; F: +359 2 923 00 89

M: +359 889 81 44 41; E-mail: k.kanev@2ec-bg.com