



The growing production of electricity from renewable sources puts more pressure on distribution companies. – The rules are clear but the implementation is still confusing. Electricity production from renewable sources in Serbia is becoming more and more attractive for investors. This fact is a consequence of the adoption of EU directives, now incorporated into the national legislation, which facilitate the procedure for obtaining the construction and operation permits as well as of the decision to give small power plants the access to the grid. The economic viability of such investment is incontestable. The special credit goes to the adoption of a feed-in tariff, which awards much higher pre-kWh price to the energy generated from renewable sources in comparison to the traditional energy sources. This means that EPS doesn't have the monopoly over the small power plants any more, no matter whether we consider their capacity or their number, nor does it hold the dominant position in this sector. However, the small hydropower plants of EPS, built more than a century ago, are still operating. There are a total of 14 small hydropower plants within the system of EPS. The construction of new ones is planned in the form of strategic partnerships, but for now EPS is not able to compete with the private sector in this field. The evidence of the expansion of the private sector in the production of electricity from renewable sources is illustrated by the number of producers from which EPS buys electricity. According to data from the Electricity Trade Department of EPS, based on signed contracts, last month EPS purchased electricity from 31 producers, i.e. the owners of small power plants. Among them are the owners of 19 hydropower units, 6 solar units, 3 fossil fuel units, 2 biogas units and one wind unit. As far as we know, there are also some other companies which are interested to sign contracts with EPS and which started the procedure of preparing the necessary documentation.

Investor finances connection to the grid

When it comes to the administrative procedures related to the production of eco-energy, the good news from the Ministry in charge is that the procedures for obtaining permits will be simplified and that additional incentives for a greater use of renewable sources will be introduced. This will undoubtedly have an effect on the development of power distribution network, which will have to receive and distribute energy produced by small power plants. The topic concerning the stage of the preparation and manners in which ED grid would cope with new requirements was on the agenda at the Conference of CIRED (International organization of distributors), held at the end of the month in Vrnjacka Banja. It was discussed at a round table session which attracted a large number of experts in this field. – We decided to organize a round table session on the preparations in ED grid for receiving distributed electricity generation from small power plants because we believe that it is one of the most relevant issues at the moment. The number of small power plants is constantly increasing so that the reception of distributed electricity generation is becoming a growing

challenge for distribution companies. The EPS's distribution companies have kept up with the pace of construction of small power plants so far, constantly striving to be more efficient in giving the permission for connection to the grid and in managing their own operation. In addition to an increasing number of power plants and growing responsibilities of distributors, there are many other issues that have to be addressed, primarily because the activities focused on increasing a share of electricity generated from renewable energy sources have not been coordinated. Small power plants and, especially the hydropower plants, have been typically built in rural areas characterized by a small number of customers and undeveloped ED grid. Who should build it? According to the legislation, the investor of the power plant finances the infrastructure construction and connection to the grid. If there are several investors and/or several power plants in the area with one connection, the connection costs are shared. The distribution company is expected to predict who will build small power plants in such area and when it will happen, even though there are never reliable indications in this case. In our circumstances, this simply could not be achieved, – explained for our magazine Dragoslav Jovanovic, a president of the National Committee of CIRED Serbia, which organized this regional conference.

How to share the costs?

Discussion on this topic began in the light of the adoption of the Ten-year development plans for ED system of EPS as well as the efforts of distribution companies to enable integration of electricity from dispersed power plants. The laws, provisions and regulations under which the small power plants could connect to the ED system were stated, including the Energy Law, six additional laws and a dozen related documents. The most important among these documents are the Regulations on distribution system operation. As to the connection costs for a small power plant, the most important document is the Decision on the methodology concerning the criteria and manner of determining the costs of the connection to the electricity transmission and distribution system, which has already been changed and amended. Also, the Regulations on distribution system operation have constantly been upgraded. It is necessary that all these documents “embody” the European standards and “reconcile” them with local conditions. When it comes to the equal participation of investors in small power plants in financing the connection to ED grid, it looks like this: if the distribution company assumes that several power plants will be constructed in a particular watercourse in the near future, it therefore has to determine the capacity of transmission lines and, potentially, of a substation – the first investor wouldn't have to pay the whole amount, but the costs will be “split” between future, at a time imaginary investors. From the perspective of the distributors, it seems as if the construction of these facilities is financed by distribution company because it is not known whether the additional plants would actually be built.

- This situation is similar to what we had when people began constructing weekend resorts.

The first home owners were building distribution facilities and grid for their own needs and those who came later acted in agreement with the first ones. It was not a fair solution, new owners could connect to the grid only under certain conditions, but the distribution company didn't build the grid nor did it call for justice – Jovanovic explains.

Distributors listed a few incontestable arguments as to why a distribution company could not undertake the planning and construction of the grid for small producers of electricity. First, there are no detailed urban-planning schemes and second, the locations where the small power plants could be constructed have not been selected yet. In the eighties of the last century the Registry of water flows adequate for the construction of small hydropower plants was created, but several years ago it was concluded that the document was outdated because of a change in hydropower generating capacity of rivers and streams, and that the new registry should be made.

As regards the wind capacity, after much speculation, the general consensus is that the wind turbines can be used only on the territory of Banat and Pester plateau and to a lesser extent in the southeastern borderlands. The possible locations for the solar panels or solar power plants, similar to the one whose foundation stone was laid in Zlatibor, have not been identified yet, let alone the places where the electricity can be produced from waste or biomass.

Solidarity of users

Distributors are therefore convinced that the practice of sharing the costs of the connection among potential small producers still cannot be applied in Serbia, and that it would literally mean that the distribution companies would invest their own financial resources in the construction of ED grid for the future owners of small power plants. Ljiljana Hadžibabić, a member of the Council of the Energy Agency, interpreted differently this legislative resolution. She said that the construction of such connection would not be financed by a distribution company from its own specific funds, but jointly by all users of ED systems. In the interview for our magazine, she said that on October 18 of this year, in the Energy Community of South East Europe, Serbia had committed to reaching the level of production from renewable energy sources that would account for 27% of Gross final consumption by 2020, which would represent the outstanding increase in comparison to the level of 21,2% attained in 2009.

- This is an ambitious goal, and all the stakeholders have to contribute to its achievement, - Hadžibabić emphasized.

Financing from grid fees

- The integration of small power plants from renewable energy sector in the distribution system is of great importance for distributions companies, not only in terms of building the grid-connection system, but also because of managing generation capacity. In general, an applicant bears all costs of a grid connection construction only if he is going to be an

exclusive user, i.e. if the capacity of standardized models of facilities and equipment is chosen in order to fulfill his needs. If several investors make requests for grid connection in that area, the costs should be divided proportionally, in line with approved grid connection capacity. Also, if the request is made by one investor and distributor estimates that there will be more interested investors in the next period, the cost of grid connection should not be “imposed” to the first applicant but financed from the funds of distribution companies collected through grid fees. Namely, the financial burden is borne by all users of the distribution system. This means that the construction of such connection is not financed from the distributor’s own financial resources, but jointly by all users of the distribution system. This would not be treated as a typical grid connection, but actually as a network development, i.e. the capital expenditure, which would be financed from grid fees - said Ljiljana Hadžibabić.

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