

## Free electricity market: Baltic experience

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At the present time a model of the perspective free Baltic electricity market is being worked out that provides for free access to the power transmission networks both for the electricity producers and its consumers. Restructuring of monopoly energetic companies is going on in all the three Baltic States, although according to different models and rates of their realisation, which complicates the solution of the problem. The most urgent task is to develop such a model of the Baltic electricity market that could be included into the European electricity market, as well, first of all by implementing the project "Baltic Ring" (power network around the Baltic sea).

At the present time technical state of 330kV network in integrated power system (IPS) Baltic States cannot assure all the requirements for fully opened electricity market. The following indicates some points that do not meet the requirements for passing to completely open electricity market and create additional restrictions in the transmission network:

- reliability criteria can only be satisfied considering emergency control;
- on power stations in IPS Baltic and United power system of Russia, there is lack of primary frequency regulators with small dead zone by frequency;
- the absence of the required amount of means to compensate excessive reactive power under minimum operational conditions of the network that leads to necessity of constrained disconnection of large number of 330 kV lines. This presents additional limitations on electrical transmission over the network.

It seems that the pass to a completely open electricity market will require detailing and toughening requirements on technical update of the transmission network in order to eliminate majority of the obstacles for realisation of a free electricity market.

The main problems for the development of the perspective free Baltic electricity market are connected with:

- the developing of a market model,
- the market regulation measures,
- formation of the market tariffs,
- the operator functions of networks and the system,
- technical problems,
- the protection of the consumers' interests.

One of the most complicated questions will be connected with the formation of joint electricity transmission tariffs. Due to the growing competition among the producers under free electricity market conditions the electricity production costs should decrease. The consumers' electricity tariffs will depend on extra costs on electricity transmission, distribution and other services rendered to the consumers.

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