

Šoštanj unit 6 lignite plant: a mistake not to be repeated



Project ID

Šoštanj in Northern Slovenia 30km from the Austrian border is the location of an existing lignite-fired power plant - Termoelektrarna Šoštanj or "TEŠ" owned by HSE (Holding Slovenske Elektrarne d.o.o.), a 100% state-owned electric utility. The plant is currently comprised of five units. A new sixth unit of 600MW started testing operations in 2014 and this project is known as TEŠ6.

Quick facts about TEŠ6

- The power plant will be operational for 40 years.
- The total installed capacity is 600 MWe or 545.5 MW.
- The power plant plans 6650 hours of operation annually.
- The electricity production is planned to be about 3.5 TWh p.a.
- The CO₂ emissions are planned to be about 3 150 kt p.a.
- The usage of lignite is about 440 kg/h or 2.926 million t p.a.
- The fuel (lignite) will mostly come from the nearby Velenje mine.



TEŠ6 in plans

In spite of not being in Slovenia's official energy plans, TEŠ6 appeared for the first time in the Resolution on National Development Projects for the Period of 2007-2013, which was adopted in October 2006. The total value of the project TEŠ6 was estimated to be €602 mln and the project was planned to be financed with private funds. At the end of 2009, the project was first brought to the attention of the public because EBRD required a public consultation. At the time, the investors claimed that the investment would be paid back in a mere 6 years, that the production price of electricity would be €39-58/MWh) and that the investment would ensure at least 3500 jobs for the coming 40 years.

TEŠ6 in reality

The final estimated cost for the TEŠ6 project is at the moment at the level of about €1.43bln. Of this, €550 mln come from an EIB loan, €200 mln from EBRD loan, €515 mln from owner's capital, €83 mln loan from HSE and €80 mln from commercial loans. The project is estimated to maintain 200 jobs until 2050. The currently estimated production price of the electricity ranges from €55-61/MWh. With the average base wholesale price for 2014 of 31.4 EUR/MWh, TEŠ6 produces 23.6 EUR loss with each produced MWh. At the planned production level of 3.5 TWh p.a., this means about €82.6 mln loss annually (calculation done with the lower end of estimated production price, 55 EUR/MWh), at least in the first few years of operation. Should the upper end of the production price estimate be reached, the loss would increase.

What happened?

The key problem was the extravagant rise of the overall price of the project.

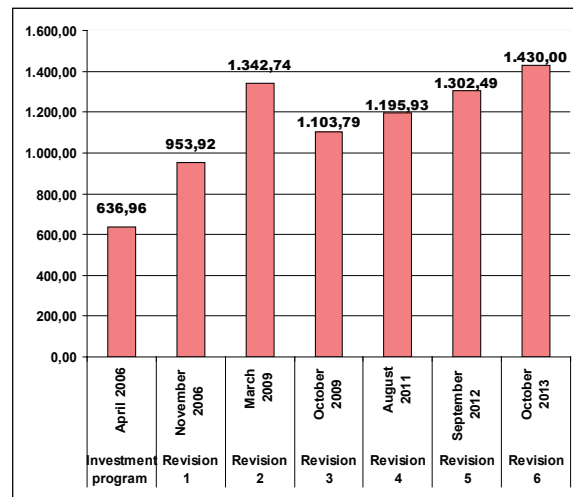
As an investigation by the Slovenian police reveals, a large part of the price tag increase is due to corruption. At the time when the main equipment supplier was selected, Slovene law was unclear on whether TES was subject to public procurement rules. In the end, a tender was carried out but the legal vacuum allowed the tender process to be affected by corruption due to conflict of interest of one of the companies involved. . Alstom, the main supplier of equipment for TEŠ6, unduly gained almost €285 mln in this deal.

The next key problem is that the investment was calculated on the basis of high sales prices of electricity, but the reality of markets is that the sales price of electricity is currently very low. Real market data for EEX futures shows no sign of price recovery, as for 2017 and 2018 the prices remain at the level of 32-35 EUR/MWh. For TEŠ6 this means about €70-80mln loss annually, if it operates at full power.

Another key problem of TEŠ6 project is its fuel: coal – or more precisely: lignite. The price of the coal is one of the key elements of the economics of the project, but so is the energy, contained in the lignite (calorific value). Those two elements moved in the wrong direction after the project was deemed to be a fait accompli.

Being in a problematic financial situation, TEŠ's management is looking for cuts. One place to find them are the employees: in to optimize the functioning of TEŠ, half of the employees – 226 of the current 452 – will be laid off. Apart from jobs in TEŠ, also the jobs in Velenje mine, which should have been 'protected' by construction of TEŠ6, are under question. This again illustrates that economic reality is harsher than the perfectly painted employment picture in the period when construction of TEŠ6 was planned.

Price increases of project TEŠ6



Source: Investment program of TEŠ6, 5th revision from September 2012 and <http://www.delo.si/gospodarstvo/podjetja/novelirani-investicijski-program-cena-za-tes-6-nespremenjena.html>

Will consumers and taxpayers pay in the end?

A large part of the €550 mln EIB loan – €440 mln – is supported by the Republic of Slovenia with a state guarantee. There are more and more signals that this guarantee will have to be cashed in. Apart from that, the key energy actors are designing a new contribution for TEŠ6, which would be paid by all electricity consumers. This 'surcharge for TEŠ6' would bring over €30 mln revenue per year that would cover the TEŠ6 losses. In this way, the taxpayers and end consumers would fill the financial holes of TEŠ6 project.

TEŠ6 should be a serious lesson for other governments in southeast Europe

Almost half of the planned new capacities in the Western Balkans comes from coal. Among the projects currently under development are:

- Stanari (under construction), Ugljevik III, Tuzla 7 and Banovici in Bosnia and Herzegovina
- Plomin C in Croatia
- Kosovo C in Kosovo
- Pljevlja II in Montenegro
- Kolubara B and Kostolac B3 in Serbia

For more details about these projects, see: <http://bankwatch.org/campaign/coal/projects>

If the economics of these investments are planned in a manner similar to TEŠ6, these projects will also make a hole in public finances that future generations will have to fill. It is therefore imperative that the lessons from TEŠ6 are learned: although Slovenia has always been perceived as the most progressive part of former Yugoslavia, the TEŠ6 case shows that even Slovenia is prone to corruption and the whole country can become a hostage to a lobby group, while the costs will be carried by the public.

TEŠ6: Economics Myth Buster is available at: http://www.focus.si/files/programi/energija/2014/myth_buster.pdf



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