

Serbian power utility EPS Elektroprivreda Srbije produces around 70% of its electricity from coal fired power plants, supplied with lignite coal from two biggest coal mines Drmno and Kolubara. Despite environment challenges EPS is planning to continue its reliance on coal fired TPPs in which it plans to invest in order to modernize facilities and comply with EU regulations explains Dragan Jovanovic, EPS Executive director for electricity production. These days EPS had a record production of electricity coming from coal. When speaking about the significance of thermal capacities for Serbian energy safety, Dragan Jovanović executive director of EPS for electricity production stresses that EPS is very much counting on thermal units, both existing and new, with due respect to European ecological regulations. Since Serbia has enough coal for the production of electricity in the next 50 years, Jovanović says that because of energy safety we have to seriously consider other energy sources, without rejecting the possibility of EPS getting into the production of “green electricity”.

At the end of 2015, in December Elektroprivreda Srbije reached two records in producing electricity from lignite. Thermal power plants produced 93.27 million kilowatt hours on Saint Nikola day (December 19), which was the largest coal production in this state ever. Then the thermal units of EPS broke this record of electricity production from coal on December 25. Thermal power plants in Obrenovac and Kostolac produced 93.28 million kilowatt hours exceeding the daily plan by 9 percent.

“This shows the significance of thermal capacities for the energy safety of Serbia, because these records were achieved 25 years after the start up of the last unit. We did it with units that are older than 200.000 hours on average” says Dragan Jovanović hardly hiding his pride while stressing that coal production is still predominant here and it is compensating for the lack in hydro sector especially at such a period when production in hydro power plants is diminished compared to integrated capacity and possibilities due to low water level on Drina and Danube.

The fact that there is a steady and reliable supply of citizens and industry these days even though there is a draught and water level at the turbines is very low, is good news according to Jovanović and proof that our plants are still vital and capable of running in full capacity.

EPS produces two thirds of electricity from coal and one third from hydro potential.

“Analysis of the production shows that some of our thermal units are working with more power than they initially had. For example Block 6 in TPP Nikola Tesla A, whose integrated capacity at the end of its construction was 308.5 MW worked with 332 MW on Saint Nikola day. It was possible because all the revitalizations and modernizations gave results. Now we have 25 MW of new capacity. It was done in other thermal units too and the biggest benefits are bigger production and bigger profits for the company” Jovanović clarified the fact that thermal units carry the most of the daily and monthly production along with the modest

operating of hydro potential.

He reminded us that EPS has some problems with the supply of thermal units with coal, because the Mining basin of Kolubara is still recovering from the consequences of the floods in 2014. Jovanović does not hide that thermal power plants Nikola Tesla A and B are using coal from landfills. Even with that EPS is reaching record production.

During 2015 EPS produced 35.6 billion KWh of electricity, which is 3.6 billion more than in 2014.

“These records show that it is good that Serbia is not abandoning its coal plants. In the document Strategy of EPS development we are certainly relying on thermal units. Having that in mind we have signed up all of our thermal units with integrated capacity bigger than 200 MW for the National program for the reduction of emission, that is, we signed them up as plants planned for investment in order to adjust them to regulations on big furnaces, with the final goal of adjusting them to keep operating after 2023” said Jovanović and mentioned that they are doing analysis for some units with capacity less than 100 MW to see whether they are capable to keep operating or they should be shut down.

We are talking about units that are fifty years old like the thermal units in TPP Kolubara.

“We have high hopes regarding the construction of new thermal capacity B3 Block in Kostolac, with integrated capacity of 350 MW and in Kolubara region our strategic course is to support the investments in the mining sector in order to amplify the production and the process of coal homogenization. The process of coal homogenization is very important to us so that we can keep up with the steady production of electricity” Jovanović said and commented that “it is realistic for this to happen in 2017. The project is ongoing. In Obrenovac we have great expectations from this project, because it would give us a little more MWh in production, because due to worse coal quality we often have problems regarding electricity production”

There were plans in EPS to build additional capacities along with the existing thermal capacities thermal power plant Nikola Tesla A and B and TPP Kolubara A. The story about building TPP Kolubara B started in the seventies and the construction started just before the dissolution of SFRY ... the project of construction of TENT B3 is newer but they were both reactivated in the beginning of the century. The state and EPS have not found strategic partners to build these new capacities. Apart from financial reasons the question was whether there is enough coal in the Mining basin Kolubara for these new power plants. So the question is how much lignite is there in Kolubara and Kostolac.

We are in the process of closing down the projects Kolubara B and TENT B3. At least in their initial form. In EPS we are counting on the existing capacities. There is enough coal in the mining basins of Kolubara and Kostolac for another 50 years of exploitation - and fueling of thermal power plants. The mine Drmno in TPP Kostolac would end its operation in 2060 while there is significantly more coal in Kolubara. The Mining basin of Kolubara has

around 1.5 billion tons of coal to be exploited and with this level of consumption it is enough for another 50 years of exploitation” according to Jovanović

Jovanović warned us that it is not a lot for the strategy of one state and the 50 year period is warning us to start thinking seriously about replacement sources of energy. The law and regulations (Serbia is a member of Southeast Europe Energy Community) are stipulating that it should be renewable sources.

“I have to say that if a state wants to have energy independence it should never forget that each renewable source must have a back up in stabile production capacities” Jovanović made himself clear while stressing the fact that the more we are open to the market the bigger quantities of electricity we have to withdraw from the market especially since the electricity is becoming cheaper, which is unfortunate for the producers. It is evident that the price of electric power is dropping due to renewable energy sources.

While speaking about how long the period of such cheap electricity would last, he said that it is evident that there will be a stagnation with renewable energy sources in the strongest European countries, which influenced the drop of electricity price exactly by pushing this type of energy sources. Anyway for the Serbian Elektroprivreda, whatever will our strategy be for the future coal will be our main source at least in the next 20 years. It is hard to change a system with investment capacities such as ours in a short period of time.

Jovanović commented that the Chinese partner in Kostolac also influenced the European producers to flinch regarding both construction price and environment.

We had offers from European companies to build thermal power plants at a price of two million euro per MW. However the 350 MW Block in Kostolac was contracted at a price of 1.3.million euro per MW including all the units in accordance with the European regulations for the reduction of green house gas emission. The Chinese are building a Block in Kostolac with filters under 30 mg including desulfurization and reduction of nitro oxides in accordance with the Directive on industrial furnaces and Directive on big furnaces. So one such block will be ecologically acceptable - says Jovanović.

He does not reject the prospect of EPS starting the green electricity production. As he says: “We are sure to invest in renewable energy sources because we have to reach the given percentages of electricity produced from green sources, but they cannot be dominant. There is no dilemma that Elektroprivreda has determined in the strategy to invest in the emission reduction, future trade in SO₂ and creating conditions for our plants to operate without being big pollutants. We have done a lot to reach that goal in the past ten years. And we keep on working on it.

It is well known that advocates of shutting down the thermal capacities often compare Serbia to Germany, which happens to have ten times more capacities in thermal units.

“EPS respects same regulations as Germany. I keep saying that Germany has 40.000 MW in coal fueled thermal capacities while Serbia has 4.000 MW lignite fueled capacities. So if we

both apply the same levels of protection against the pollution we should not be the one to get the bad pollutant reputation Jovanović claims.

In Germany thermal power plants are built with the most modern technological solutions, which do not pollute the environment. The question is why shouldn't Serbia be able to build at least one more thermal power plant in Kostolac along with the current project of TPP Kostolac B3 construction, since there is enough coal for another thermal power plant with integrated capacity of 1000 MW.

"New potential pit in Kostolac is Dubravica or Zapadno polje site, where exploration has been done and elaborates show that there is around 400 million tons of pretty exploitable coal with significantly bigger geological quantities. This coal has a relatively lower stripping ratio which makes the exploitation easier and cheaper. These 400 million tons of lignite is a nice quantity which can supply a block or blocks. The thermal capacity of around 1000 MW would consume 8 to 10 million tons of coal per year. So we would have enough coal for such a power plant for the next 40 or 50 years of operation. Besides the location is good because it is in the vicinity of two rivers Morava and Danube. It has a complete infrastructure for the construction of a new thermal power plant because it is near to existing thermal capacities that are already equipped with appropriate infrastructure" Jovanović says and concludes that it is a very realistic investment potential in Serbia.

We have yet to see which model will be practiced by the state in the future period. Will it be open for this expert's estimate that a stable source capacity with 1000 MW would keep Serbia from being dependent on energy import in the next period, transmits Serbia-energy.eu