Serbia exclusive: Coal dependence vs electricity balances, the report

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Coal represents the backbone of the Serbian energy. In fact, two thirds of the electricity comes from coal, while the share of energy from the renewable sources amounts to slightly more than 20 percent of the total consumption.

Serbia has the significant coal reserves and these reserves can ensure the safe electricity supply in the decades to come. The most significant coal quantities in our country are located in the Kolubara basin. Over 50 percent of the electricity in Serbia is produced from the lignite of MB “Kolubara”. How important this is to Serbia and its citizens one could see after May floods – power deficiency situation in Serbia. Two open pit mines in Tamnava were completely flooded, and the lignite production, in all four open pit mines was stopped. The process of pumping the water out is still in progress at the largest and the most modern open pit mine, “Tamnava-West Field”.

The consequences were enormous. As it had been anticipated by the tender, which was announced before the winter season, it was planned that the company TPPNT would procure 150,000 tons of coal in November this year, 310,000 tons in December as well as in January, while in February 2015 that amount would be 280,000 tons and in March 250,000 tons of coal. All amounts are subject to 20% change. The plan also envisaged the procurement of the optional 500,000 tons and that is, in January up to 180,000 tons, in February up to 150,000 tons and in March 170,000 tons of coal. That’s a total of about 1.5 million tons of coal, but the exact calculation will be known at the end of the winter season.

To what extent Serbia is actually dependent on coal could be seen after the May floods. We are still lacking sufficient power, so the coal is being imported and the water is busily pumped out of the largest open pit mine in MB “Kolubara” – “Tamnava-West Field”. During the floods, when the Kolubara River broke the embankments and rushed into the Tamnava OPMs, the most productive open pit mines were turned into the two lakes. Re-establishing of the production process in these mines is important for the security of the national power system and continuous electricity supply for the consumers.

MB “Kolubara” produces approximately 30 million tons of coal annually, which is 70 percent of total production in the country. Prior to floods situation, MB “Kolubara” was producing 90,000 tons of coal daily, necessary for the average electricity production and supply from local sources during the winter when the electricity consumption is high. Upon activating the coal production in the open pit mine “Veliki Crljeni”, 65,000 tons of coal is produced from MB “Kolubara”, which is about 80 percent of total production.
The Tamnava OPMs represent the main support of the coal production in the Mining Basin “Kolubara” in recent years, especially the open pit mine “Tamnava-West Field”. Last year, over 19 million tons of coal was excavated at the Tamnava OPMs which was two thirds of the

total mine’s production (over 30 million tons).

According to the data in the new Serbian energy strategy draft, oil and gas comprise less than one percent of the geologic reserves in the structure of the fossil fuels, while the share of lignite in the balance reserves amounts to more than 95 percent. Coal consumption is predominately related to the electricity production in the thermal power plants – around 92%. In the electricity production, the coal occupies the dominant position with 64%, while the share of hydro energy is 34.5%.

As far as coal is concerned, the strategic goals are to have safe and reliable supply of the thermal power plants and providing the necessary quantities for the final consumption and heating energy production. The strategic pathways are the intensification of the deposit exploration, opening replacement capacities for the open pit mines to be shut down and opening of the mines which will be intended for the new thermal power capacities and the introduction of the quality management system.