
II. THE ENERGY SECTOR – A SECTOR OF HIGH CORRUPTION RISK⁹

2.1. SOURCES OF CORRUPTION RISK

The energy sector is among the most important industries in the national economy with a major share in the industrial added value.¹⁰ Electricity generation in 2007 was 43,297 GWh annually.¹¹ While taking into account the technical and commercial losses, some 27,000 GWh out of this quantity are hypothetically sold at a value exceeding 2 billion BGN net of the VAT. Besides, there is the added value in the other energy sub-sectors, such as the production of and trade in coal and other solid fuels, gas and heating, the extraction of oil and natural gas, and the management of water energy resources. Therefore, in order to protect public interest and prevent the abuse of large public funds, it is of key importance to ensure that the sector is managed responsibly and according to best practice.

Traditionally a sizeable share of the companies with the largest sales in Bulgaria operates in the energy sector. For 2008, 17 companies in the energy sector, excluding those in oil refining and trade, were in the Top 100 companies ranked by their revenue. However, those high performers in sales do not occupy leading positions in terms of investment efficiency. The profit of producers and distributors of electricity decreases over time, whereas the contractors implementing public procurement contracts awarded by the biggest energy companies are considered to be some of the most profitable businesses in the country.

Increases in the gas and energy prices boost the sales side and partially alleviates the problem. However, a closer look on the expense and provisions side in the official financial statements will show lack of efficiency and transparency. Profitability remains low both compared to other sectors and to that of similar companies abroad. Section IV discusses in detail public companies' management and financial standing issues. Although NEC ranks top 3 in the country on sales, it falls down to number 16 on profits. Maritza Iztok, Toplofikacia and Bulgargaz are in the same bucket of poor performers.

⁹ *Corruption in Public Procurement: Risks and Reform Policies*, Center for the Study of Democracy, 2007.

¹⁰ The gross added value of the country was reported by the NSI to be slightly over 36 billion BGN in 2005, out of which industry accounted for some 11 billion BGN (26.1%). See www.nsi.bg/gdp/

¹¹ Eurostat.

TABLE 8. RANKING OF ENERGY COMPANIES IN TOP 100 COMPANIES (RANKED ON SALES)

Ranking by sales		Company	Sales		Profit/Loss		Ranking by profit (ascending order)
2008	2007		2007	2008	2007	2008	2008
14	17	NPP Kozloduy (part of BEH)	634,157	835,564	3,459	70,110	7
34	30	CEZ Distribution Bulgaria	359,900	389,600	54,900	56,600	12
22	24	TPP Maritza-East 2 (part of BEH)	428,445	534,801	22,182	48,148	15
3	3	National Electrical Company (part of BEH)	2,494,589	2,975,656	41,479	46,837	16
35	35	EVN Bulgaria Electrorazpredelenie	321,996	375,632	28,623	33,351	21
75	66	Brikel	176,800	184,487	23,699	25,341	27
41	43	Enel Maritza-East 3	271,466	314,504	31,859	20,030	30
92	*	Bulgartransgaz (part of BEH)	150,363	148,418	42,733	15,618	36
10	9	CEZ Electro Bulgaria	910,500	1,076,800	14,200	14,400	38
9	15	Overgaz Inc.	667,647	1,098,224	20,248	11,147	47
28	*	Electricity System Operator (part of BEH)	357,433	453,070	9,433	6,567	57
17	22	EVN Bulgaria Electrosnabdiavane	512,049	642,943	73	6,118	58
29	29	Mines Maritza-East (part of BEH)	360,565	421,360	8,018	1,648	69
98	*	Energy Finance Group	50,073	139,502	561	889	73
83	67	TPP Bobov Dol	174,423	173,211	5,077	-1,495	80
32	28	Toplofikacia Sofia	365,635	394,188	-15,004	-58,325	91
6	*	Bulgargaz (part of BEH)	1,113,088	1,433,104	86,989	-90,543	92

Source: Capital Weekly

TABLE 9. RANKING WITHIN THE ENERGY SECTOR (RANKED ON SALES)

Ranking		Company	Sales (1000 BGN)			Profit/Loss (1000 BGN)				Profitability %
2008	2007		2006	2007	2008	Change %	2006	2007	2008	
1	1	National Electricity Company	2,226,888	2,494,589	2,975,656	19.28	32,163	41,479	46,837	1.57
2	*	Bulgargaz	1,203,773	1,113,088	1,433,104	28.75	114,557	86,989	-90,543	-6.32
3	3	Overgaz Inc.	437,895	667,647	1,098,224	64.49	20,371	20,248	11,147	1.02
4	2	CEZ Electro Bulgaria	70	910,500	1,076,800	18.26	2	14,200	14,400	1.34
5	4	NPP Kozloduy	739,724	634,157	835,564	31.76	4,712	3,459	70,110	8.39
6	5	EVN Bulgaria Electrosnabdianavane	266,000	512,049	642,943	25.56	21,000	73	6,118	0.95
7	6	TPP Maritza-East 2	361,685	428,445	534,801	24.82	8,473	22,182	48,148	9.00
8	*	Electricity System operator	-	357,433	453,070	26.76	-	9,433	6,567	1.45
9	7	Toplofikacia Sofia	340,834	365,635	394,188	7.81	-5,582	-15,004	-58,325	-14.80
10	8	CEZ Distribution	843,797	359,900	389,600	8.25	67,451	54,900	56,600	14.53
11	9	EVN Bulgaria Electrorazpredelenie	177,600	321,996	375,632	16.66	6,200	28,623	33,351	8.88
12	11	Enel Maritza-East 3	242,030	271,466	314,504	15.85	80,243	31,859	20,030	6.37
13	12	Brikel	160,349	176,800	184,487	4.35	11,864	23,699	25,341	13.74
14	13	TPP Bobov Dol	150,148	174,423	173,211	-0.69	4,226	5,077	-1,495	-0.86
15	*	Bulgartransgaz	-	150,363	148,418	-1.29	-	42,733	15,618	10.52
		Average for top 15	550,061	595,899	735,347	23.40	28,129	24,663	13,594	1.85

Source: Capital Weekly

In the face of the shrinking profits of monopoly producers over the period 2003 – 2004, Risk Engineering was the company with the third largest sales and, at the same time, it was awarded the largest public procurement contract for repair works of the facilities at Kozlodui NPP. Moreover, Risk Engineering ranked first in terms of return on investment and second in terms of profitability. It would be interesting to compare the growth of the sales and profitability of NEC's intermediary companies in the exports of electricity. It cannot be done, however, due to the restricted access to information.

The great turnovers in the context of the major intervention of the government and the lack of competitive environment expose the sector to substantial corruption risks. In 2004, the then Ministry of Energy and Energy Resources (MEER) admitted that the corruption risk "remained high" in that sector due to:

- the insufficient legal regulation at the national and institutional levels on the status and functions of the specialized anti-corruption structure at the MEER;
- the large stakes and the substantial financial resources in the energy sector;
- the process of privatization of the electric distribution companies;
- the large investment projects in terms of both number and value;
- the pressing need for strengthening of the capacity of inspectorates;
- the need for introduction of a training system for the people involved in the combat against corruption;
- the need for development of a policy to increase salaries as a factor for the reduction of the corruption risk.¹²

But those observations did not bring about any real practical measures. Moreover, there are many signs of the growing level of corruption in the energy sector. One of them is the increased share of the exported electricity by private intermediaries rather than by NEC. Besides, the corruption potential in the sector is used very skillfully and intensely under the guise of claims that the highest political and national interests are protected in this way. What are the reasons and conditions for this situation?

First, the energy sector suffers from lack of competition and from inefficient government regulation, both of **which create conditions that incur excessive costs at the expense of consumers**. They generate considerable corruption resources and opportunities for their distribution opposite to the logic of the market.

Energy activities are heavily regulated. The Law on Energy defines a wide range of activities subject to regulation: generation, imports and exports, transmission, transit transmission, distribution of electricity and heating, natural gas, oil and oil products, trade in electricity and heating and natural gas, and use of renewable energy sources. However, the regulatory body, the **State Energy and Water Regulatory Commission**

¹² *The Energy Sector Has a Huge Kick-back Potential, The Monitor daily, 21 December 2004.*

(SEWRC), is not protected against the pressures which those managing the sector might exert in pursuit of personal interests. This is partly due to the **closed circle of energy experts** and also to the huge financial stakes. Since there are no opportunities to seek collective (group) remedies, citizens are discouraged to withstand their rights before SEWRC because the personal interest of individuals has too low individual value compared to the legal defense costs.

SEWRC is required by law to control electricity producers and distributors so that to prevent them from using their monopoly position on the market to the detriment of consumers. But it seems that the price control is focused primarily on the electric distribution companies. However, distribution is only the final stage in the whole chain. In fact, in a monopoly environment distributors are expected to take up the protection of the end consumers without any opportunities to influence the other participants upstream all the way to the producers and the importers of energy sources. Thus the regulatory control of electricity producers remains very limited. They are shielded by their principal and the discontent of consumers can easily be re-directed to the suppliers which often operate even under the acceptable standards of service, although they have been privatized. But the law requires comprehensive auditing of the way in which producers form their prices at which they sell to the distributors (electric distribution companies or EDCs).

A formal procedure does exist. The business plans of producer companies are examined and approved by SEWRC. They can well envisage excessive expenditure that nobody would control because of the lack of capacity at the regulatory authority and sometimes also because of the inability of the companies themselves to draw up business plans. No precise economic analysis is carried out to check the way in which companies are managed or the practical need for one or another kind of expenditures and mainly the efficiency of the investment policies calculated in prices per unit of capacity and compared to the average European efficiency benchmarks.

The management of NEC and Kozlodui NPP use all kinds of pretexts to warn that the price of electricity would be increased soon. In 2005, for example, NEC made forecasts that the price of electricity would grow by 30 % upon the closing down of units 3 and 4 of Kozlodui NPP. Later on, NEC came out with new arguments, claiming that because of the coal price increase the price of electricity had to go up by 15 % in July 2006. But the real share of coal in the prime cost of electricity revealed that such an increase of the price of electricity would correspond to soaring of coal prices by 50 to 60 percent, which was far from reality. The growing speculations with the estimated costs for the maintenance of de-commissioned nuclear reactors have a similar purpose. But the annual reports of Kozoldui NPP outline a different picture of the costs needed to maintain operating reactors. About 30 % of the costs go for nuclear fuel. 18 % of the sales revenues are remitted to the special funds. Depreciation costs account for some 23 %. They discontinue when reactors are closed down. Another 15 % are labour costs and 16 % are operational costs and they should be greatly reduced after the decommissioning of the units.

Such price signaling is intended to justify the demands for increases in the electricity price. However, there needs to be more public information on the economic and financial grounds behind price corrections, so that both consumers' and producers' interests are taken care of.

Second, the sector is strongly dependent on the energy sources supplied under monopoly import terms and conditions. The local entities enjoying the trust and confidence of energy suppliers actually dominate the domestic market. It is not difficult for them to create the impression that there is no alternative to their involvement in the transactions. Since the energy imports depend on many geopolitical factors, one can assert that the energy market is characterized by strong political influences and it is a field of conflicts among divergent economic interests. This has a peculiar impact on the domestic energy market. Political and economic circles take shape in close connection with countries producing energy sources and with corporate structures dominating in them. Their success results from the penetration into the highest political levels over time, regardless of their political affiliation, on the one hand, and on the other, on their connections to the external energy suppliers who are typically linked to the highest political groups in their own countries. It is at this level that the influence of the business environment structured in this particular way is exerted on the energy security in the country and the region. Thus, the import of energy sources becomes a serious channel for political influence coming from outside. Besides, the monopoly position of importers gives them the opportunity to apply prices exceeding those of the international markets.

Quite indicative in this respect is the import of nuclear fuel for Kozlodui NPP. Each year one-third of the fuel in the reactors is to be replaced. Units 5 and 6 of the power plant need some 55 tons of fresh fuel on an annual basis. The only producer of nuclear fuel for this type of reactors is Russia. Furthermore, nuclear fuel is imported through intermediaries and the contract was amended to the detriment of the Bulgarian side a few years ago. As a result, the nuclear power plant purchases the Russian fuel at a price which is about 22 % higher than that of the international markets.¹³ Besides, the Russian nuclear fuel is known to be of poorer quality than the fuel offered by Western producers. However, that was not an obstacle for the nuclear power plant which signed a supply agreement valid until 2020.

Third, the issue of the export of electricity is similar, although with a reverse logic. Here again, intermediaries are involved and the professional community believes that there is no way to avoid them.

However, it should be noted that actually NEC carried out the export of electricity on its own several years ago. The practice of a widespread use of intermediaries has become quite common for the last 4 – 5 years. NEC officially announced that exports were carried out mainly through intermediaries for the first time in its 2004 annual report, which read that "the quantity of the electricity exported in 2004 through traders in

¹³ *Banker weekly*, № 23, 10 – 16 June 2006.

BOX 1. EXPORT OF ELECTRICITY

NEC carries out the transmission, import and export of electricity and the traditional export markets are the countries on the Balkan Peninsula. For the last few years, this most profitable activity has been in the hands of private traders in electricity. In 2003, the annual report of NEC pointed to exports of 5.45 billion kWh but did not specify the percentage of exports through intermediaries. In 2005, exports amounted to 7.6 billion kWh (2005 Annual Report of NEC) and the share of intermediaries was not specified. At its meeting held on 29 June 2006, the Parliamentary Anti-corruption Committee examined a NEC letter which made it clear that 90 % of the exports in 2005 were carried out through intermediaries. The names of the private exporters were not mentioned and NEC explained their involvement with the willingness of the electric companies in the neighboring countries to work with intermediaries and also with the claim that NEC could not afford deferred payments for 60 days and therefore it could not win in public tenders. The NEC annual reports make it clear that the revenues of NEC from exports were 3.1 eurocents per kWh on the average. “The bidders in the public tender for import of electricity offered to supply only a half of the quantity of electricity that Macedonia needs. The Macedonian electric transmission system operator (MEPCO) wants to purchase 0.862 billion kWh to meet the needs of the country until the end of April 2007. The lowest bid quoted 5.6 eurocents per kWh in April and 8.98 eurocents per kWh in the winter months.” Obviously the price differential is at least 0.5 eurocents per kWh and it may well reach over 6 eurocents in the winter months. Even in “the worst scenario” from the perspective of intermediaries, the difference would amount to some € 35 million or close to 70 million BGN. These are the revenues which NEC gives up (although they are bigger than the profit reported in 2005) and leaves to intermediaries.

Source: CDS, Corruption in Public Procurement: Risks and Reform Policies, 2007

electric power accounted for 81.3 % of the total exports”. In 2005, this figure reaches almost 90%. There exist no economic justifications for this situation because, in practice, NEC holds the monopoly on the purchase of electricity for export purposes; it has full monopoly over the high-voltage network that is used to bring the electricity to the neighboring countries to which the exports are almost exclusively oriented.

In general, intermediaries in the export of electricity belong to the same business, which control the importation of energy sources. This has become possible because the export of electricity is launched in public as a strategic business project of Bulgaria. Many economic analyses, as mentioned in Section I, prove that the prospects might not be so bright for this type of exports since the exports react to shrinking demand.

Besides, the size of NEC’s revenues from exports is far below the levels of a strategic national priority. In 2004, for instance, exports accounted for 17.2 % of the electricity generated and provided 18.2 % of the revenues.¹⁴ Had it been true that NEC made a large profit from the export of electricity, exports would have generated, say, 30 – 40 % of the revenues. The NEC annual reports for 2004 and 2005 reveal that the average export price per kWh of NEC was less than 0.1 eurocent above the price on the domestic market, in spite of the much higher price on

¹⁴ See 2004 Annual Report of NEC.

the international market. Undoubtedly, such practices are harmful to the state-owned enterprise, to the government budget and to the consumers but they are beneficial to the intermediaries.

The need for intermediaries is justified in various ways but most frequently it is done as a result of their greater flexibility and ability to adapt more easily to the market requirements in comparison to NEC. For instance, intermediaries claim to be capable of offering deferred payment of 60 days for the supply of electricity to their customers, while NEC is believed to be unable to do so. If there was an export contract though, any commercial bank would be prepared to lend to NEC. The argument that the use of intermediaries contribute to the market liberalization process is similar. It is claimed further that “companies in the neighboring countries are willing to work with intermediaries”.¹⁵ However, it is perfectly clear that if NEC were a private company, it would not allow any single kWh to be exported by a competitor.

Fourth, the sector is characterized by **high technical and environmental risks and it affects the national security**. All this naturally supports the arguments about restricting the access to information and the debates on technological issues. In many cases, it is possible for information to be concealed without any sanction through its unjustified classification. This is particularly relevant to nuclear energy. The Law on the Safe Use of Nuclear Energy puts safety on top of the agenda for understandable reasons. Article 3, para 2 reads that “in the use of nuclear energy and ionizing radiation and in the radioactive waste management nuclear safety and radiation protection shall have priority over any other aspect of these activities”. This creates a substantial loophole for awarding public procurement contracts without any competition or even without any formal procedure. Thus, all other aspects of the public interest can be sacrificed in the name of safety without sanctions, including such aspects as cost efficiency, openness, transparency, competition and etiquette. The reference to safety has turned into a mantra in the nuclear energy sector which is not subject to discussion. It turns out that the legal provisions quoted above become the universal excuse for the violation or neglect of other laws or rules of ethics.

The high public and international sensitivity to nuclear safety issues turns into justification for the frequent and sometimes uncontrolled increase of the costs of Kozlodui NPP. The data from the annual reports of the nuclear power plant show that the prime cost was 0.034 BGN per kWh in 2001. In 2002 (prior to the closing down of Units 1 and 2), it increased by as much as 15 %. The same rate was reported in 2003, reaching 0.044 BGN. Throughout the period there was no increase of the prices of metals or nuclear energy, the exchange rate of the U.S. dollar dropped substantially, the facilities at the nuclear power plant were better utilized

¹⁵ Minutes from the meeting of the Parliamentary Anti-corruption Committee, 29 June 2006. A representative of NEC justified the need for intermediaries in the following way: “When state-owned companies in the neighboring countries, to which we exported about 10 %, and these are the companies of Macedonia, Serbia, Greece, Kosovo and Croatia, are no longer willing to buy, I want to ask whether the remaining 90 % of the output generated by our facilities should stay like monuments or their output should be sold somewhere”.

and staffing levels were reduced. Nevertheless, the prices of nuclear energy continued to grow in Bulgaria. The only plausible explanation could be investments in safety, although EU grants worth millions were allocated for that purpose. The comparison to the financial performance of nuclear power plants of the same type in market economies points to inefficiency of the generation of nuclear power instead. The operational costs of U.S. nuclear power plants were about \$ 0.016 per kWh on a net basis in 2004. The operational costs of French nuclear power plants were even lower. The adjustment to identical terms reveals that the operational costs of Kozlodui NPP were approximately 40 % higher than those of U.S. nuclear power plants. Such large discrepancies could hardly be explained by economic arguments because the costs incurred for nuclear fuel, materials, spare parts and others in the nuclear energy sector are at international prices and few of them are specific.

The energy experts in Bulgaria are not that many and they could hardly be called independent. Almost all of them are employed in the sector or provide consultancy services to it. The need for adequate expertise makes the participation of the the general public in the public debate very difficult, especially when the issue at stake is the making of crucial decisions with far-reaching consequences. In fact, civil society seems to have taken part in the discussion of only two sets of issues: the protection of the environment and the expediency of the closing down of the first units of Kozoldui NPP. This situation is also made worse by the underdeveloped consumer protection mechanisms and the lack of legal remedies against decisions of great importance to society. The expert parlance and the closed nature of the system make it difficult for external institutions to exercise control and to prove the liability in formal court proceedings. Any attempt at proving some violation would inevitably grow into a technical debate on the expediency of one or another decision. The bodies which administer justice would practically be unable to find independent and unbiased experts capable to justify it.

All this is particularly relevant to **experts in the nuclear sector**. The debate on the closing down of Units 3 and 4 of Kozlodui NPP and the construction of Belene NPP was actually diverted from economic expediency and channeled into abstract national interest deliberations. The arguments that were put forward sought to appeal to infringed national pride or a professed concern about higher prices hurting the consumer. The discussion on the price of the electricity generated by the nuclear power plant held at the expert level was not reported in the media in a way that could be comprehensible to consumers. Thus the arguments that nuclear energy was not the cheapest one and it could even prove to be the most expensive, taking into consideration most of the decommissioning costs and other price-formative factors, including the price of attracted financial resources over time, did not reach the public. Technically, this process has been going on for decades; the personnel of the nuclear power plant is numerous and the nuclear waste is not stored or disposed of free of charge. Both the public opinion and the media were not impressed by the disclosed data or the lack of explanation of the depreciation allowances at the nuclear power plant or the continuous growth of the investment in facilities subject to closure or the

lack of clear explanations of the exact price of the electricity generated there.¹⁶

Finally, whether privatization could be a solution to these risks is a key issue. Privatization per se cannot resolve efficiency problems against a non-existing market competition, particularly given the public mistrust in its transparency. Still, what makes corrupt practices in the privatization of the energy sector different from those in the other sectors of the economy? Given that a sizeable portion of the market is monopolized, it is not so much a matter of corruption in the privatization process but an opportunity for corrupt practices in the private monopoly under inefficient state regulation. A large percentage of potential buyers with predominant or exclusive government stake (although some state-owned enterprises are public) is typical for the energy sector. In fact, the old schemes of government officials draining resources out of the energy enterprises are being replaced by schemes to be applied by foreign officials. If the main objectives of the privatization are to promote the market and enhance efficiency through the involvement of the private sector, this legislative approach should be defined as inadequate, to say the least. The same companies that controlled both the input and the output of state enterprises are still involved but now as intermediaries in the import and export of raw materials and electricity. Their earlier incarnation as consultants in the privatization process was substituted by them being import or export intermediaries. The reason for this adaptation is related to their continued influence in SEWRC and the Ministry of Economy, Energy and Tourism (MEET).

An indirect indicator of the quality of buyers is the price offered for the facilities to be privatized. In the course of the history of Bulgarian Privatization there have been no other cases when packages of shares had price quotation differences of dozens of times at the same point of time. This could mean that either the buyers count on fundamentally different development strategies for the privatized company and, as a result, bids differ as much as 1:30 or more, or that they have no clear idea of the management of a private company or that unequal treatment is involved and some bidders have more information at their disposal than others. The problem is that the Law on the Privatization and the Post-privatization control does not allow participation of Bulgarian buyers with predominant state or municipal stake but it allows participation of buyers with predominant state interest from other countries. It is no surprise that the only facilities suitable for privatization and for attracting foreign investment have turned out to be the several larger electric distribution companies. Of course, their attitude to businesses and consumers cannot be substantially different from that of the state-owned companies. They turned to be the convenient culprits for the growing electricity prices and the energy shortages which have occurred in some regions. Thus they unwittingly became a convenient excuse for the excessive expenditures in the power plants and in the transmission phase at the expense of the consumers. The ongo-

¹⁶ The price should be the sum total of two components – one for the facilities and one for the generation of electricity. It should be identical to the electricity purchase price but this is not the case in reality and there are no satisfactory explanations to this effect.

ing privatization process continues to turn into a clash between domestic and foreign capital, where foreign interests are sometimes represented by state-owned enterprises (including a publicly quoted one), whereas domestic capital does not enjoy the trust and confidence of the general public. The only exceptions are the several electric distribution and district heating companies. On the other hand, since NEC and Bulgargaz are on the list of companies that are not to be privatized for years to come, the attempts to privatize certain elements of their operations – such as the exports of electricity in the case of NEC – are of increasing interest.

In this context, an issue of considerable public interest is whether privatization is appropriate if it only leads only to the replacement of domestic corrupt practices by foreign ones beyond the jurisdiction of the Bulgarian state and often also beyond that of the European Union. This also sets international anti-corruption efforts in an entirely new context. It is perfectly possible for the management of a Bulgarian enterprise to be involved in foreign corrupt schemes but affecting mainly and only the interests of Bulgarian consumers. The simplest case is the public procurement at a local enterprise, where corruption takes place abroad and hence the Bulgarian law enforcement authorities are unable to prevent or prosecute it. One of the possible illustrations refers primarily to the public procurement of imported energy sources.

2.2. PUBLIC PROCUREMENT IN THE ENERGY SECTOR

The energy sector has always made huge investments in comparison to the other sectors of the economy, regardless of the economic condition of the country. According to a survey of the Bulgarian Energy Chamber, energy enterprises have planned investments of 1,178 million BGN which is 150 % more than the level in 2006.

TABLE 10. GROWTH OF INVESTMENTS IN THE ENERGY SECTOR 2006 – 2007 (MILLION BGN)

	2006	2007
Kozlodui NPP	82	100
NEC	243	412
Generation of electricity	197	357
Distribution of electricity	200	280
District heating companies	52	29
Total	774	1,178

Source: Bulgarian Energy Chamber

In some cases, such investments are necessary and justified in terms of their type but not in terms of their amount.

Currently, for instance, the harmonization with the EU environmental protection standards is underway. Even the most conservative estimates point to hundreds of millions of Euros. The adjustment involved the construction of desulphurization systems in all thermal power plants and this measure enjoys sufficient public approval. How-

ever, there is always the risk even for the most appropriate measures to create favorable conditions for abuse so that to substantially exceed the

real expenditures needed. Energy investment projects are typically quite expensive. Their average price is many times higher than that in the other sectors. It is easy to conceal corrupt payments in such projects which most frequently go through the ubiquitous consultants. The value and nature of these projects inevitably call for the involvement of an engineer consultant who exercises a number of delegated state control functions as prescribed by law.

It is only natural for these large investments in the sector to have at least three energy companies ranking among the largest contracting authorities under the *Law for Public Procurement (LPP) and Regulation for Small Public Procurement (RSPP)*. According to the data from the Public Procurement Agency, in terms of the value of the public procurement contracts awarded over the period from 2004 and 2006, those were NEC EAD; Maritsa-East Mines EAD, Radnevo; Maritsa-East 2 TPP, and Kozoldui NPP. These four companies have awarded contracts worth more than 8.5 billion BGN between 2004 and 2006, accounting for 77% of the total value of the public procurement contracts awarded by the top ten contracting authorities for the same period. In 2009, the share of Public Procurement going to the energy sector is still considerable. We do not have data on the value of the contracts, but in number the energy sector is clearly among the leaders with 25%.

Since, according to the same data for 2004 – 2006, about two-thirds (66.5%) of the total value of public procurement are contracted by sectoral contracting authorities, it can be concluded that **energy companies have structural significance for the public procurement sector and they have appropriate feedback mechanisms to influence the market of certain supplies, services and construction works**. Besides, one should remember that the available data refers only to the public procurement contracts awarded under the LPP and RSPP. The law provides for the option to award contracts without holding public procurement procedures under certain thresholds – a provision commonly used to award contracts to pre-selected candidates.

TABLE 11. NUMBER AND VALUE OF PUBLIC PROCUREMENT CONTRACTS IN THE ENERGY SECTOR (1 OCTOBER 2004 – 30 JUNE 2006) (BGN)

Total for the period October 1, 2004 – June 30, 2006	Number of tenders announced	Number of contracts awarded	Value of the contracts awarded
Total	2,139	2,239	9,078,854,031
Construction works	328	320	8,165,029,124
Supplies	1,055	1,112	520,043,553
Services	756	807	393,781,353

Source: National Public Procurement Agency

TABLE 12. SHARE OF PUBLIC PROCUREMENT CONTRACTS IN THE ENERGY SECTOR*

2009	
Contracting Authority	Number of contracts
The National Railway Infrastructure Company (NRIC)	215
Sofia Municipality	214
"Lozenetz" Hospital	196
Ministry of State Administration and Administration Reform	176
TPP Maritsa – East	175
Ministry of Healthcare	171
EVN Bulgaria Electrorazpredelenie – Plovdiv /Formerly Electrorazpredelenie Plovdiv/	138
Kozloduy NPP	134
Ministry of Defence	111
University Hospital "St. Ekaterina"	108
National Revenue Agency	105
Military Medical Academy	100
Burgaz Municipality	98
Ministry of Regional Development and Public Works	92
Electricity System Operator	89
Mines Maritsa-East – Radnevo	88
National Gamegrowing Station "Vitinya" – Botevgrad	85
Enel Maritsa-East 3 /Formerly "Energy Company Maritsa-East" 3/	82
Varna Municipality	82
National Cardiological Hospital – Sofia	80
Pleven Municipality	75
University Emergency Hospital "N.I. Pirogov" – Sofia	71
Bulgarian National Television	64
University Hospital – Stara Zagora	62
University for National and World Economy	61
Total	2,872
Energy	706
Share of Energy (%)	25%

* Data as of August 13, 2009

Source: National Public Procurement Agency

When we look closer at the data from the National Public Procurement Agency (PPA), we see that the number of Energy sector Public Procurement (PP) contracts seem to increase at a higher rate than the total number. That, coupled with the traditionally large size of energy PP contracts, means that an increasingly larger share of the state money given to the energy sector are funneled through the PP scheme. Access to more detailed data would help confirm this conclusion and give precise estimates.

TABLE 13. RATE OF INCREASE IN PUBLIC PROCUREMENT

	2008	2007
Total	5,213	4,176
Energy	1,212	935
YoY change total		25%
YoY change Energy		30%

Source: National Public Procurement Agency

The risk of awarding **unfavorable public procurement contracts** is higher in the energy sector than elsewhere. The reasons lie in the existing monopoly over the distribution of electricity, heating and gas; the special market and PR significance of nuclear energy; the greater technical risks and the priority of nuclear safety over all other operational, legal and economic aspects (Art. 3, para 2 *Law on the Safe Use of Nuclear Energy*); the closed and non-transparent

price formation and approval and regulation of the sector as a whole; the large scale of the main producers, etc. The sector does not have the practice of calculating the effect of some public procurement or technical project on the basis of the end result. Generally, the application of formal criteria to the technical specifications leads, deliberately or not, to unfavorable end results. Investments are rarely evaluated, while taking into account the full range of efficiency criteria in the energy sector: the value per unit of output capacity for the whole period of operation of the facilities plus the reliability of the equipment (actually, the full life cycle). For instance, when nuclear fuel is supplied, the price is calculated on the basis of metric units rather than the quantity of energy they can generate.

BOX 2. SUPPLY OF NUCLEAR FUEL FOR KOZLODUI NPP

Kozoldui NPP conducted a public procurement tender for the supply of nuclear fuel. That happened in a more or less competitive environment and it was possible to reach a favorable price. The contract was awarded to the Russian company Tver which offered fuel of the lowest technical category at a price which was 20 % higher than the international price. That became possible because of the way in which the technical specifications were formulated in the public tender. The price bids were calculated and compared in terms of the quantity of fuel supplied rather than the quantity of energy it could generate.

Source: Verbatim Report – Minutes No. 31 of 29 June 2006 of the Parliamentary Anti-corruption Committee

In the case of many investment projects in the energy sector the price per 1 MW of installed or rehabilitated capacity is much higher than the price in similar or more developed countries. Unless the opposite is convincingly justified and supported by official numbers, this would be a clear sign of the amount of public resources abused. In such cases, society suffers double damage: taxpayers pay these amounts through overt or covert forms of state subsidies or guarantees in the form of government commitments to provide support and cover costs and then all electricity consumers pay once again. The appraisal of projects on the basis of price/capacity/duration/environmental effects/costs is not applied to the process of making decisions of great importance for the national economy. The competition among potential partners, suppliers or contractors is thus even less encouraged.

2.3. FORMS OF ABUSE

Several main types of deviation from the rules and economic expediency can be discerned in the public procurement in the energy sector. Some of them can be defined also as unlawful, while others formally comply with the letter of the law but they lead to damage which is compensated by distributing the loss among consumers. The main types of violations and deviations in public procurement in the energy sector are as follows:

- opening of public procurement procedures which are not expedient (do not meet public needs) in order to spend resources or to ensure personal benefit;
- selection of negotiations regardless of the options to hold a more competitive procedure and/or a non-professional team;
- deliberate manipulation of the procedure and the related documentation, including its unnecessary complications or ambiguities;
- deliberate manipulation of the requirements to the bidders; inadequate qualification criteria, requirements for experience, certification and technical requirements;
- exertion of administrative or political pressure to hire certain subcontractors or to guide the decisions of the administrative staff of the contracting authority;
- exertion of pressure on the contractor through the procedure for payments;
- deliberate creation of unequal treatment or prerequisites for inequality or unfair competition among the bidders;
- breach of trust and disclosure of information.

BOX 3. SUPPLY OF EQUIPMENT FOR MARITSA-EAST 2 TPP

In 1998, Maritsa-East 2 TPP announced a public procurement procedure for the supply and installation of a turbine. The selection was carried out at NEC EAD by a committee appointed by the Board of Directors of NEC. The appointment was confirmed by a decision of the Board of Directors of the company because, at that time, Maritsa-East 2 TPP was a branch of NEC. The principal gave its approval. The winner offered experimental equipment without the necessary guarantees. The purchased turbine could not be set into operation in the course of several years after its supply and installation. As a result of that inaction of the company, huge damage was caused due to the failure to generate power. The contractor could not be made to compensate for the damage since the contract did not contain such clauses. The only option left was to seek remedy pursuant to the general provisions for compensation under Art. 45 of the Law on Obligations and Contracts, requiring proof of the amount of the damage incurred. There is no available evidence to prove that it was done and, meanwhile, the statute of limitation for that damage expired.

Source: Pari Daily, 27 October 2004

Some typical violations are related to the decision to hold and announce procedures.¹⁷ The others involve deliberate errors in the opening of the procedure so that to provide grounds for its discontinuation if the best bid comes from an “unwelcome” candidate. In such cases, it is found out before the end of the procedure that financial resources are unavailable. These procedural maneuvers can continue until the favored bidder wins.

The evasion of a competitive public procurement procedure has a long history. A typical example under the earlier versions of the LPP was the awarding of contracts for services labeled as R&D. That has become much more difficult under the latest version of the law. Still, the specific features of the energy sector facilitate the evasion of compliance. The factors which contribute to this situation are as follows: the above mentioned Art. 3, para 2 of the *Law on the Safe Use of Nuclear Energy*; the technological monopoly over many supplies (e.g. nuclear fuel or spare parts); the electricity export arrangements, and so on.

The tendency for less competitive public procurement procedures in the energy sector can be seen in the relatively high percentage – about 40 % of all procedures – of negotiations with or without announcement.

¹⁷ Just a short excerpt from the catalogue: wording of the subject-matter of the procedure in a misleading way or in a way which does not fully correspond to the nature of the public procurement; establishment of unjustified or obscure criteria related to the qualifications; introduction of requirements for experience in spheres of little practical relevance; requirements for experience on a scale which is obviously irrelevant to the volume and nature of the contract; requirements for certification under a less known certification scheme (prior to the amendments to Arts. 30 to 33 LPP); excessively long validity term of the bids against the backdrop of dynamic market developments; too stringent technical requirements based on the catalogue of a certain manufacturer or bidder; excessively high and stringent requirements to the qualifications of the staff; too complicated procedure for obtaining the documentation; explanations on the content of the documentation, when the answers obviously do not cover the questions or come just before the deadline for the submission of the bids when essential aspects are clarified; unduly complicated or obscure procedure for submission of the bids, etc. Non-governmental organizations have gathered information on some of these practices.

BOX 4. THE MODERNIZATION OF KOZOLDUI NPP

In 1998, a contract was concluded in connection with the modernization of Units 5 and 6 of Kozoldui NPP. The initial price of the contract was \$8 million (which increased subsequently to \$24 million by 2004, which was indicative of the problem with the efficiency of public procurement and the justification of the costs). The contract was signed with a company which was registered specifically for that purpose and no public tender was held. Furthermore, the subcontractors were also to be selected on a non-competitive basis, regardless of the high price of the project and the enhanced public interest. It was perfectly lawful because the documentation did not envisage such a requirement. The issue of the modernization costs for Units 3 and 4 of Kozoldui NPP after the agreement between the Government of Bulgaria and the EU on their closing down was discussed also by the Parliamentary Anti-corruption Committee. According to the information made available there, the post-2001 costs for the two units amounted to some \$180 million and they were planned to continue until 2009. The problem would have hardly reached the Bulgarian general public without the inquiry of the European Commission into the modernization programs and the residual resource management programs until 2009.

Source: Minutes No. 31 of 29 June 2006 of the meeting of the Committee; Capital weekly, No. 45 of 2006

Table 14 makes it clear that 51.3 % of all public procurement procedures in the energy sector involved negotiations with or without announcement under the LPP, including accelerated procedures, and invitations under the RSPP. If contracts concluded without any public procurement procedure are added it becomes clear that the erosion of market competition is the rule rather than the exception. This conclusion is supported also by the use of the commodity exchange trading by the sectoral contracting authorities. Most of the public procurement contracts in the energy sector are supplies of energy sources. They can easily be purchased on the commodity exchanges in Bulgaria and abroad. It seems, however, that this procedure is assiduously avoided, in spite of the detailed regulation set out in the LPP Implementing Rules which leave no grounds for doubt as to their lawfulness. According to the data from the Public Procurement Agency, the number of public procurement procedures in the energy sector through commodity exchange transactions was 16 out of a total of 2,139 over the period from 1 October 2004 to 30 June 2006, i.e. they accounted for only 0.7%. One of the reasons is perhaps the limited corruption potential of commodity exchange transactions due to the lack of direct contact between the buyer and the supplier in the course of the negotiations.

**TABLE 14. PUBLIC PROCUREMENT IN THE ENERGY SECTOR BY TYPES OF PROCEDURES
(OCTOBER 2004 – JUNE 2006)**

	2004	2005	2006	Total	Share (%)
Number of public procurement procedures, including:	138	1,220	781	2,139	100
Open procedures under the LPP	48	268	151	467	21.8
Restricted procedures under the LPP	0	3	3	6	0.3
Accelerated restricted procedures under the LPP	0	0	0	0	0
Negotiations with announcement under the LPP	15	282	225	522	24.4
Accelerated negotiations with announcement under the LPP	3	12	2	17	0.8
Negotiations without announcement under the LPP	14	191	114	319	14.9
Open competitive bidding under the RSPP	43	269	175	487	22.8
Public tender under the RSPP	0	2	2	4	0.2
Negotiations by invitation under the RSPP	15	155	70	240	11.2
Commodity exchange transaction under the RSPP	0	13	3	16	0.7
Short-listing system and preliminary announcement – invitation	0	25	36	61	2.9
Competitive dialogue	0	0	0	0	0

Source: National Public Procurement Agency

Box 5. BELENE NPP

The Council of Ministers adopted a decision dated 29 April 2004 to approve the report of the Minister of Energy and Energy Resources on the construction of a nuclear power plant in Belene and to instruct the relevant ministers to hold negotiations with the potential investors and financial institutions to sign the project implementation contracts. The type of procedure chosen - even leaving aside the problems with the expediency of such a project started without any public debate – was a case in point. No explanations were given as to why the biggest ever public procurement in Bulgaria (7.82 billion BGN) would be awarded through the non-competitive procedure of negotiations. Thus the Ministry of the Environment and Waters approved the construction of a 2,000 MW facility on the basis of the light water technology. It provided opportunities for broadening the scope of potential bidders. At the same time, however, NEC announced a procedure only for Russian reactors of the WWER type, excluding the Western light-water type of reactors. That was a typical case of manipulated public procurement documentation and the technical specifications in particular to the benefit of a certain bidder or certain bidders. But the most important thing was the restriction of competition.

BOX 5. BELENE NPP (CONTINUATION)

The government institutions rejected those arguments and stated that the documentation did not mention Russian reactors and that the equipment already supplied on the site of Belene was manufactured by Skoda, the Czech Republic. A public tender was announced for the completion of units 1 and the construction of unit 2 on the basis of the light-water technology. Theoretically, at least four manufacturers could participate. The procedure offered three options: bids for the whole plant or separately for the nuclear and non-nuclear part and another one for the fuel. Still, the only bidders were two companies producing WWER type reactors only. Following the selection of the foretold winner the NEC stated that for security and economic reasons it had been decided to construct entirely new units rather than the completion of the first two. These considerations had been, however, pointed out by experts two years earlier and they should have led to a tender for all types of light water reactors not only WWER.

Source: Corruption in Public Procurement: Risks and Reform Policies, Center for the Study of Democracy, 2007

2.4. ABUSE IN THE CONSULTING AND INTERMEDIARY SERVICES IN THE ENERGY SECTOR

The sector has the practice of awarding public procurement contracts that cannot be justified on any essential technical, economic or other public grounds. Consultancy services deserve special attention from the perspective of efficiency and benefit as they are most difficult to quantify (or evaluate in qualitative terms) and therefore sectoral contracting authorities have special liking for these services. The reason is that the value of human resources is not analyzed in such procedures. The main costs in consultancy are the labor costs and the costs related to the servicing of the personnel (transportation, office costs, communications, information services, accommodation). All material costs are easily comparable in the competitive bids. Fees, however, are allowed to vary a lot and are typically calculated in the form of person-days or hours. The problem in the energy sector is that a detailed analysis would point to either incredibly expensive labor per unit of time or too long work with too much staff or both. If the requirements to the bidders and the technical specifications were worded accurately, the competition among the bids would be mainly price-based and ultimately consultancy services would drastically reduce their value, as is in fact the case on the free market. But in the energy sector the market for consultancy services cannot be considered free because of the lack of serious competition, the reasons for which are subjective rather than objective.

The practice of organizing and holding public procurement procedures with the sole purpose of ensuring income for the contractor is quite common. The compliance with the European environmental protection and safety standards provide favorable conditions for corrupt practices, including those in the supply of goods and construction works. Thus the corruption potential in the energy sector is the highest among all

spheres of the public sector. The problem is that there is no authority to decide which contract for the supply of goods or services was necessary and which was not. With regard to big contracts this function could be performed by SEWRC in the course of the review of the annual business plans of energy enterprises. The latter should have the obligation to submit their public procurement plans for each calendar year with the related justifications and cost plans.

BOX 6. THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCEDURE FOR BELENE NPP

In connection with the Belene NPP, NEC signed two initial contracts: one for the preparation of an environmental impact assessment and the other one for a feasibility study for the purposes of drafting the report to the Standing Committee for Energy at the National Assembly. The contracts were signed with Parsons E&C Europe Ltd. The price was set at about \$7.7 million. The media reported that the price of previous studies with similar content was approximately \$150 thousand. When labor input costs were re-calculated according to the generally accepted rates (in the United States and Europe) for external experts, the price of the contracts was estimated to be not more than \$1 million. A possible explanation of that drastic difference is that the contractors were selected without any procedure under the LPP. The ironic remark of one of the experts was that “there is no law to prevent NEC from spending 50 times more of the money of Bulgarian consumers of electricity”.¹⁸

Source: Corruption in Public Procurement: Risks and Reform Policies, Center for the Study of Democracy, 2007

The representatives of the energy sector justify the involvement of consultants in the development and implementation of large-scale projects with the existence of such a requirement in most loan agreements. On the other hand, they refer to the requirement under the Law on Spatial Planning and Development to have such consultants. In other words, officials in the energy sector argue publicly that they had no choice but to make big projects more expensive and, in spite of all their claims for high professional level, they could not possibly develop their projects without external consultants.

The consultancy market in the energy sector is dominated by several linked companies. The situation with the exporters of electricity is similar with some major companies being the key players in both sectors. The monopolization of both markets is inconceivable without the active support of the leadership in the sector and the main energy enterprises which, in turn, generates corrupt practices. The problem in this case is that the distortion and circumvention of public procurement procedures lead to less competition.

¹⁸ Mathew Brunwasser, *The Long Way to Belene or Why Only Petty Violations are Punished*, available online at <http://mediapool.bg/site/project/files/belene.shtml>.

BOX 7. PROCEDURE FOR THE SELECTION OF A CONSULTANT FOR MARITSA-EAST 2 TPP

Maritsa-East 2 TPP announced a public procurement procedure to select a consultant under the Law on Spatial Planning and Development for its ongoing investment project – rehabilitation of unit 1 to 6 and construction of desulphurization installations at units 1 to 4. Three candidates submitted their bids. The most beneficial bid at a price of about €9 million was filed by the US company C&L Engineers Limited in consortium with Energoprojekt AD, Sofia, which had no ongoing projects in the sector. After the bids were opened, the contracting authority discontinued the procedure pointing out the reason that it had no resources. The termination of the procedure was appealed by Parsons E&S Ltd. which had been eliminated. The decision of the contracting authority was reversed by the Regional Court of Stara Zagora and the reversal of the decision was subsequently confirmed also by the Supreme Administrative Court. Several months later – already in the following calendar year – a new procedure was announced and the wording of the service sought was modified only slightly remaining identical to the previous one in its essence. There was only one bid from Parsons E&C Ltd. which failed to win in the earlier procedure. The company held a sizeable portion of the market for such services and the price of its bid was about €18 million or twice higher than the bid of the other participant eliminated in the earlier procedure. This time the authorities had no difficulty in providing the financial resources although they were much greater in size than before. The only bidder Parsons E&C Ltd. was announced to be the winner and a contract was signed at the price quoted in its bid.

Source: Administrative Case No. 298/2004, Decision No.298/21 January 2004 of the Regional Court of Stara Zagora and the materials in Administrative Case No. 4245/2005 and Decision No. 9115/19 October 2005 of the Supreme Administrative Court, 4th Division

To give a rough idea of the size of potential damage to the state companies' performance and essentially to the final consumer and tax payer, we could have a closer look in the notes to the 2008 consolidated statement of BEH. The consulting services expenses jump from ~6 million BGN in 2007 to 37 million BGN for 2008.

The figure in itself could be reasonable if those consulting services lead to actual financial impact – such as improving margins, leaning the process, optimizing the network, etc. In the current total lack of transparency and solid track record of public funding abuse in the energy sector we could seriously doubt that those 37 million have been given for the right purposes.

The usual position of government institutions with regard to the monopolization of the market for consultancy and intermediary services is that there are no companies holding dominant position. They substantiate it by referring to market shares as percentages of the total turnover or the total number of contracts per contractor. What is omitted in these arguments is that some companies, which are public procurement contractors, are linked to each other and so are their subcontractors. More often than not, relationship schemes generate conflicts of interest, although manifested in different public procurement contracts. The reason is that the same company may act as the contractor under different public procurement contracts but within the same investment project or with the same contracting authority. Sometimes the government administration acting as the principal and the sectoral contracting authorities cite opposite arguments. They claim that the range of experts and con-

TABLE 15. EXPENSES FOR EXTERNAL SERVICES

Consolidated annual financial report as of 31 December 2008

9. Expenditures for external services

<i>In thousand BGN</i>	2008	2007 (unaudited)
Concessionary taxes and licences	12,874	5,922
Repairs	150,665	120,075
Insurance services	55,339	50,217
Consultancy services	37,292	6,206
Communication services	4,570	4,684
Security	20,109	19,160
Transport services	119,579	129,525
Rent	3,290	3,296
Others	62,021	28,202
Total expenditures for external services	465,739	367,287

Source: Consolidated financial statement BEH 2008

sulting companies is very narrow and this naturally limits their choice. This, however, raises the question why some consulting companies win public procurement tenders abroad but they cannot win in Bulgaria. And conversely, why the most successful bidders in Bulgaria do not have the same success in other countries?

2.5. ANTI-CORRUPTION MEASURES IN THE PUBLIC PROCUREMENT IN THE ENERGY SECTOR

An important prerequisite for the limitation of corrupt practices in the energy sector is the existence of a comprehensive national energy strategy and the optimization of the energy balance on this basis; the compilation of a list of the strategic facilities of national importance in the energy sector and the need for new production capacities. All this calls for a genuine public debate because it will involve the spending of billions of taxpayers and consumers BGN (including the sovereign guarantees) in the next 10 to 15 years.

Government officials should be subjected to continuous public pressure to fully exercise their rights of the principal in the companies generat-

ing electricity and heating. This includes comprehensive monitoring and control, including court remedies sought by the government as the shareholder against the management of its own companies. Such an option is envisaged in the *Commercial Code* but there is no evidence that it has ever been invoked. For this to happen, new obligations – together with non-compliance penalties – should be introduced for the principals. This could be done in the *Regulation on the Exercising of the Rights of the Government in the Companies with State Interest*.¹⁹ At present, the Regulation (Art. 11, subpara 12) envisages only the right but not the obligation of the company to seek damages from the manager or the controller as a prerogative of the sole owner of the capital. SEWRC should be empowered to exercise real control over the business plans of electricity producers. The Commission still fails to demonstrate a capacity for economic analysis which makes unjustified or poorly justified price increases possible. It is efficiency, i.e. the ultimate effect in the money/capacity/environmental effect ratio that can and must underlie price increase assumptions.

Analysis should be made of the efficiency of the existing production capacities. It is necessary to analyze the cost per unit of installed capacities and then calculate and add the costs for servicing financial arrangements and for building the requisite infrastructure.²⁰ Only then the cost can be compared to similar projects abroad so that to gauge the efficiency and public benefit of the respective project.

The introduction of a public monitoring system of procurement in the energy sector is urgent. For this purpose, a model should be developed and proposed to the government. This could be done by the non-governmental sector, including the Consumer Protection Organization. On the one hand, the system would enhance the confidence of consumers in the energy policy; on the other, it would minimize the damage caused to the sector by excessively expensive or unnecessary public procurement contracts. It is also necessary to work out a system of indicators for the corruption risk in the public procurement sphere in general, and the energy sector in particular, which could provide the underpinnings of continuous public monitoring of the spending of resources in the energy sector. The analysis of the current practices in the public procurement and the energy sector leads to the conclusion that the following indicators could be initially contemplated:

- unjustified increase of the corporate expenditures of energy producers and electric distribution companies over a certain period. An additional indicator in the nuclear energy sector could be the existence of much higher operational costs in comparison to similar power plants

¹⁹ Adopted with CoM Ordinance № 112 of 23 May 2003, promulgated in The State Gazette, No. 51 of 3 June 2003, actual entry into force on 16 February 2007. The Regulation mentions corporate responsibility in two cases: responsibility of the manager or liquidator in their management contracts and the release from responsibility as grounds for release of the management performance bond.

²⁰ A well known fact is that the cost of the electricity lines (about \$1 million per km on the average) to be established for the Belene NPP is not included in the estimates. Even without these financial and infrastructure costs, the price per kW of installed capacity in Belene is currently estimated to be about €2,000, whereas in Russia and the countries using similar technologies it is reported to be €1,500.

- in countries with market-based energy sector;
- undue reduction of the profit of these companies over a certain period, accompanied by inexplicable increase of the profitability of ancillary activities based on outsourcing or the profitability of contractual partners;
 - immediate reshuffling of the management after parliamentary elections without transparent and clear reasons (as an indicator of getting hold of resource-intensive business entities);
 - repeated public procurement procedures seeking the same service;
 - unjustified termination of public procurement procedures;
 - involvement of the same consultants in different roles and at different extent of domination of the market for consultancy services;
 - systematic avoidance of commodity exchange transactions in the typical purchase of commodity goods;
 - linkages between companies one of which is the consultant in an investment project, another is the buyer or the consultant in a privatization procedure, and still another is a contractual partner to a producer or wholesale or retail distributor of energy.