

## **Electricity price as a factor of the national electric power industry sustainability\***

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### **Summary:**

*PE Elektroprivreda Srbije (Electric Power Industry of Serbia - PE EPS) is of a strategic importance for national economy. Long-term policy of depressed electricity price has caused a number of distortions, mainly through direct impact on the operations of EPS and a number of other effects such as irrational consumption, high energy intensity, low charges, high level of technical and commercial losses, etc. Serbia still has the lowest electricity price in Europe, but regulated price model provides a certain profit level for EPS. The aim of this paper is to show the potential that the electric power industry as a branch can have if the Government provides the conditions for its sustainable operation.*

### **Key words:**

*Electric Power Industry, electric power, price, investment, financial sustainability*

### **Rezime:**

*JP Elektroprivreda Srbije (JP EPS) je od strateškog značaja za nacionalnu ekonomiju zemlje. Dugoročna politika depresirane cene električne energije izazvala je niz poremećaja, koji su se uglavnom ogledali kroz direktan uticaj na poslovanje EPS-a i niz drugih efekata, kao što su neracionalna potrošnja električne energije, visoki energetske intenzitet, niski troškovi, visoki nivo tehničkih i komercijalnih gubitaka itd. Republika Srbija još uvek ima najnižu cenu električne energije u Evropi, mada uprkos tome regulisani model cena pruža određeni nivo profita za EPS. Cilj ovog rada je da pokaže Elektroprivreda kao grana može da ima visok potencijal ukoliko Vlada obezbedi odgovarajuće uslove za njeno održivo poslovanje.*

### **Ključne reči:**

*Elektroprivreda, električna energija, cena, investicije, finansijska održivost*

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## **1. INTRODUCTION**

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The World Bank Report, published in December 2011, announced that electricity is the most acute constraint on sustained expansion of Serbian's economic activity and exports, especially once the economy moves onto a faster growth trajectory. (i.e. [10]) Serbia is facing a looming power sector crisis; already, generating capacity is not able to meet peak demand and projections of consumption and new capacity show the gap widening after 2015. The percentage of firms in Serbia that identifies electricity as a major constraint in doing business had increased by 120% comparing to the previous round of survey. Although the indicator is relatively low compared to other countries in the Europe and Central Asia region, it is still five times higher than the OECD average of 6.1%. (i.e. [11])

Serbia is a very high energy consumer and energy intensity in Serbia was and is substantially higher than in other Balkan countries and the European Union. During the 2000s, energy was a key input in fast-growing industries like steel, sugar, rubber, and copper—Serbia's main exports. Although energy intensity has declined by about 25% since 2005, the economy still uses double the energy per dollar of gross domestic product (GDP) than its Western Balkans neighbors and almost 2.5 times more than Western European countries. Yet per capita energy and electricity consumption are still below the OECD Europe average by about 65%. (i.e. [3])

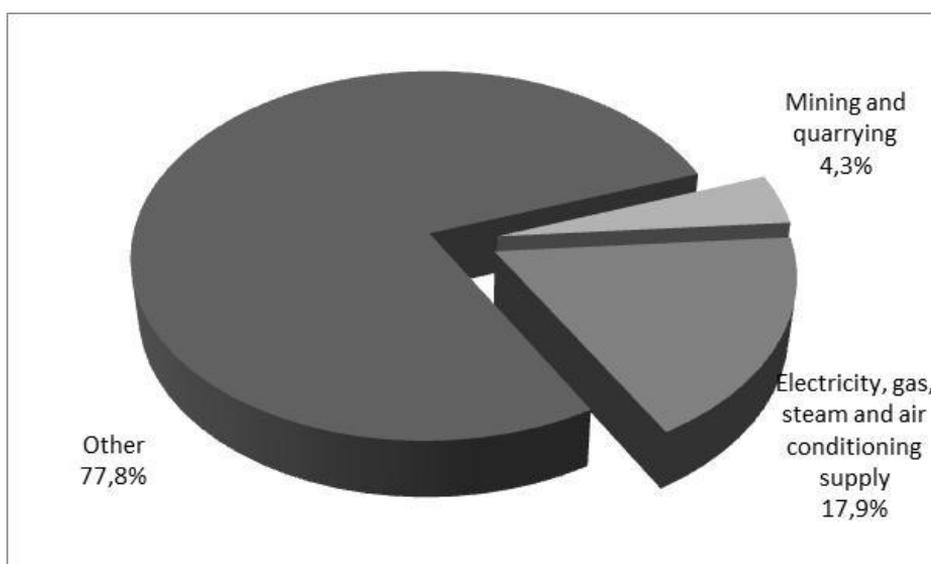
A high level of energy intensity as well as other energy sustainability indicators (e.g. electricity consumption per capita) can be related to the level of electricity price. Serbia has the lowest electricity price in Europe and it resulted in a wide range of direct and indirect effects. Bearing in mind that there is a high correlation between electricity prices and operational performance of PE EPS, we will focus in this paper only on the analysis of the direct effects of price policy on the EPS business operations.

## **2. THE IMPORTANCE OF ELECTRIC POWER INDUSTRY FOR THE NATIONAL ECONOMY**

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Electric power industry is a strategic sector of the economy, which has export potential and pro-investment orientation at the same time. The share of electric power industry (power generation plus extraction of coal) in generating gross domestic product (GDP) is around 3%. While the share of electricity generation in total industrial production of Serbia is greater than 20%.

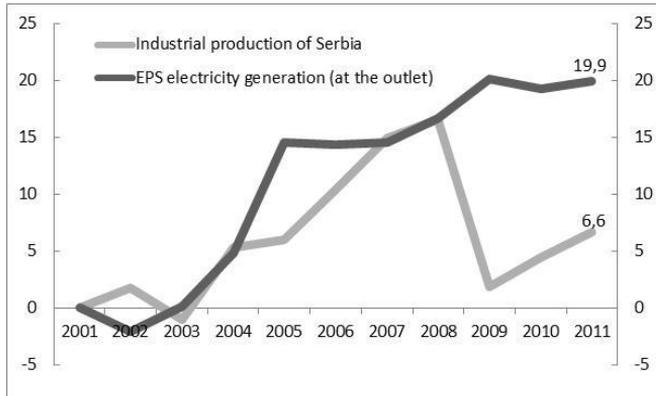
It is important to bear in mind that, according to the methodology of calculating the weights for the products within the overall industrial output, the weights of the products (in this case the production of electricity) approximately represent value added per unit of product measures. However, calculating the value added per unit of measure of the product is done in the way that average value per unit of measure is calculated for each product, and then reduced by the value of the material cost. As the average value per unit of measure is the ratio of total product revenue for a given product and its quantity sold, it is clear that the production of electricity weight size depends directly on the amount of the price of electricity. So, if electricity prices are higher, the participation of strategic products in total industrial production will be over 20%.



**Figure 41 Structure of industrial production in 2011**

Source: [13]

Electricity generation with the production of food and beverages are the most important areas of industrial production, which generate 1/3 of the total value added of industry. But, as in the case of the physical volume of industrial production, the share of branches, and thus PE Power Industry of Serbia (EPS) in the formation of GDP is also relatively underestimated in financial terms due to the relatively low price of electricity. As GDP is equal to the sum of added values by activities at basic prices and the total taxes on products minus the subsidies on products and services of financial intermediation services, indirectly measured at the level of the total economy, the amount of the selling price of electricity directly determines the value of EPS production, and through it the amount of the added value.

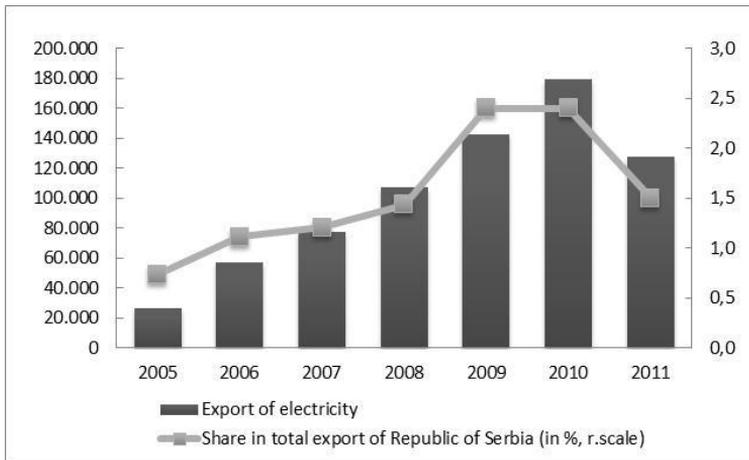


**Figure 42 Cumulative growth of EPS electricity generation and total industrial production of Serbia (in %, 2001=0)**

Source: [12 and 13]

In recent years, Serbia recorded significant growth of FX inflows from electricity export. In 2011 the export of electricity was worth €127.5m and was higher than imports of €51.7m. Electricity is among the most important export products, which, in 2011, accounted for 1.5% of total exports of the country. Expressed in physical units, exports reached 4.339 MWh in 2010, which is 71% higher result than a year before.

Most important export destinations in the first ten months of the 2011 were: Montenegro (35.6% of exports), Bosnia-Herzegovina (16.6%), Hungary (15.5%), and Macedonia (12.2%). These are followed by Albania, Croatia, Cyprus, Slovenia, etc.



**Figure 43 Export of electricity in period 2005-2011, in 000 EUR**

Source: [12]

Extremely dynamic growth of electricity exports was interrupted in 2011. Compared to 2010 export was reduced by 28.8%, or by €51.6m. In 2011, Serbia spent €75.8m on imports of electricity, while in January, February and October of the same year imported about 257 million kWh per average prices of 5 and 5.3 euro cents, which is about €13.5m. Severe droughts increased imports in October, November and December, so as much as 850 million kWh was purchased in foreign markets per average prices of 6 to 7.41 euro cents since the production was even reduced in Europe due to unfavorable hydrological situation. Although the data have not yet been summarized, electricity imports continued in early 2012 as well when, due to extremely high consumption, EPS imported as much as 20 million kWh per day.

When the value of electricity exports is divided by the exported quantities, we obtain the unit price of exports. In light of the said, the price of exported kWh in 2009 amounted to an average of 5.2 euro cents, and was 6.4% higher than the average price in the domestic market. This ratio was even better in 2008 when the price of a kWh averaged 7.1 euro cent and was 33.9% higher than the average price in the domestic market in the said year. Thus, as for export of electricity the Republic of Serbia achieves constantly growing foreign income but also achieves positive terms of trade in electricity foreign trade.

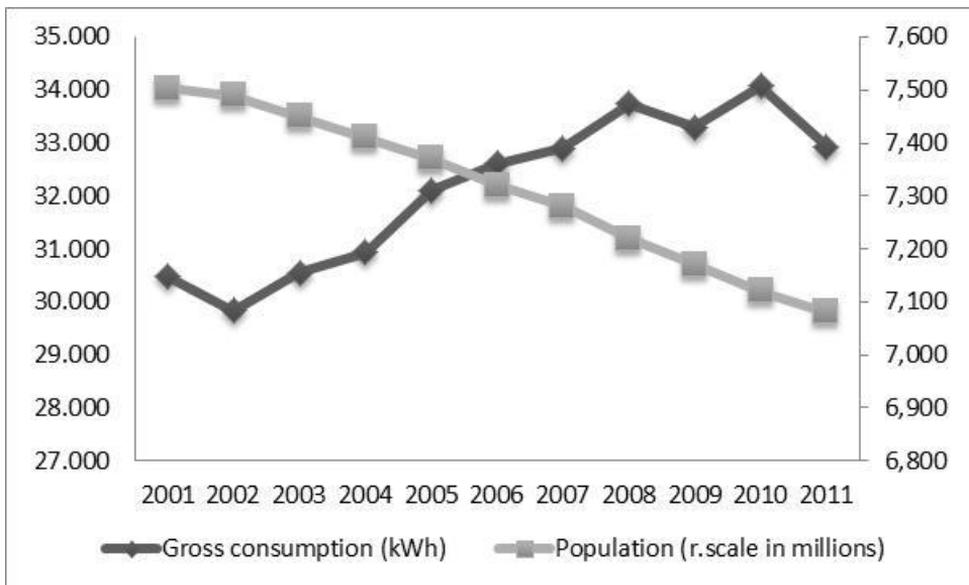
A new model of the Republic of Serbia's economic development must be transferred from the service sector to durable goods sector or primarily industry. Therefore, average growth of manufactured durable goods would be significantly faster in relation to the services sector. According to the assumptions of the new model of growth and development for the period 2011-2020, average annual growth in industrial production is projected at the level of 6.9%, while the total industry, manufacturing industry should be increased by an average annual rate of 7.3%.

Keeping in mind that this sector is highly energy-intensive, it implies a far greater electrical power production able to meet the additional demand. In the case of industrial growth it is essential to increase investments in capacity of electricity generation. In order to provide the necessary capital and attract strategic investors, it is necessary to establish the price of electricity, which covers all expenses and provides a rational investor's income.

Since 1990 the production of electricity in Serbia is growing faster than industrial production, but more slowly than consumption since all the more electricity is consumed from season to season while, for the time being, no new power source has been developed. (i.e. [2]) The age of hydropower plants range from 35 to 44 years, and of the thermal power from 21 to 44 years. Following many years of technical maintenance below acceptable limits, at a completely halted construction of new facilities, the strategic orientation and ongoing task since 2001 in the EPS was reconditioning and rehabilitation of degraded plant, primarily the cooking line. Although since

2001 it was greatly invested in repairs and modernization of equipment, the existing production capacity, with the current increasing production, reached maximum efficiency.

The most important reasons for the survival of electricity sector in such circumstances should be look for, on the one hand, in the economic growth that was throughout the last decade based on favoring non-durable goods and the service sector, characterized by low energy intensity, and on the other hand, in the population reduction which, to a certain extent, alleviated normally growing demand by households. This is confirmed by the fact that in 2001 durable goods (agriculture, hunting, forestry and fishing, manufacturing) involved in the formation of GDP from 32% share in 2011 fell to about 23%. Industrial production in 2011 was only 6.6% higher than in 2001, while its share in the creation of gross GDP during this period dropped from 21.7% to about 17%.



**Figure 44 Gross consumption and population vs. population's changes in Serbia**

Source: [12 and 13]

Its consequences on the power consumption can best be traced according to the following chart where the elasticity of demand for electricity in the past decade unveiled as a result of the percentage changes in electricity consumption and percentage changes of GDP. It is clear that the EPS was able to follow relatively dynamic growth rate of GDP since in the last decade, in average terms, with a one unit increase in GDP electricity demand grew only by 0.57%.

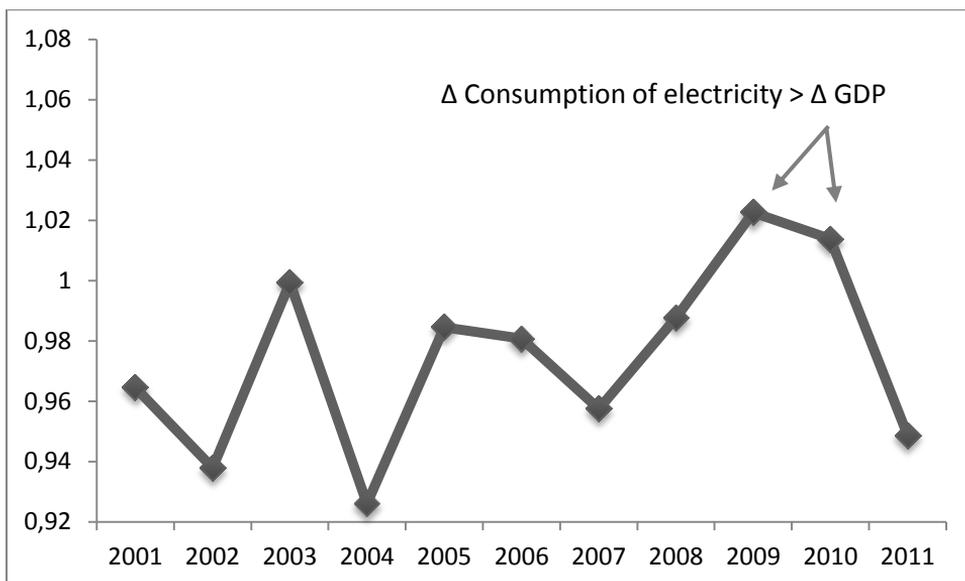


Figure 45 Elasticity of demand for electricity ( $\Delta$  Consumption of electricity /  $\Delta$  GDP)

Source: Author's calculation

### 3. ELECTRICITY PRICING POLICY IN SERBIA

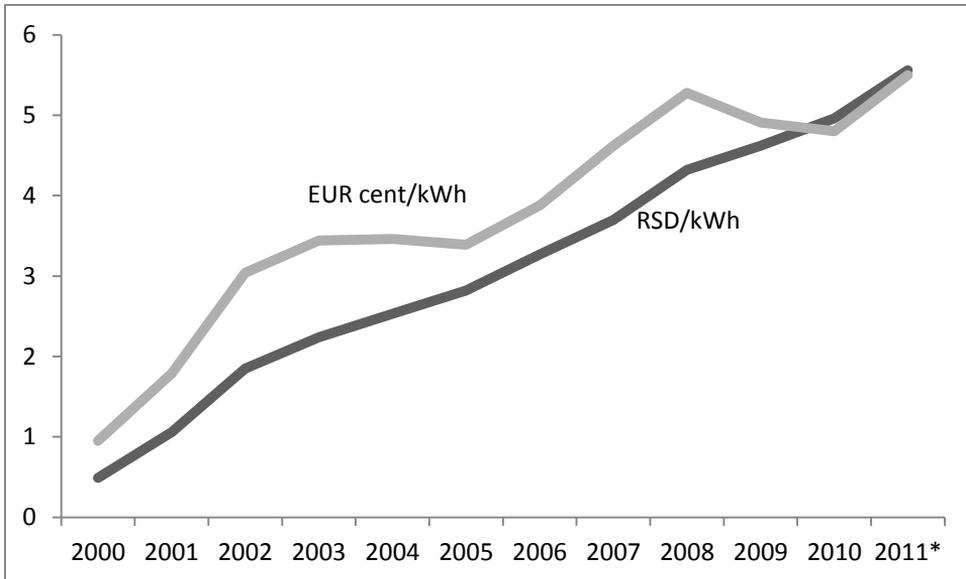
Policy of depressed electricity prices in Serbia has been applied since decades. (i.e. [1]) The first serious attempt to change such a policy was made in 2001, when PE EPS introduced a new tariff system. Thanks to the implementation of the new tariff system, the electricity price was three times increased and more than doubled at the end of the year. In the period 2002-2007 the Serbian Government approved an increase in electricity prices once a year. In 2002 the Government introduced a flat fee of 1.5 kW, which was increased to 2.16 kW in 2003. The limit for the so-called "green zone" was reduced from 600 to 350kWh in 2004. In 2008 electricity price increased two times, at the beginning of the year by 7.6%, and then second time at a mid-year by 8.4%. In 2009 the Government refused to approve electricity price increase due to the general situation in the economy. The latest price increase was in April 1<sup>st</sup> 2011. The official statistics registered that average electricity price in 2011 was 12% higher compared to 2010. Taking into account that the electricity price in Serbia was slightly above 5.5 RSD/kWh (or 5.5 EUR cents/kWh) at the end of 2011, it was the lowest electricity price in Europe. Among the EU countries, the lowest electricity price is in Bulgaria - 6.38 cents/kWh for industrial customers and 6.88 EUR cents/kWh for the average household. (i.e. [14])

**Table 6 Average annual electricity price in Serbia, RSD/kWh and EUR cents/kWh**

	Price in RSD/kWh	Average annual exchange rate	Price in EUR cents/kWh	Price increase in RSD/kWh (%)	Price increase in EUR cents/kWh (%)
2000	0,49	51,72	0,95	/	/
2001	1,06	59,50	1,79	116,72	88,42
2002	1,85	60,75	3,04	73,60	69,83
2003	2,24	65,26	3,44	21,56	13,16
2004	2,53	73,00	3,46	12,64	0,58
2005	2,82	83,19	3,39	11,75	-2,02
2006	3,27	84,06	3,88	15,64	14,45
2007	3,70	80,09	4,62	13,28	19,07
2008	4,32	81,91	5,28	16,84	14,29
2009	4,62	94,12	4,91	6,85	-7,01
2010	4,96	103,00	4,80	7,40	9,40
2011*	5,56	101,95	5,50	12,00	9,90

Source: [15]\* for 2011 author estimation.

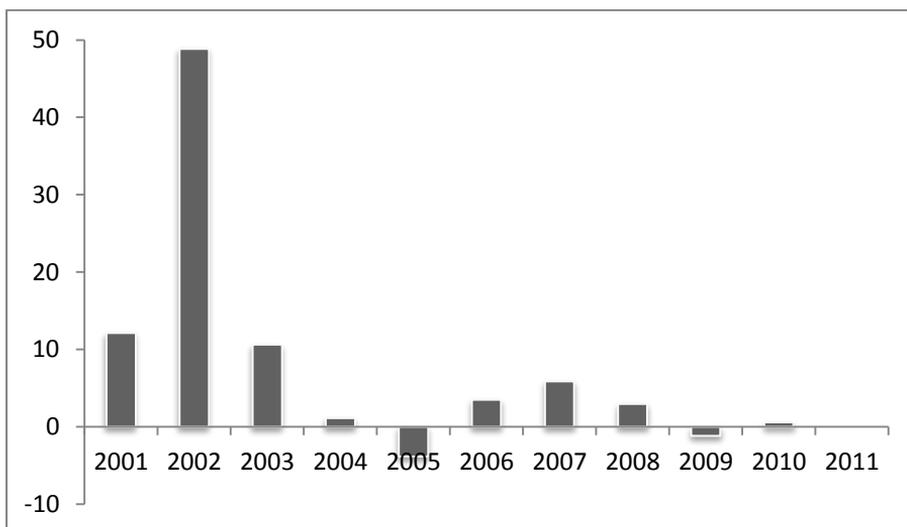
In the period 2000-2009, the average electricity price, expressed in RSD/kWh, increased by 28% per year, while the average price expressed in EUR/kWh increased slightly over 20% per year.



**Figure 46 Growth of electricity price in Serbia**

Source: [15]\* and authors estimation for 2011.

However, if we include the impact of inflation into analysis, the results are significantly changed. The following graph provides an overview of the relationship between growth and electricity price inflation since 2001. It is obvious that success in the attempt to reach economic level of electricity prices was achieved only twice in the last decade. The first attempt, and also the most successful, was carried out in the period 2001-2003 as a result of pressure from the International Monetary Fund and other financial institutions whose support was pressing for reconstruction of destroyed economy. The second attempt, of considerably lower intensity, was implemented in period 2006-2008. In all other years the growth rate of electricity had been more or less at the level of inflation for the said year. Averaging the growth of electricity prices in the period 2005-2010 as well as of incurred inflation, the average electricity prices in RSD during this period grew faster than the rate of inflation by only 0.8%, which is absolutely insufficient for achieving the economic cost of electricity.



**Figure 47 Real increase in electricity prices in %**

Source: estimation of authors.

Electricity prices in Serbia for both households and industry are still among the lowest in the region and, apart from the introduction of new methodologies and tariff systems, these prices are the reflection of absence of new investment for more than 20 years. (i.e. [4]) A number of problems increase the production costs of electric power sector of Serbia. Most are legacies from the 1990s e.g. high technical and commercial losses, problem of payment discipline, etc. The average collection rate has significantly increased in the previous period and reached in 2011 approximately 96%,

although the economic crisis hit industry and markedly reduced payments to PE EPS.

Generally, transferring tariff-setting power from the Government to the Energy Agency of Serbia would help create a credible and predictable regulatory framework. The New Energy Law envisages transferring tariff-setting competence to the Energy Agency of Serbia in October 2012. Much value could be derived by further separating and clarifying each institution's functions—policy making to Ministry, regulation enforcement to EAS, and operations to the company. Separation would limit conflict of interests and political interference, contributing to the sector's commercial and financial viability.

#### **4. EFFECTS OF THE DEPRECIATION OF THE ELECTRICITY PRICE**

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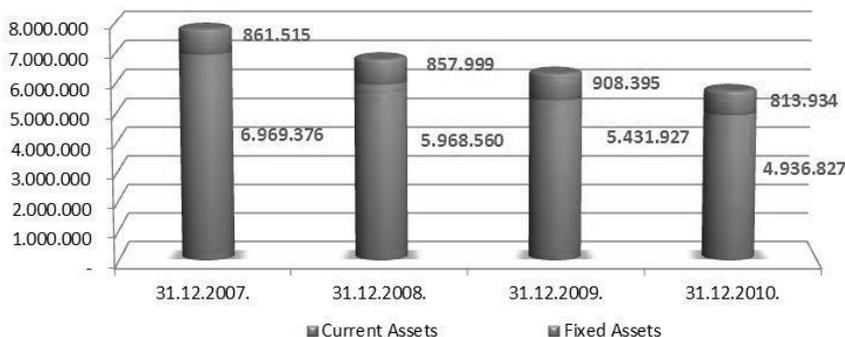
The effects of the policy of low electricity prices can be traced to several levels of observation. (i.e. [8 and 9]) In this paper we will be focused on the direct effects and the impact of electricity prices on business performance of Public Enterprise EPS, which further affect its market position.

EPS is a public enterprise wholly owned by the state. In terms of total operating income, capital value and over 34 thousand employees PE EPS takes first place on the list of the biggest companies in Serbia. Evaluation of business performance of PE EPS was made on the basis of its publicly available financial reports for the period from the year 2007 to the year 2010.

In the period from the year 2007 to 2010, between 85% and 89% of total assets of the PE EPS refers to fixed assets, which is consistent with the characteristics of the industry in which PE EPS operates. In all of the observed years, there is a tendency of declining book value of fixed assets and slight decrease in participation of fixed assets to total assets of the company. In absolute terms, the value of fixed assets of the PE EPS decreased by RSD 31.4 billion or EUR 2 billion as of December 31<sup>st</sup> 2010 compared to the value from December 31<sup>st</sup> 2007. Expressed in relative terms, the value of the PE EPS fixed assets in the same period decreased by 5.7%, observed in RSD, or by 29.2% observed in EUR. One of the causes of decline in the value of fixed assets is high depreciation costs and insufficient level of investment, both in new equipment as well as in repair of the existing facilities.

At the end of the year 2010, the company's fixed assets accounted for 85.8% of the value of total assets. The property, plant and equipment is the most important item of fixed assets, accounting for 85% of the value of total

assets, whose value as of December 31<sup>st</sup> 2010 amounted to RSD 515.6 billion or EUR 4.9 billion.



**Figure 48 Structure of the assets of PC EPS in the period from 2007 to 2010 in 000 EUR**

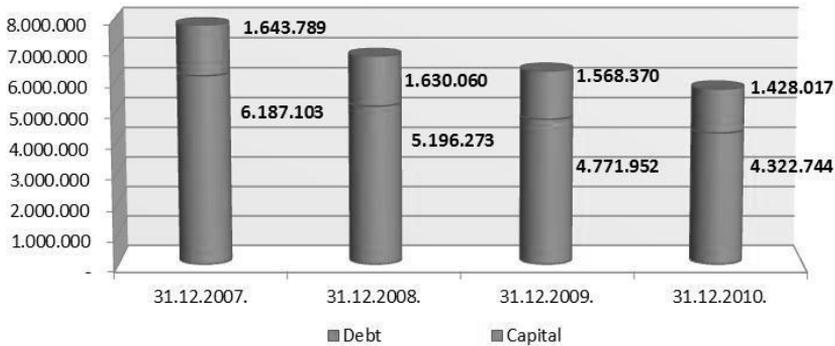
Source: [7]

The book value of the current assets at end of the year 2010 amounted to RSD 85.9 billion or EUR 813.9 million, making the share of total assets of 14.2%. The short-term receivables, investments and cash is the single largest item of the company's current assets (RSD 61.7 billion or EUR 584.5 million), which makes 10.2% of the value of total assets of PE EPS. The largest portion of the mentioned item refers to trade receivables which, at the end of 2010 amounted to RSD 49.4 billion or EUR 468.4 million and it had a share of 8.1% in PE EPS total assets. The rest of the working capital refers to inventories whose values at the end of 2010 amounted to RSD 24.2 billion or EUR 229.5 million and accounted for 4.0% of the value of total assets of EPS. This structure with a high proportion of trade receivables is not a favorable one. Trade receivables are less certain element of the company's assets given the fact that debt collection is not always certain, and the fact that the average collection period is very long.

The company has a significant problem of debt collection that significantly affects its final operation result. The total amount of the provisions for trade receivables as of December 31<sup>st</sup> 2009 amounted to 91.8% of the total provisions for receivables from sale and an even 58.3% of the total gross value of trade receivables. During the year 2009 PE EPS performed a write-off of trade receivables from domestic customers in the amount of 71.7% of its total gross (uncorrected) value. The PE EPS was facing the same problem at the end of the year 2010, when the provisions for trade receivables amounted to 92.1% of the total provisions for receivables from sale and 54.6% of the total gross value of trade receivables. At the end of 2010 the PE EPS made a write-off of trade receivables from domestic customers, which amounted to 67.2% of its total gross (uncorrected) value.

The biggest debtors of PC EPS are large systems (enterprise) in restructuring and some large public companies. Debts of the ten largest debtors of PE EPS at the end of the year 2009 accounted for 36.3% of total net trade receivables. During 2008 and 2009, the total net trade receivables from domestic customers accounted for approximately 19% of the total invoiced revenue from electricity sales.

The structure of funding sources indicates a favorable level of financial security, given the dominance of capital relative to debt during the analyzed period. The share of capital is continually decreasing throughout the analyzed period, as a result of the losses continuously generated in all of the observed years. Accordingly, the share of capital in total funding sources declined from 79% (at the end of 2007) to 75.2% as of December 31<sup>st</sup> 2010. At the end of the year 2010, debt mainly consisted of short-term funding sources (47.7%), followed by long-term sources of funding (30.6%), deferred taxes (15.7%) and long-term provisions (6.0 %).



**Figure 49 The structure of PE EPS funding sources from 2007 to 2010 in 000 EUR**

Source: [7]

The company mostly borrowed from the Paris Club of Creditors and the international financial institutions (EBRD, KfW). In the total long-term loan debt, the Paris Club of Creditors participates with 46.5%, while the international financial institutions participate with 27.0% (EBRD, KfW, EIB, WB IDA). Governments of China, Russia and Poland have significant share in total long-term loan debt of 11.4%.

Operating income and expenses has significant share in the structure of total income and expenses, while the share of financial income and expense and other income is relatively low. During the whole observed period other expenses have a significant share in total expenses of the company, especially in the year 2007 when it reached nearly RSD 100 billion (EUR 1.2 billion), incurred due to negative effects of the property and

equipment valuation (in the amount of RSD 84.8 billion or EUR 1.1 billion). In general, the reason for such a high share of other expenses in the total expenses of the company is a high amount of impairment of assets, except in the year 2007 when the reason was negative effects of the valuation of assets. The share of certain categories of income, expenses in total income and expenses of the company are presented in the table below.

**Table 7 The structure of income and expenses of PE EPS from 2007 to 2010**

The structure of income	2007	2008	2009	2010
Operation income	91.7%	93.0%	93.0%	89.7%
Financial income	6.5%	5.3%	5.6%	7.2%
Other income	1.8%	1.7%	1.4%	3.1%
Total income	100%	100%	100%	100%
The structure of expenses	2007	2008	2009	2010
Operating expenses	57.2%	84.5%	82.0%	81.4%
Financial expenses	1.4%	5.9%	3.7%	6.4%
Other expenses	41.4%	9.6%	14.3%	12.2%
Total expenses	100%	100%	100%	100%

Source: [7]

During the observed period, the largest share of operating income was reported by revenues from electricity sales with a share ranging from 85.7% to 89.3%. The rest of the operating income referred to revenues from sales of coal for industrial consumption, heat and technical vapor, grants and subsidies and investments for their own use.

The growth rate of operating income of the company in 2008 was 21.6%, mainly due to 22.8% growth of revenue from electricity sales. Operating income in 2009, compared to 2008, recorded much smaller growth rate of 5.2%, primarily due to the lower rate of revenue growth from electricity sales, which in the year 2009 (compared to the previous year) amounted to 8.0%. Operating income in 2010 amounted to RSD 177.1 billion or EUR 1.7 billion, while the recorded annual growth rate, expressed in RSD, was 11.0% or, expressed in EUR, 1.4%.

Operating expenses of the PE EPS increased by 13.7% in 2008 compared to the previous year, while in 2009 they were reduced by 8%, mainly due to the reduction of direct operating expenses by 17.4% and depreciation costs by 19.1%. Operating expenses in 2010 amounted to around RSD 157.9 billion (EUR 1.5 billion), recording annual growth expressed in RSD of 10.2% and 0.6% expressed in EUR. The main reason for operating expenses growth in 2010 was the increase in direct operating expenses by 43.7% expressed in RSD or 31.3% expressed in EUR.

In the structure of operating expenses, the share of direct operating expenses (purchase of electricity and the cost of materials and fuels)

ranged from 15.9%, as it was in 2007, to 20.8% in 2010. Greater relative share than direct operating expenses had depreciation, labor costs and maintenance costs. The share of depreciation costs in total operating expenses has decreasing tendency from 33.8%, as it was in 2007 to 22.8% in 2010. At labor costs, as opposed to depreciation expenses, their share in operating expenses had increasing tendency from 23.0%, as it was in 2007 to 26.2% in 2010. The average share of the costs of maintaining and operating costs in the observed period was 11.7%.

In 2007 and 2008 the PE EPS recorded a negative operating result that amounted to RSD 16.4 billion (EUR 205.4 million) and RSD 9.2 billion (EUR 112.9 million) respectively. In 2009 and 2010, the total operating expenses were at the level of 93.0% and 92.3% of the operating income, respectively, making the gain on the business level of RSD 10.8 billion (EUR 115.2 million), and RSD 13.2 billion or EUR 127.9 million respectively.

In the period from 2007 to 2010, the PE EPS recorded a negative net result from operations on a consolidated basis. The positive business and financial result in 2009 and 2010 was offset by negative net result on the level of other expenses and income. The level of other expenses is more than twice the operating profit achieved in 2009 and by nearly 80% higher than the operating profit achieved in 2010. The level of net loss decreases during the period, but the PE EPS still has not reached the value of sales that will enable it to reach the level of break-even point of profitability.

Liquidity ratios are below the theoretical optimum, which indicates that company's current liabilities were not covered by working capital, further indicating that liquidity of the company is deteriorated. Current liquidity of the PE EPS was achieved by optimizing the aspect (relationship) of turnover days between the different items of working capital and short-term sources of funding.

The Long-term financial equilibrium is not achieved in either year of the observed period, as the PE EPS recorded a negative net working capital. In other words, the fixed assets have not been fully financed from the long-term sources. Net working capital is continuously decreasing from year to year, so that, at the end of 2010, the value of current assets was less than the short-term liabilities and deferred tax liabilities for RSD 14.1 billion, or EUR 133.3 million. Thus, during the observed period, the PE EPS was able to finance short-term liabilities from working capital but not the deferred tax liabilities.

The debt ratios increased during the observed period which indicates the increase in total debt of the company. However, the values of the aforementioned indicators point to a beneficial level of financial security, given the dominance of the capital over debt throughout the analyzed period. Despite the high share of capital in total sources of financing during the analyzed period, solvency indicators recorded values below the theoretically desired level.

Return on operating assets (ROA) show the profitability of the company in relation to the average commercial property engaged. Since the company generated positive operating result only in 2009 and 2010, the rate of return on commercial property was reported only in the said years, of modest 1.8% and 2.1% respectively.

Return on equity (ROE) by combining the rate of net income and equity turnover ratio shows the amount the company earned on the basis of each unit invested by the owners. Given that the net rate of gain over the net income influences the creation of return on equity, it can be concluded that the PE EPS continually decreases the level of equity.

## **5. CONCLUSION**

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The policy of depressed electricity price has many disadvantages. In this paper we focused on the price effect on the functioning and sustainable operation of the PE EPS. The PE EPS is a public enterprise with relatively long-term perspectives of sustaining the state-owned majority control and with the possibility of involving other shareholders in the company's ownership structure.

The necessity for change of current electricity price policy comes from the fact that are at risk: the level of production and regular supply of customers, enabling development of the PE EPS and electricity market opening, reaching the required standards of environmental protection, the existence of a significant part of the local economy oriented toward the PE EPS .

The capital value of the PE EPS is highly correlated with electricity prices. For any partial privatization of the PE EPS, examples from past experience where electricity prices increased significantly after the change of ownership should be avoided. In other words, if the electricity price policy continues to be dominantly influenced by the social factors, sales prices for shares in EPS will be low, and consequently the government revenue from the sale. And if the increase in electricity prices is inevitable, it seems that there is no reason to wait for new ownership structures to be implemented.

This paper analyzed the business performance of the PE EPS in the period from the year 2007 to 2010. It is evident that the current policy of low electricity price has a direct impact on the company's business performance, and the following indicators speak in favor of the said:

- negative net result from operations in all observed years;
- the level of net loss was in decline over the observed period, but the company still did not reach the value of sales to allow the level of break-even point of profitability;

- negative net result dramatically reduced the possibility of realization of investment, repair and maintenance, which along with the high cost of depreciation, resulted in a decrease in value of fixed assets;
- in the structure of current assets, trade receivables have the largest share, which are the less certain element of the current assets as debt collection is not always the case, and the average collection period is long;
- long-term financial equilibrium was achieved in neither of the observed years, since the PE EPS recorded the negative net working capital in all observed years;
- there is a pronounced tendency of debt growth in all of the mentioned years;
- liquidity is deteriorated, while the solvency indicators are under the theoretical desired level - the rate of return on operating assets (ROA) is positive only in 2009 and 2010, while the rate of return on equity (ROE) is negative throughout the observed period.

To ensure financial sustainability of the system it is necessary to respect the basic principles of tariff policy. (i.e. [5 and 6]) In addition to increasing electricity prices, without which the overall situation in the PE EPS cannot significantly improve, the operation results could be improved among others by cost reduction within the PE EPS. Rationalization of operating costs would be realized through the reduction of staff, separation of unprofitable non-electric activities, reduced fuel consumption, raw material and other costs, better control of financial flows and the application of procurement procedures to be applied in the public sector. Through the continued maintenance, high exploitation discipline, and along with cost reduction, all the technical requirements would be utilized to the maximum. As a result, along with economically justified price of electricity, the PE EPS business operations would be made profitable.

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