3. GOVERNANCE DEFICITS IN THE BULGARIAN ENERGY SECTOR

3.1. GOVERNANCE OF STATE-OWNED ENTERPRISES

The financial outlook of state-owned enterprises has become increasingly problematic in the 2011 - 2014 period. The main problems continue to be the intra-system indebtedness, inefficient governance and sustainability of major financial drains undermining the financial health of the companies of the BEH. Additionally, scarce public information on the involvement of certain state-owned enterprises in large energy infrastructure projects suggests that state energy companies are overloaded with enormous (in terms of both size and cost) infrastructure projects and burdened by social functions that restrict their investment opportunities. The lack of capacity to manage large projects and to identify and mitigate project risks has led to management collapse and draining of SOE in favour of banks, service providers and subcontractors. Above all, Bulgargaz and the NEC continue to be characterized by poor financial state and desperate lack of liquidity due to inherent state-capture inefficiencies in the governance of the Bulgarian energy system, such as state intervention, poor debt collection, unreasonably high supply prices, market hostile practices of electricity grid connection and non-market pricing mechanisms, etc.¹⁰⁸

An overview of the financial performance of BEH enterprises shows that NEC EAD, ESO EAD and Bulgargaz EAD are loss-making companies for 2012 (Table 7). As per Q3 2013, the three companies are still characterized by challenging financial situation. In 2012, Bulgargaz registered losses amounting to BGN 113 million, while NEC's financial loss amounted to more than BGN 94 mln. Short of BEH's temporary rescue loans, both Bulgargaz and the NEC are dependent on regulated prices for natural gas and electricity. Stateregulated prices (kept artificially low) and the absence of market-based pricing are serious hurdles to bettering the financial conditions of both enterprises. Adding to these, NEC's poor financial results can be directly attributed to its involvement in fraudulent infrastructure projects like NPP Belene and HPP Tsankov Kamak. As per Q3 2013, NEC's long-term debt approximates BGN 627.2 mln due to outstanding loans for investment projects realized by NEC, while the financial indicators of the company suggest that merely 4 % of the current expenses are readily payable. 109 While consumers and producers are footing the bill for what was announced as costs incurred for "green" energy production, the question of who covers the vast expenses already incurred by NEC for large energy projects like NPP Belene, remains open. The lack of

¹⁰⁸ This section presents an analysis of the state of BEH's main enterprises based on an analysis of their annual reports and financial results reported by the Ministry of Finance. The financial health of state-owned enterprises has deteriorated in 2011 – 2013 period.

¹⁰⁹ National Electric Company, (2012), Annual Report.

transparency of governance creates a huge uncertainty over the predictability of cash flows in and out of NEC. Moreover, NEC's indebtedness has been a major hurdle in the process of unbundling the ESO from NEC,¹¹⁰ which is an EU requirement for liberalization (as per the Third Energy package). This ought to had happened by March 2011, and Bulgaria is facing an infringement procedure for a failure to comply with EU regulations. Bulgargaz EAD is in challenging financial state due to unfavourable market prices for fossil fuel imports and the fact that the company is obliged to sell gas to its consumers at prices lower than the purchase price. Toplofikatzia and other District Heating Companies (DHC) have piled debts to Bulgargaz. BEH bought the debt of Toplofikatsia Sofia to Bulgargaz but this has resulted in lower reserves in Chiren gas storage and shorter liquidity.

Table 7. State-owned Enterprises' Financial Results, 2008 - 2013 (BGN thousand)

	2007*	2008*	2009	2010	2011	2012	Q3 2013	
			Bulgarian E	nergy Holding	(BEH EAD)			
Total Assets	1,156,969.00	2,595,023.00	2,812,369.00	2,826,957.00	2,937,377.00	3,082,401.00	3,726,792.00	
Total Debt	28,707.00	276,354.00	61,663.00	4,707.00	3,948.00	3,324.00	na	
Equity	1,128,262.00	2,318,669.00	2,750,706.00	2,822,250.00	2,933,429.00	3,079,077.00	3,147,423.00	Bal
Current assets	84,581.00	665,928.00	311,369.00	306,204.00	479,109.00	647,515.00	na	Balance
Inventories	60.00	60.00	1.00	1.00	30.00	2.00	na	sheet
Cash	58,295.00	212,976.00	64,243.00	93,422.00	167,173.00	75,683.00	84,146.00	eet
Current liabilities	28,190.00	276,027.00	58,135.00	2,675.00	2,591.00	3,044.00	na	
Long-term debt	517.00	327.00	3,528.00	2,032.00	1,357.00	280.00	na	
EBIT (Operating Income)	17,231.00	50,166.00	50,420.00	103,406.00	168,109.00	241,974.00	244,816.00	
EBT	14,704.00	53,753.00	76,377.00	111,763.00	183,950.00	258,224.00	264,295.00	P&L
Net Profit	13,134.00	52,259.00	72,531.00	115,295.00	186,943.00	285,897.00	na	•
D&A Costs	-906.00	-936.00	-992.00	-2,100.00	-2,551.00	-2,197.00	-306.00	
Operating Cash Flow	-91,608.00	-65,099.00	-294,976.00	42,180.00	178,313.00	47,098.00	na	
Investment Cash Flow	-553.00	-280,220.00	-53,757.00	-13,001.00	-20,895.00	3,715.00	na	Cash
Financing Activity Cash Flow	na	500,000.00	200,000.00	na	-83,667.00	-142,303.00	na	Flow
Free Cash Flow to the Enterprise	58,295.00	212,976.00	64,243.00	93,422.00	167,173.00	75,683.00	na	

^{*} BEH EAD. Financial Statement as of 31 December 2008.

¹¹⁰ It is foreseen that NEC will be involved in electricity production and trade only, while ESO will be responsible for electricity transmission and management of the network.

Table 7. State-owned Enterprises' Financial Results, 2008 – 2013 (BGN thousand) (Continued)

	2007*	2008	2009	2010	2011	2012	Q3 2013	
			National Ele	ctric Company	(NEC EAD)			
Total Assets	4,159,975.00	4,863,477.00	5,911,966.00	6,300,870.00	6,296,169.00	6,798,056.00	6,987,911.00	
Total Debt	1,274,275.00	1,794,728.00	1,968,473.00	2,245,916.00	2,237,952.00	2,551,869.00	2,855,955.00	
Equity	2,885,700.00	3,068,749.00	3,943,493.00	4,054,954.00	4,058,217.00	4,246,187.00	4,131,956.00	Bal
Current assets	715,203.00	902,325.00	491,418.00	497,434.00	439,408.00	536,484.00	849,048.00	Balance
Inventories	35,249.00	25,780.00	16,986.00	13,345.00	11,677.00	12,551.00	13,213.00	e sheet
Cash	142,316.00	160,003.00	59,617.00	84,410.00	45,784.00	47,625.00	34,505.00	et
Current liabilities	491,138.00	648,405.00	790,119.00	1,127,846.00	1,127,043.00	1,960,768.00	2,228,741.00	
Long-term debt	783,137.00	1,146,323.00	1,178,354.00	1,118,070.00	1,110,909.00	591,101.00	627,214.00	
EBIT (Operating Income)	na	96,153.00	-1,161	na	14,805.00	-192,727.00	-124,539.00	
EBT	46,992.00	46,837.00	6,743.00	109,652.00	68,843.00	-99,919.00	-113,320.00	P&I
Net Profit	39,400.00	40,075.00	8,533.00	102,570.00	68,572.00	-94,075.00	-113,320.00	,
D&A Costs	-174,798.00	-152,456.00	-141,923.00	-161,673.00	-156,818.00	-158,031.00	-121,549.00	
Operating Cash Flow	123,509.00	135,744.00	216,675.00	413,877.00	326,425.00	103,919.00	78,360.00	
Investment Cash Flow	-227,079.00	-574,895.00	-281,765.00	-215,446.00	-225,649.00	-88,979.00	-54,280.00	Cash
Financing Activity Cash Flow	168,676.00	466,814.00	-35,382.00	-173,642.00	-139,401.00	-13,093.00	-37,200.00	Flow
Free Cash Flow to the Enterprise	142,316.00	160,003.00	59,617.00	84,410.00	45,784.00	47,625.00	34,505.00	

^{*} NEC. Consolidated Annual Financial Report as of 31 December 2007, www.nek.bg/cgi?d=1906

	2007*	2008*	2009*	2010*	2011	2012	Q3 2013	
				Bulgargaz				
Total Assets	569,954.00	698,677.00	563,627.00	616,748.00	675,581.00	682,632.00	404,018.00	
Total Debt	137,197.00	356,268.00	195,315.00	285,828.00	417,861.00	538,485.00	245,732.00	
Equity	432,757.00	342,409.00	368,312.00	330,920.00	257,720.00	144,147.00	158,286.00	Ва
Current assets	420,582.00	556,126.00	451,912.00	532,497.00	622,848.00	657,919.00	389,169.00	Balance
Inventories	131,266.00	211,420.00	217,117.00	183,858.00	202,260.00	172,117.00	111,903.00	sheet
Cash	104,411.00	22,759.00	90,282.00	151,996.00	196,162.00	111,624.00	19,279.00	et
Current liabilities	123,119.00	356,197.00	144,995.00	285,828.00	377,670.00	499,935.00	193,965.00	
Long-term debt	14,078.00	71.00	50,320.00	291.00	40,191.00	38,550.00	51,767.00	

Table 7. State-owned Enterprises' Financial Results, 2008 – 2013 (BGN thousand) (Continued)

	2007*	2008*	2009*	2010*	2011	2012	Q3 2013	
				Bulgargaz				
EBIT (Operating Income)	104,000.00	-98,680.00	62,743.00	-48,411.00	-58,310.00	-102,819.00	19,618.00	
EBT	96,475.00	-93,751.00	33,761.00	-36,200.00	-73,133.00	-114,125.00	12,989.00	P&L
Net Profit	86,989.00	-90,543.00	30,156.00	-37,392.00	-73,200.00	-113,573.00	14,138.00	•
D&A Costs	-74.00	-56.00	-203.00	-248.00	-143.00	-150.00	-111.00	
Operating Cash Flow	85,847.00	-218,255.00	-48,664.00	61,154.00	50,060.00	-74,010.00	84,475.00	
Investment Cash Flow	-139.00	-108.00	-165.00	-3.00	-140.00	-57.00	-167.00	Cash
Financing Activity Cash Flow	18,703.00	136,681.00	-126,323.00	-2,717.00	-2,695.00	-1,966.00	-2,756.00	Flow
Free Cash Flow to the Enterprise	104,411.00	22,759.00	90,282.00	151,996.00	196,162.00	111,624.00	19,279.00	

^{*} Bulgargaz. Annual Activity and Financial Report, 31 December 2008, 31 December, 2010.

	2007*	2008*	2009*	2010*	2011	2012	Q3 2013	
				Bulgartransgaz				
Total Assets	778,934.00	1,357,737.00	1,436,540.00	1,477,529.00	1,513,764.00	2,026,145.00	2,013,550.00	
Total Debt	35,724.00	108,667.00	106,522.00	85,710.00	83,433.00	147,133.00	145,803.00	
Equity	743,210.00	1,249,070.00	1,330,018.00	1,391,819.00	1,430,331.00	1,879,012.00	1,867,747.00	Bal
Current assets	164,193.00	203,376.00	295,569.00	342,773.00	433,297.00	358,237.00	347,672.00	Balance
Inventories	32,768.00	35,637.00	28,425.00	25,083.00	26,243.00	26,235.00	32,717.00	sheet
Cash	68,097.00	4,258.00	153,450.00	254,168.00	100,208.00	72,221.00	223,442.00	eet
Current liabilities	30,851.00	47,794.00	45,180.00	10,056.00	11,025.00	17,400.00	17,105.00	
Long-term debt	4,873.00	60,873.00	61,342.00	75,670.00	72,408.00	129,733.00	128,698.00	
EBIT (Operating Income)	51,581.00	13,118.00	99,334.00	105,827.00	114,563.00	107,580.00	66,723.00	
EBT	48,690.00	17,519.00	96,730.00	125,535.00	133,014.00	119,684.00	71,607.00	P&L
Net Profit	43,801.00	15,613.00	87,036.00	112,979.00	119,697.00	107,681.00	66,265.00	
D&A Costs	-38,205.00	-51,242.00	-52,526.00	-54,557.00	-51,984.00	-51,235.00	-52,988.00	
Operating Cash Flow	85,312.00	-27,789.00	164,035.00	96,946.00	156,165.00	137,048.00	131,485.00	
Investment Cash Flow	-14,376.00	-14,785.00	-15,306.00	-1,780.00	-6,557.00	-34,726.00	-91,753.00	Cash
Financing Activity Cash Flow	-4,843.00	-19,265.00	3,100.00	-192.00	-75,877.00	-178,052.00	-71,280.00	Flow
Free Cash Flow to the Enterprise	68,097.00	4,258.00	153,450.00	254,168.00	100,208.00	72,221.00	223,442.00	

^{*} Bulgartransgas. Independent Auditor's Report and Annual Financial Report as of 31 December 2008; 31 December 2010.

Table 7. State-owned Enterprises' Financial Results, 2008 – 2013 (BGN thousand) (Continued)

	2007*	2008	2009	2010	2011	2012	Q3 2013	
				Kozloduy NPP				
Total Assets	1,851,428.00	1,832,865.00	1,899,397.00	2,038,905.00	2,086,729.00	2,590,422.00	2,515,042.00	
Total Debt	765,475.00	675,483.00	676,667.00	802,993.00	780,496.00	888,611.00	915,203.00	
Equity	1,085,953.00	1,157,382.00	1,222,730.00	1,235,912.00	1,306,233.00	1,701,811.00	1,599,839.00	Bal
Current Assets	468,000.00	509,894.00	525,022.00	597,280.00	667,416.00	758,651.00	735,459.00	Balance
Inventories	199,901.00	242,361.00	252,059.00	52,085.00	50,290.00	59,136.00	62,902.00	sheet
Cash	169,283.00	125,308.00	82,847.00	72,822.00	183,609.00	78,985.00	24,769.00	et
Current Liabilities	133,223.00	129,886.00	141,400.00	212,508.00	214,512.00	314,627.00	280,785.00	
Long-term Debt	632,252.00	545,597.00	535,267.00	590,485.00	565,984.00	573,984.00	634,418.00	
EBIT (Operating Income)	15,693.00	107,051.00	82,053.00	77,285.00	220,260.00	221,250.00	75,207.00	
EBT	4,044.00	80,073.00	72,114.00	66,938.00	216,203.00	208,340.00	77,763.00	P&l
Net Profit	3,459.00	70,801.00	64,890.00	60,437.00	114,192.00	146,584.00	13,915.00	
D&A Costs	-140,904.00	-143,955.00	-142,614.00	-138,034.00	-123,469.00	-124,562.00	-100,786.00	
Operating Cash Flow	160,662.00	220,347.00	133,136.00	188,332.00	291,692.00	na	81,883.00	
Investment Cash Flow	-84,789.00	-133,556.00	-126,512.00	117,718.00	-85,884.00	na	-80,042.00	Cash
Financing Activity Cash Flow	-52,504.00	-131,860.00	-49,069.00	77,433.00	-95,021.00	na	-56,061.00	Flow
Free Cash Flow to the Enterprise	169,283.00	125,308.00	82,847.00	72,822.00	183,609.00	na	24,769.00	

^{*} Kozloduy NPP Balance for 2007.

^{**} Independent Auditor's Report for 2011.

	2007*	2008*	2009*	2010*	2011	2012	Q3 2013	
			Ma	uritsa East 2 TP	P			
Total Assets	717,437.00	858,950.00	1,239,461.00	1,270,662.00	1,385,552.00	1,621,261.00	1,583,898.00	
Total Debt	347,885.00	445,614.00	597,237.00	647,924.00	756,810.00	704,846.00	713,795.00	
Equity	369,552.00	413,336.00	642,224.00	622,738.00	628,742.00	916,415.00	870,103.00	Bal
Current Assets	130,102.00	139,091.00	145,593.00	116,055.00	138,322.00	101,347.00	134,862.00	lance
Inventories	43,760.00	52,206.00	62,588.00	68,509.00	64,833.00	57,799.00	57,429.00	sh
Cash	11,703	17,461.00	1,503.00	900.00	16,094.00	6,088.00	941.00	eet
Current Liabilities	110,439.00	152,825.00	228,121.00	211,534.00	297,181.00	338,133.00	382,349.00	
Long-term Debt	237,446.00	292,789.00	369,116.00	436,389.00	459,629.00	366,713.00	331,446.00	

Table 7. State-owned Enterprises' Financial Results, 2008 – 2013 (BGN thousand) (Continued)

	2007*	2008*	2009*	2010*	2011	2012	Q3 2013	
			M	aritsa East 2 TI	PP P			
EBIT (Operating Income)	22,574.00	67,874.00	82,302.00	48,454.00	52,070.00	58,852.00	na	
EBT	23,590.00	53,588.00	50,104.00	14,042.00	15,329.00	51,358.00	na	P&L
Net Profit	22,182.00	48,148.00	44,738.00	12,724.00	15,164.00	45,506.00	na	•
D&A Costs	-72,809.00	-76,271.00	-70,039.00	-81,138.00	-95,791.00	-130,137.00	na	
Operating Cash Flow	128,208.00	149,897.00	123,766.00	102,204.00	253,207.00	206,023.00	na	
Net Investment Cash Flow	-170,744.00	-222,601.00	-139,662.00	-149,959.00	-154,066.00	-121,005.00	na	Cash
Financing Activity Cash Flow	50,094.00	78,462.00	-62.00	47,152.00	-83,770.00	-92,925.00	na	Flow
Free Cash Flow to the Enterprise	11,703.00	17,461.00	1,503.00	900.00	16,094.00	6,088.00	na	

^{*} Maritsa East 2 TPP. Annual Financial Reports for 2008 and 2010.

	2007*	2008	2009	2010	2011	2012	Q3 2013	
			Mir	ni Marita East E	:AD			
Total Assets	522,558.00	735,042.00	782,619.00	775,174.00	782,604.00	1,106,369.00	1,089,542.00	
Total Debt	146,845.00	224,517.00	271,244.00	255,595.00	250,249.00	348,924.00	367,382.00	
Equity	375,713.00	510,525.00	511,375.00	519,579.00	532,355.00	757,445.00	722,160.00	Bal
Current assets	191,040.00	201,584.00	225,607.00	193,095.00	212,461.00	251,359.00	217,634.00	Balance
Inventories	92,063.00	97,489.00	90,896.00	92,598.00	78,372.00	92,526.00	113,626.00	sheet
Cash	8,989.00	3,172.00	2,931.00	3,542.00	30,980.00	22,728.00	4,274.00	et
Current liabilities	59,621.00	107,986.00	146,226.00	117,845.00	103,339.00	159,375.00	151,073.00	
Long-term debt	87,224.00	116,531.00	125,018.00	137,750.00	146,910.00	189,549.00	216,309.00	
EBIT (Operating Income)	na	5,907.00	8,659.00	11,374.00	23,983.00	8,441.00	-14,810.00	P&L
EBT	8,986.00	2,006.00	2,477.00	8,650.00	21,102.00	5,909.00	-17,085.00	state
Net Profit	8,018.00	1,648.00	1,592.00	9,350.00	18,715.00	5,362.00	-16,976.00	statement
D&A Costs	-51,321.00	-61,606.00	-67,291.00	-61,244.00	-98,867.00	-67,504.00	-33,840.00	nt .
Operating Cash Flow	66,026.00	44,762.00	8,976.00	na	86,364.00	31,601.00	-18,454.00	
Investment Cash Flow	-70,234.00	-52,097.00	-44,748.00	na	-25,860.00	-12,800.00	-6,500.86	Cash F
Financing Activity Cash Flow	9,894.00	1,517.00	35,531.00	na	-31,586.00	-27,053.00	-22,753.01	Flow st.
Free Cash Flow to the Enterprise	8,989.00	3,172.00	2,931.00	na	30,980.00	22,728.00	4,274.00	

^{*} Mini Maritsa East TPP. Auditor's Report 2007, http://www.marica-iztok.com/files/finance_info/file_25_bg.pdf

Table 7. State-owned Enterprises' Financial Results, 2008 - 2013 (BGN thousand) (Continued)

	2007*	2008	2009	2010	2011	2012	Q3 2013	
				ESO EAD				
Total Assets	96,576.00	116,970.00	97,140.00	156,495.00	238,613.00	124,971.00	178,526.00	
Total Debt	38,210.00	52,059.00	75,808.00	58,008.00	58,195.00	53,271.00	106,033.00	
Equity	58,366.00	64,911.00	21,332.00	98,487.00	180,418.00	71,700.00	72,493.00	Bal
Current Assets	47,025.00	63,586.00	40,971.00	109,050.00	198,667.00	81,225.00	140,642.00	Balance
Inventories	8,788.00	16,267.00	15,859.00	12,794.00	12,285.00	12,476.00	15,930.00	sheet
Cash	9,844.00	5,941.00	516.00	1,369.00	32,835.00	16,752.00	13,487.00	et
Current Liabilities	31,707.00	45,703.00	68,603.00	48,199.00	50,093.00	44,715.00	97,477.00	
Long-term Debt	6,503.00	6,356.00	7,205.00	9,809.00	8,102.00	8,556.00	8,556.00	
EBIT (Operating Income)	10,407.00	7,604.00	-46,820.00	86,425.00	116,735.00	-38,291.00	771.00	
EBT	10,484.00	7,300.00	-47,427.00	85,741.00	116,226.00	-38,457.00	793.00	P&L
Net Profit	9,433.00	6,567.00	-42,715.00	77,155.00	104,595.00	-38,117.00	na	ľ
D&A Costs	-12,754.00	-12,033.00	-12,393.00	-9,916.00	-9,974.00	-9,918.00	-7,592.00	
Operating Cash Flow	12,561.00	-1,903.00	-973.00	na	35,357.00	-10,299.00	na	
Investment Cash Flow	-2,717.00	-2,000.00	-1,497.00	na	-3,891.00	-5,854.00	na	Cash
Financing Activity Cash Flow	na	na	-2,955.00	na	-509.00	-166.00	na	Flow
Free Cash Flow to the Enterprise	9,844.00	5,941.00	516.00	na	32,835.00	16,752.00	na	

http://www.tso.bg/uploads/file/ESO_finansov_otchet_2007_BG.pdf

Source: CSD, 2014, based on information from Ministry of Finance.

Within BEH, state-owned enterprises that expected positive financial results at the end of 2012 are the coal-fired power plant Maritsa East 2, the Maritsa East coal mines (despite reductions in extracted coal quantities), and NPP Kozloduy. However, together with NPP Kozloduy, TPP Maritsa East 2, and Mini Maritsa East, NEC has high level of short-term liabilities, while all companies, except Bulgartransgaz and the BEH, are characterized with **low levels of free cash flow availability**. The level of "free cash flow" is a telling financial indicator (even more so than net income/profit/loss), 111 as it reveals the amount of cash available to the company for discretionary spending (like future investments).

[&]quot;Net Income" (EBIT) is determined by subtracting the company's total expenses from the company's total income to determine how much money the company has to spend, while "Freecashflow" indicates cash available for discretionary spending.

BEH itself reports expected profit of BGN 36 million for 2012.¹¹² While created in 2008 as a structure to improve the process of governance of state-owned energy enterprises, the Holding has since had a life-support role for poorly governed state enterprises. For example, in 2008 − 2009, the Holding's capital was increased by the government with € 204,5 mln to enable investment in the repayment of Toplofikacia Sofia's (the capital's central heating system) debt to Bulgargaz. In exchange, the Holding was to become a majority shareholder in Toplofikacia Sofia. Yet, as of 2014, procedures rendering the Holding a majority stakeholder in the capital's central heating system have not been completed.¹¹³

It is also often the case that BEH redistributes from better performing companies to poor performers which alongside the mandatory prepayment of dividends to the budget (80 % dividend mandatory repayable to the budget) has drained the coffers of BEH and its companies of liquidity and investments. Betterperforming state-owned energy companies pay the bulk of their profits as dividends to BEH, which, in turn, offers low-interest-rate loans to the laggards. For example, in 2008, BEH offered a revolving credit line to Bulgargaz, the decision for which has already been renewed and, as of 2014, this practice continues. In 2009, BEH provided a loan to Mini Martisa East from the Holding's funds intended for investments to cover the mining company's current expenses. Further, another BGN 103 million also purposed for investments were transferred to NEC to cover outstanding loans for HPP Tsankov Kamak.¹¹⁴

As these practices seem to have fallen short of sustainability, BEH is preparing to issue bonds and sell its minority stake on the foreign stock exchange. However, the worsening state and the deteriorating credit ratings of the BEH companies and the worsening forecast for revenues undermine the feasibility of the future sales (if ever) either through IPO and/or minority share sales. According to many analysts BEH is still at least 2 years away from an IPO. In that regard, it could be concluded that the systematic problem arises from the fact that the management of BEH's companies does not have a free hand to improve the financial performance and bases its decisions not on best choice but rather has to follow the social priorities of the government. In that sense, the source of the problems is not BEH's management *per se* but the direct intervention of the government, the failed restructuring of BEH and its affiliates, the lack of strategy and vision and abandoning of the original goal – i.e. public listing and gradually lowering the state's ownership that should have happened by the end of 2013.

[&]quot;BEH expects BGN 36 million in profits in 2012", Capital Weekly, December 12, 2012, accessed from http://www.capital.bg/biznes/kompanii/2012/12/20/1973562_beh_ochakva_pechalba_ot_36_mln_lv_za_2012_g/

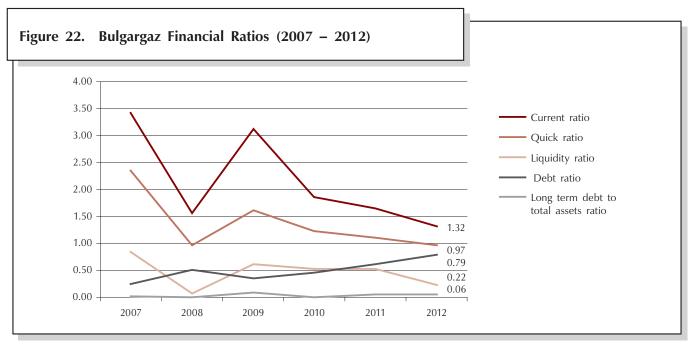
Public Financial Inspection Agency, (2009), Report on Carried Out Financial Inspection of the Ministry of Economy, Energy and Tourism.

¹¹⁴ BEH, (2011), Annual Report of the activities and a Financial Report; PFIA, (2009), Report on Carried Out Financial Inspection of the Ministry of Economy, Energy and Tourism.

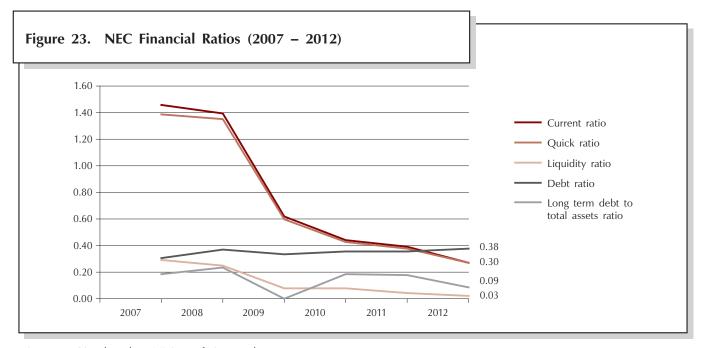
Plans included issuing bonds for at least EUR 350 m in 2012 and have a credit rating assigned by Fitch. However, the government has put on hold plans to sell BEH's minority stake on the foreign stock exchange, as market conditions have been seen as unfavorable.

Debt and Liquidity Pressure for NEC and Bulgargaz - Key Performance Ratios Analysis

The financial results of NEC and Bulgargaz have deteriorated after 2007. Above all, levels of liquidity and quick access to cash and callable resources have significantly eroded, while debt has been re-accumulated. The very ability of the state-owned companies to repay short-term and long-term obligations has been put at risk. NEC is in a state of technical insolvency, while Bulgarsgaz is also in a particularly challenging financial situation (Figure 22 and Figure 23).



Source: CSD, based on Ministry of Finance data.



Source: CSD, based on Ministry of Finance data.

- The current ratio of a company is the ratio of current assets to current liabilities. It shows the company's ability to meet its short-term liabilities (debt and payables) with its short-term assets (cash, inventory, receivables). The higher the current ratio, the more capable the company is of paying its obligations. A ratio under 1 suggests that the company would be unable to pay off its obligations if they came due at that point. NEC's current ratio is well below 1 0.30, while Bulgargaz results are slightly better and above the technical bankruptcy threshold with 1.32 current ratio. Both NEC and Bulgargaz show extreme deterioration in the last few years as their current ratio levels have decreased by 78.5 % and 61.4 % respectively compared to levels in 2007.
- The quick ratio is an indicator of a company's short-term liquidity. The quick ratio measures the company's ability to meet its short-term obligations with its most liquid assets. For this reason, the ratio excludes inventories from current assets, and is then divided by current liabilities. The quick ratio measures the amount of liquid assets available for each unit of current liabilities. Thus, a quick ratio of 1.5 means that a company has USD 1.50 of liquid assets available to cover each USD 1.0 of current liabilities. The higher the quick ratio, the better the company's liquidity position. Quick ratios of both NEC and Bulgargaz are below 1 0.37 showing that the companies have very limited access to liquid assets and would need external financing if they were to pay creditors at the current moment. A negative trend of constant decrease in the ratio value is witnessed in the 2007 2012 for both companies.
- The liquidity ratio expresses a company's ability to repay short-term creditors out of its total cash. The liquidity ratio is the result of dividing the total cash by short-term borrowings. It shows the number of times short-term liabilities are covered by cash. If the value is greater than 1, it means fully covered. Liquidity ratios of NEC and Bulgargaz stand considerably below 1, 0.03 and 0.22 respectively. A negative trend of constant decrease in the ratio value is witnessed in the 2007 2012 for both companies.
- The debt ratio is a financial ratio that measures the extent of a company's leverage. The debt ratio is defined as the ratio of total debt to total assets, expressed in percentage, and can be interpreted as the proportion of a company's assets that are financed by debt. The higher this ratio, the more leveraged the company and the greater its financial risk. Debt ratios of NEC and Bulgargaz are below 1 but there is a negative trend of constant increase in the ratio values witnessed in the 2007 2012 period for both companies. There are suspicions that the actual debt/assets ratio could be distorted by assets not being properly revalued to market benchmark (i.e. they are kept artificially overvalued asset value is reflecting different aspects book value market value liquidation value). This is critical to understand why some of the assets are liabilities or not reconciled losses like in the case of Belene NPP.
- Long-term debt to total assets ratio is a measurement representing the percentage of a corporation's assets that are financed with loans and financial obligations lasting more than one year. The ratio provides a general measure of the financial position of a company, including its ability to meet financial requirements for outstanding loans. A year-over-year decrease in this metric would suggest the company is progressively becoming less dependent on long-term debt to grow their business and vice versa. The latter is the case with Bulgargaz and NEC as long-term debt to total assets ratio is the only indicator

that yields slightly positive results for the two companies, possibly indicating the existence of buffers for long lending as a way out from the particularly difficult financial situation.

Box 9. BEH's Eurobond Sale and Related Credit Rating

BEH raised EUR 500 m through its debut Eurobond issue in late October 2013, collecting more than EUR 1.2 bn in orders. It has been announced that EUR 250 m of the loan will be used to cover a bridge financing provided by Citigroup to cover a loan from BNP Paribas to NEC in the spring of 2013. The remainder will be used to finance the building of new gas pipelines and cover deficits within the holding companies.

The five-year notes, which carry a 4.25 % coupon, priced at a reoffer price of 99.837 to yield 4.287 %, which is equivalent to a 320 basis point spread over mid swaps. Bond sale advisors Citigroup and Raiffeisen Bank International announced collecting in the low 300s area. Persisting concerns about the country's political outlook and the debut nature of the transaction were among the factors justifying a slightly higher premium compared to peers. The bond priced around 200bp over the Bulgarian sovereign curve, slightly more generous than the premium offered by other energy companies in Central and Eastern Europe.

Fitch assigned BEH's debut EUR 500 m eurobond issue a final foreign currency senior unsecured rating of "BB+" in the beginning of November. The bonds' rating mirrors BEH's long-term foreign and local currency issuer default ratings (IDR) of BB+/stable outlook. BEH's long-term IDRs reflects its dominant position in Bulgaria's electricity and gas markets and its strong links with the Bulgarian state. Developments that could lead to negative rating action include failure to maintain sufficient liquidity, negative change in the sovereign rating and/or weakening links between BEH and the state funds from operations net adjusted leverage exceeding 3x on a sustained basis. Positive rating action could be prompted by stronger corporate governance, progress in the liberalisation of the local electricity market and funds from operations net adjusted leverage below 1.5x on a sustained basis.

Investment and Renovation Activities of BEH Enterprises

Financial results of enterprises directly influence growth and re-investment capacities for the upcoming financial period. As the financial indicators for the state-owned energy enterprises have deteriorated, investment and renovation budgets have been reduced and/or have not been fully executed. In energy, failure to adequately finance renovation and re-investment leads to reduction in the security of supply, thus increases hazards for technological glitches (e.g. power outages or blackouts) and potentially environmental disasters. In 2012, the BEH subsidiaries faced financial difficulties and could not meet the initially planned re-investment and renovation targets. The situation with Kozloduy NPP is particularly worrying as the financial decapitalization on the back of administratively regulated prices had inevitable effects on the renovation funding required (Table 8). Moreover, Bulgargaz' negative financial results in 2012 prevented the company from securing the required amounts of gas to be imported in the Chiren USG facility.

Table 8. Execution of Investment and Renovation Programs of BEH Enterprises (2009 – 2012)

	200)9	201	10	201	11	201	12
Investment program	Execution (BGN mln)	% Execution						
Mini – Maritza EAD	94	73 %	88	94 %	46	52 %	66	61 %
Maritza – East 2 EAD TPP	114	67 %	163	92 %	196	117 %	86	39 %
Kozloduy EAD NPP	147	59 %	211	82 %	142	74 %	73	37 %
NEC EAD	340	132 %	373	101 %	87	113 %	207	37 %
Bulgargaz EAD	na	na	na	na	na	na	na	na
Bulgartransgaz EAD	16	39 %	3	33 %	8	8 %	31	24 %
ESO EAS	na	na	na	na	na	na	na	na
Renovation Program	Execution (BGN mln)	% Execution	Execution (BGN mln)	% Execution	Execution (BGN mln)	% Execution	Execution (BGN mln)	% Executio
Mini – Maritza EAD	49	92 %	52	132 %	55	86 %	64	98 %
Maritza – East 2 EAD TPP	51	96 %	24	79 %	23	58 %	35	143 %
Kozloduy EAD NPP	71	139 %	55	100 %	38	55 %	37	45 %
NEC EAD	52	128 %	55	100 %	32	99 %	24	47 %
Bulgargaz EAD	na	na	na	na	na	na	na	na
Bulgartransgaz EAD	na	na	na	na	na	na	na	na
ESO EAS	na	na	na	na	na	na	na	na

Source: CSD, based on Ministry of Economics and Energy data.

Public Accountability and Transparency

In light of the above, it is clear that **the current opaque system of governance of state-owned enterprises is prone to abuses** of public funds and serious neglect of the companies' interests. Sufficient public scrutiny over the consistency of reporting mechanism are, thus, necessary to increase the transparency of governance and improve the management of state-owned enterprises. Bulgarian regulations on monitoring of and reporting by companies that are applicable to state-owned enterprises (Decree 114)¹¹⁶ stipulate that all companies ought to present: 1) quarterly and annual profit and loss accounts (income statement), and 2) balance sheet statements and additional financial analysis based on the presented results. A review of the compliance of state-owned enterprises with these regulations directed the report to the following conclusions:

¹¹⁶ Bulgaria, Council of Ministers, (10.06.2010), Decree No 114 on monitoring and control of the financial condition of state-owned enterprises and companies with a majority government stake and the companies under their control.

- Currently, most companies reveal the bare minimum of financial data required by Decree 114;
- Reports by a number of state-owned energy enterprises lack the required additional performance analysis;
- While publishing their reports, NPP Kozloduy, NEC, ESO, Bulgargaz, and Bulgartransgaz are characterized by **a lack of consistency** in their reporting.

More specifically, an analysis of the compliance mechanism currently in place in Bulgaria revealed the following main issues:

- Mini Maritsa East, TPP Maritsa East 2, NPP Kozloduy, and Bulgartel publish no annual financial reports on their official websites.
- Often, one and the same company presents different structure of information for consecutive reporting periods, thus, hampering a comparison in time.
- There are discrepancies between the annual reports uploaded on the Ministry of Finance's website and the annual reports uploaded on the companies' own websites (notably, for NEC and ESO).
- Required additional financial analysis (i.e. analysis of financial results such as key performance ratios) is not available for all state-owned enterprises. Only NPP Kozloduy, NEC, ESO, Bulgargaz, and Bulgartransgaz publish this information.
- There are some **factual mistakes** in the presented information, most notably, in the case of TPP Maritsa East 2.
- The financial reports uploaded on the Ministry of Finance's webpage lack a cash flow statement and/or unconsolidated cash flow information. Instead, companies' balance sheets offer only the final free cash flow for the reporting period (excl. Bulgargaz, NEC, ESO, Bulgargaz, and Bulgartransgaz).

3.2. LARGE INVESTMENT PROJECTS: RECENT DEVELOPMENTS

3.2.1. Belene NPP

The plans for building a second NPP in Bulgaria near Belene were initiated in the 1970s, and the project has been stalled and revisited a number of times since then. The Belene NPP project poses a number of questions from an energy security perspective. Its proponents see it in terms of the weight inherent to large-scale energy production, while its opponents warn about the project's innate dependence on fuel imports and technology. Accordingly, the construction of NPP Belene has been a topic of constant and heated debate, especially since its renewed announcement at the beginning of 2008. The project has been sustained through the last 5 years of deliberations not least thanks to the existence of a vocal and powerful nuclear lobby in Bulgaria. However, the project's economic feasibility has been questionable from its very announcement. For example, ESO's grid development plan for 2010 – 2020¹¹⁸

¹¹⁷ CSD, (2011), "Energy and Good Governance in Bulgaria: Trends and Policy Options".

¹¹⁸ ESO, (2010), A Plan for the Development of the Electricity Transmission Network in Bulgaria for the Period 2010 – 2020.

develops two scenarios (i.e. one for a minimum and one for a maximum growth in electricity consumption) and notes that adding NPP Belene to the Bulgarian energy system would result in an excess of electricity produced amounting to over 12,000 GWh by 2020. Thus, the plan notes that the viability of the NPP Belene project is conditional on the existence of long-term intergovernmental electricity export agreements between Bulgaria and other neighbouring countries, while the latter would also necessitate the construction of additional transmission capacity (that is currently not in place). Further, even under the maximum growth in consumption scenario, NPP Belene is not deemed necessary in meeting domestic electricity needs.

Adding to this, cost forecasts for the NPP Belene project have not been updated until 2012, while a publicized analysis from a markets perspective is entirely missing. The cost of NPP Belene, thus the price of electricity produced from the NPP, has become a subject of enormous controversy. As a rule, only part of the costs (namely, the overnight costs estimated at about EUR 4 billion) were publicized. Estimations of the additional expenses (incl. for grid access, project administration, etc.) and escalations (inflation-adjusted costs), adding up to a price of about EUR 6-7 billion, have come under public scrutiny only recently. Moreover, the information that nuclear power projects are very capital intensive (involving huge upfront costs) and include a sizeable share of interest rates to finance the project¹¹⁹ is largely withheld from public debates. The full project costs of above EUR 10 billion¹²⁰ were finally announced creating public tensions. The withheld information is key for determining the price of electricity that will be produced by the Belene NPP, as 75-80 % of the price of electricity generated by NPPs is determined by the size of the initial investment.¹²¹ While operating costs of NPPs are relatively low, their capital costs are the highest of all energy producing facilities and the costs for financing these upfront capital costs are significant. That is, the currently low prices of electricity produced by NPP Kozloduy owe to the fact that the plant's capital costs are already paid financially depriciated (thus, consumers merely cover the operating costs). Conversely, for the electricity produced by NPP Belene, Bulgarian consumers will have to cover all the capital, operating, and financing costs. Accordingly, estimations of the cost of electricity produced by NPP Belene, based on the latest total project cost assessment, are not likely to match (and are likely to substantially exceed) electricity prices from the existing paid-out NPP Kozloduy.

Therefore, from an energy security perspective, NPP Belene project cannot be assessed positively, as it is not likely to contribute to either the affordability component of energy security, nor to rendering the country less dependent on foreign resources and technologies. Moreover, various accidents with nuclear

 $^{^{119}}$ Interest rates on nuclear power projects vary depending on the duration of project construction. Thus, depending on the time it takes to build an NPP, the interest rates are likely to be 30 – 40 % of the total project costs. In the case of NPP Belene, this would mean over EUR 3 billion.

¹²⁰ In 2011, CSD provided a breakdown of the full costs of NPP Belene adding up to EUR 10 – 12 billion (CSD, (2011), "Energy and Good Governance in Bulgaria: Trends and Policy Options"). These estimates were later confirmed by HSBC, as the consultant was hired to perform a financial analysis of the NPP.

¹²¹ World Nuclear Association, (2010), "The Economics of Nuclear Power".

power in Japan, the USA, the UK, Hungary, Russia, France, and others¹²² provide serious grounds for questioning the sustainability of NPPs in light of increasingly recurrent extreme weather events. Finally, from a financial security perspective, NPP Belene has the potential to pose a serious threat to the financial security of the country due to the following factors:

- **Sizeable investment** (incl. substantial upfront costs) that is extremely sensitive to the duration of the construction phase: the costs of an NPP project increase with every additional year of construction. All NPPs currently under construction in Europe are behind schedule, thus, will end up being notably more expensive than initially estimated. Similarly, contract costs with Atomstroyexport for NPP Belene increased with more than EUR 2 billion in two years (from 2008 to 2010) and will continue to do so.
- The **return-on-investment** (ROI) timeframe is long (30-40 years) and hard to estimate in the current reality of increasingly liberalized European market. The past few years show that substantial changes to the energy markets occur over such timeframes that might totally shift focuses and alternatives.
- As suggested by the European Court of Justice's audit report on decommissioning NPPs in Bulgaria, Lithuania, and Slovakia, the process of decommissioning is commonly characterized by huge cost overruns. According to the ECJ, the currently available financial resources from both EU contributions and national funding will not be sufficient to complete the task of decommissioning, in the case of Bulgaria, NPP Kozloduy's reactors 1-4.¹²³

Management issues (most notably, disposal) of high-level radioactive waste remain unresolved. Internationally studied deep-geologic placement is not only extremely expensive, but enjoys limited progress not least due to the inconceivable timeframe forecasts necessary for a long-term waste management solution (i.e. 10,000 years and above).

The timeline of project developments summarized below demonstrates the latest political complexities and turning points.

The course of the NPP Belene project is also a demonstration of the enormous share of political instead of economic considerations that go behind the scenes when deciding on large energy infrastructure projects. The result of a January 2013 referendum, which was not valid due to low turnout, showed that Bulgarian citizens are confused about the benefits of a nuclear power plant. Yet because of the implicit wording of the question asking voters whether they are support the development of nuclear energy in Bulgaria, the majority said 'Yes', which was used as a political dividend by the-then-opposition.

Historic data for nuclear accidents was compiled by NASA in 2011. Some notable accidents include: 1) spills of spent fuel or enriched uranium in Erwin and Braidwood, USA, (2006 & 2005), Paks, Hungary, (2003); 2) damage to reactors in Fukushima and Onagawa, Japan (2011); Tomsk and Chernobyl, Russia, (1993 & 1986), Saint Laurent des Eaux, France, (1980), Three Mile Island, USA, (1979), Jaslovské Bohunice, former Czechoslovakia, (1977), Windscale Pile, UK, (1957), Chalk River, Canada, (1952), etc.

European Court of Auditors, (2011), EU Financial assistance for the Decommissioning of Nuclear Plants in Bulgaria, Lithuania, and Slovakia: Achievements and Future Challenges, Special Report No 16.

Figure 24. NPP Belene – Timeline of Recent Project Developments

Project feasibility review contracted to HSBC. April, 2011 Atomstroyexport seeks arbitrage at the International Court of Arbitration to the International Chamber of Commerce in Paris. The claim against the Bulgarian National Electric Company is for EUR 58 million. July, 2011 The National Electric Company in turn submitted a claim for EUR 61 million against Atomstroyexport at the arbitration court in Geneva. October, 2011 NPP Belene is stalled: the Minister of Energy presents a report on the withdrawal of Decisions No. 259 and No. 260 of the Council of Ministers (2005) on building NPP Belene, and motions for the completion of a 7th reactor at NPP Kozloduy. March, 2012 Atomstroyexport increases its claim against the Bulgarian National Electric Company to EUR 1 billion, for construction, maintenance, and other expenses incurred by the Russian side. September, 2012 End of September, 2012 A potential consortium of unknown foreign investors, headed by the American Global Power Consortium (Quantum group) claims interest in the NPP Belene project; an actual consortium is never formed and renowned investors deny any association with Quantum group. October, 2012 A decision to hold a national referendum on the construction of the new NPP; specific references to the NPP Belene project are dropped from the final wording of the question. January, 2013 A national referendum on the construction of a new NPP took place on January 27, 2013; a low voter turnout of just over 20 % renders referendum results non-obligatory (60 % in favor and 38 % against); the decision over the construction of a new NPP goes to the Parliament. June, 2013 New government takes an ambiguous stance declaring the project might have to go forward. No change on the ground. 2013

Source: CSD.

Box 10. The Arbitration Case against Bulgaria on the Belene NPP Project

The political struggle over the construction of the NPP Belene became international when Atomstroyexport, the leading contractor for the project and subsidiary of Rossatom, introduced an initial claim of EUR 58 million in the Paris-based International Court of Arbitration. Later in September 2012, the company raised it to EUR 1 billion. The claim is for compensation for the stoppage of the Belene NPP project earlier in 2012. NEC has filed a counter lawsuit against Atomstroyexport with the Geneva-based Court of

Box 10. The Arbitration Case against Bulgaria on the Belene NPP Project (Continued)

Conciliation and Arbitration for over EUR 61mn for delayed works. The case is extremely complicated and involves a number of stakeholders, which means that it is unlikely to be resolved anytime soon. However, the government has issued controversial statements on the case including one by PM, Oresharski, who said in June 2013 that Bulgaria is likely to lose the case in the Arbitration Court. Later, the opposition accused the government of purposefully delaying its preparation for the case citing a letter by the legal firm in charge of the Bulgarian defense. The latter was able to negotiate a postponement of the case in order to gather the necessary experts to represent Bulgaria. Since then in February, 2014, the Bulgarian Nuclear Regulatory Agency (NRA) prepared an analysis of the NPP Belene project and concluded that its completion can be positively assessed similar to the positive report by the International Atomic Energy Agency's mission. The outcome has been that the government's policy towards the Belene NPP project remains inconsistent, which not only hurts Bulgaria's chances in the Arbitration case, but also undermines its ability to formulate an independent, long-term energy strategy.

3.2.2. International Gas Pipeline Projects (South Stream and EU's Southern Corridor)

The South Stream is a natural gas pipeline project for transporting Russian natural gas through the Black Sea to Bulgaria and further to Greece, Italy, and Austria, bypassing Ukraine. As per a 2008 agreement between the Bulgarian and the Russian governments, the project plan includes two segments: North (transporting natural gas through the Bulgarian-Serbian border and further to Hungary and Austria) and South (transporting gas through the Bulgarian-Greek border, using segments of the existing transmission system in Bulgaria). In 2011, a Bulgarian-Ukrainian consortium (consisting of two companies related to Gazprom) selected to carry out the project's feasibility study. The study, carried out through 2011, provides a few route options for the pipeline, allowing for a rough calculation of the costs, yet, more precise calculations based on the upcoming Environmental Impact Assessment (EIA) are still missing.¹²⁴ The selection procedure for carrying out an EIA is still pending as of 2014. However, a final investment agreement has already been signed between Bulgaria and Russia.

The South Stream is considered a rival project to the EU's diversification plans for bringing Caspian and North Iraqi gas to Europe through the so-called Southern Corridor initiative. With a varying degree of willingness, Bulgaria has subscribed to the South Stream gas pipeline from its very beginning. There has not been a publicly available cost-benefit analysis of the project for its Bulgarian part. The latter is to be constructed by a company equally owned by Russia and Bulgaria, through Gazprom and BEH, which was set up in November 2011, following a 2009 Agreement of Cooperation between the two parties. Negotiations on the project have been opaque, characterized by pressure exertion from the Russian side through a number of unexpected visits at the highest political level and by the Gazprom top management. Despite the government's lack of firm position on the project,

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¹²⁴ Bulgarian Energy Holding, (2011), Annual Report of the activities and a Financial Report.

in November 2012, a memorandum of understanding was signed that somewhat clarified an investment structure with some very sensitive aspects.

A year later, on October 30, 2013, it was announced as per a bilateral agreement that the construction of South Stream on Bulgarian territory is to be started by the end of 2013. According to the announcement, the total cost of the project would be EUR 3.5 bn as opposed to the announced only a year earlier EUR 3.3 bn and almost twice the initially planned costs in 2008. The project is to be financed through 30 % equity and 70 % debt for the Gazprom-BEH consortium. BEH would finance its equity part through a loan from Gazprom's bank at 4.25 % yield. A number of further questions are also raised as per the following issues: lack of publicly available cash flow and actual gas demand projections; the time gap between the envisaged start date of gas transit (December 2015) and the first dividend payments (January 2018); the contingency issues related to dividends dependent on questionable pipeline capacity fulfilment requirements (at least 50 % of the 63 bcm) that delineate the commercial viability of the whole project and could turn to be unrealistically high as no sufficient demand could be currently projected; the lack of clarity about the 70 % debt financing and expected high interest rates (above 8 %); compatibility problems between South Stream existing gas transit arrangements to Greece and Turkey and the related potential loss accumulation for BEH.

In addition to all of these issues, the steady spikes in the price of the project since its inception has led many observers to believe that the project can turn into a considerable strain on BEH's financial balance and indirectly onto the national budget, further exacerbating the bleak financial situation of Bulgaria's energy sector and the country's overall energy security risks. Finally, the project also holds little promise to improving the affordability aspect of energy security in the country in the future without continuing subsidies from transit towards consumption, as it only provides a new route but not a different supplier. In December 2013, it was announced by the European Commission that the South Stream bilateral agreements (including the agreement between Gazprom and BEH) are in breach of EU law, and need to be renegotiated. According to the Commission, intergovernmental agreements cannot be the basis for the operation of South Stream as three major issues were highlighted:

- EU's network ownership 'unbundling' rules need to be observed, meaning that Gazprom, which is both a producer and a supplier of gas, cannot simultaneously own production capacity and the transmission network.
- Non-discriminatory access of third parties to the pipeline needs to be ensured. There cannot be an exclusive right for Gazprom to be the only shipper.
- The tariff structure is not transparent and there is no economic reasoning behind it as well as guarantees for non-discriminatory tariffs for third parties.

The Bulgarian parliament reaffirmed its political support for the construction of the South Stream pipeline by its decision in the beginning of April 2014 to adopt at first reading amendments in the *Energy Law* granting South Stream a special status. **The goal of the bill is to circumvent the existing EU legislation on the liberalization of the internal natural gas market.** The decision creates a new legal norm which allows for the construction of a marine gas pipeline,

Box 11. South Stream – Official Investment Agreement Details between Russia and Bulgaria

- The officially announced cost for the construction of the Bulgarian segment of the South Stream is EUR 3.5 bn as per the start of construction on 31st October, 2013.
- Initially planned to be constructed with 30 % equity from South Stream Bulgaria (Gazprom and BEH joint project company with a 50 % ownership for each partner) and 70 % project financing.
- BEH would finance its 50 % equity investment though a loan for EUR 625 m from Gazprombank at 4.25 % yield.
- The pipeline would be open to other transit operators as per EU' Third Liberalization Package
- Construction to start by December 2013, dividends payable by January 2018.

defined as a gas pipeline, running through both Bulgaria's territorial waters, and onshore until it reaches "the connection point with another onshore gas infrastructure in the country". The latter also extends the definition of a "gas interconnector" to include marine gas pipelines entering the onshore territory of an EU member state, but "only used to connect the gas transmission systems of these EU countries". In this way, the Bulgarian Parliament has created the legal preconditions for South Stream to be treated not as an international gas pipeline between member-states of the EU and a third country, but as a marine pipeline, which connects to a series of gas interconnectors on EU territory. Among the justification for the proposed *Energy Law* amendments, the MPs, who introduced them, cite the EC's decision from May 2013 to exempt the TAP from the third liberalisation package, which demonstrates that the decision related to South Stream is subject to the approval of the EC, thus increasing the risk of sanctions and future losses for Bulgaria.

Independent analyses have demonstrated, on a number of occasions, that the project does not address the top priorities and public needs of Bulgaria's energy security, and is not of immediate urgency for the country. The determination, with which its implementation has been pursued by Bulgarian institutions, despite rising risks, increases fears that it is not (solely) national public interests that drive the energy decision-making of the government.

As parliament's decision has implications on the rest of Europe, and the European Commission has explicitly asked Bulgaria for more coordination and caution concerning South Stream, it would have made sense to at least consult the proposed amendments with EU partners in advance. Moreover so that the proposed amendments seem to create preconditions for circumventing common EU rules on the internal natural gas market by allowing the construction and exploitation of the South Stream pipeline on Bulgaria's territory without effective separation of the ownership of the natural gas and the pipeline transmission system. The adopted amendments at first reading to the *Energy Law* demonstrate yet again the risks of state capture by third-party interests.

3.3. PUBLIC PROCUREMENT IN THE ENERGY SECTOR¹²⁵

Despite some limited progress in terms of anti-corruption measures and prevention of the misuse of public financial resources in general, the major problems in the energy sector keep reoccurring and some are even being exacerbated. Most big energy projects like the construction of Belene NPP, the large renewable energy projects, Tsankov Kamak HPP and other smaller projects related to the rehabilitation of facilities can serve as examples of the misuse of public procurement mechanisms.

Public procurement is a key economic development tool and also means for redistributing national income. As such it is highly prone to corruption, fraud, and other forms of abuse of public financial resources.¹²⁶ Thus, increasing accountability for public procurement in the energy sector is a matter of particular importance to the citizens of any country. In the energy sector, public procurement plays a substantial role in a number of activities ranging from building multi-billion new power stations and purchasing materials and consumables to awarding consultancy and financial services.

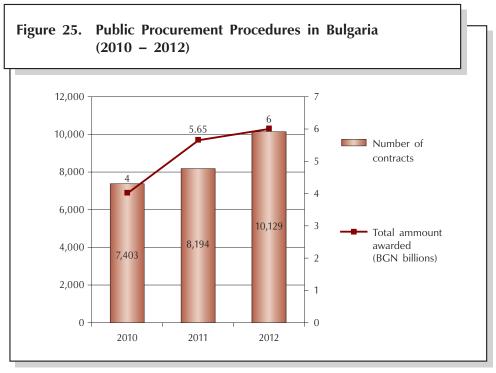
Data for public procurement in Bulgaria indicates that a total of 25,726 public procurement contracts were awarded in the 2010 – 2012 period for a total of BGN 15.7 billion in all of the country's economic sectors. **The general trend shows an increase of both the numbers of procedures and the amounts awarded.** The difference between years indicates the overall pattern of economic development in the period, as there was a slow but positive trend of economic growth in Bulgaria in the years between 2010 and 2012. In addition, the increase in the number of contracts and the amount of funds spent is due to the growing absorption of EU funds in this period. 127

Along with health care, energy enterprises are commonly ranked among the largest public procurers in Bulgaria both in terms of awarded public procurement contracts, and in terms of spending. Between 18 % and 21 % of the public procurement contracts awarded between 2010 and 2012 by the largest procurers in Bulgaria were awarded by energy enterprises.

¹²⁵ The data used in this section is available for the period 2007 – 2012, but we do not expect major discrepancies in 2013 – 2014 from the previous trend. The reason is that significant changes in the distribution between competitive and non-competitive public procurement procedures requires a change in the *Public Procurement Law*.

¹²⁶ CSD, (2007), Corruption in Public Procurement: Risks and Reform Policies; CSD, (2011), Anti-Corruption in Public Procurement: Balancing the Policies.

According to the data from the Information system for management and monitoring of the EU structural funds in Bulgaria (Council of Ministers), the amounts paid were for 2010, for 2011 and BGN 2,1 billion for 2012.



Source: CSD calculation, based on data from the Public Procurement Agency, 2013.

Table 9. The Biggest Contracting Authorities in Terms of Value of Contracts (in BGN)

Name of the contracting authority	2009	2010	2011	2012	Total 2009 – 2012
Agency "Road Infrastructure"	na	867,175,125	498,391,522	324,245,017	1,689,811,664
National Railway Infrastructure Company	107,222,720	na	563,712,073	488,000,756	1,158,935,549
Metropoliten EAD Sofia	173,065,926	na	228,899,630	164,469,684	566,435,240
Maritsa Iztok 2 TPP EAD	133,867,475	108,944,822	135,053,699	152,654,682	530,520,678
State Agency "State Reserve and War-time stocks"	na	75,667,461	132,973,987	223,705,358	432,346,806
Municipality of Varna	na	na	na	304,943,223	304,943,223
Mini Maritsa Iztok EAD, Radnevo	120,164,085	na	na	163,515,169	283,679,254
Ministry of Health	na	180,803,698	94,276,847	na	275,080,545
CEZ Distribution Bulgaria AD	na	na	242,203,105	na	242,203,105

Table 9. The Biggest Contracting Authorities in Terms of Value of Contracts (in BGN) (Continued)

Name of the contracting authority	2009	2010	2011	2012	Total 2009 – 2012
Kozloduy NPP EAD	154,999,501	na	86,063,216	na	241,062,717
Municipality of Sofia	na	na	89,624,658	134,160,469	223,785,127
Sofiyska Voda AD	84,459,629	73,851,644	na	na	158,311,273
EVN Bulgaria Electric Distribution AD, Plovdiv	72,068,374	64,558,536	na	na	136,626,910
Municipality of Burgas	na	na	na	130,168,152	130,168,152
University Hospital "Saint George" – Plovdiv	na	na	124,081,721	na	124,081,721
"Sofia Autotransport" EAD	na	na	na	117,528,585	117,528,585
Bulgarian National Railway Holding	na	100,772,520	na	na	100,772,520
National Electric Company EAD	84,477,102	na	na	na	84,477,102
"Central finance and contracts" Directorate (Ministry of Finance)	na	78,008,765	na	na	78,008,765
Energo-Pro EAD	na	71,391,526	na	na	71,391,526
Saint Ekaterina Hospital	na	70,504,168	na	na	70,504,168
Sofia Airport EAD	12,673,150	na	na	na	12,673,150
ENEL Maritsa Iztok	2,515,800	na	na	na	2,515,800

(Note: Energy enterprises marked)

Source: CSD calculation, based on data from the Public Procurement Agency, 2013.

In terms of public procurement in the energy sector, a total of 4,846 public procurement contracts were awarded in the 2010-2012 period for a total of BGN 2.9 billion. In 2012, the total number of contracts is 1,826 totalling BGN 0.87 billion. In 2011, the number of awarded contracts is 1,636 at a total value of BGN 1.2 billion, and in 2010-1,384 contracts totalling BGN 0.81 billion. There are several important trends that could be derived from the data:

• The presence of energy enterprises in the Top 10 procurers ranking (by value of the contracts awarded to them) for the 2009 – 2012 has been reduced in exchange for greater participation of road and city infrastructure developers and municipalities (see Table 9). It is indicative that in 2012 there were 4 infrastructure/transport enterprises and 3 municipalities that awarded 7 of the

largest 10 public procurements. This could be interpreted as the result of increased public scrutiny in addition to the shifted focus of the government on large infrastructure and city projects developments. Among the energy enterprises, TPP Maritsa East 2 has been constantly awarding large contacts for the last 5 years (See Table 9). National Electric Company (NEC) has been among the lowest ranked procurers compared to other large energy enterprises. Meanwhile, there is an upscale trend for the first three ranked energy companies – ESO, Mini Maritza Iztok EAD – Radnevo, Kozloduy NPP as they show constant upward movement in ranks in terms of number of contracts awarded in the monitored period between 2007 and 2012.

Table 10. Number of Contracts Awarded by the Biggest Contracting Authorities in the Energy Sector (2007 – 2012)

Contracting Authority	2007		2008		2009		2010		2011		2012	
	rank	No. of contracts										
Electricity System Operator EAD	24	83	16	145	21	112	12	26	5	146	1	296
Mini Maritsa Iztok EAD, Radnevo	7	187	10	212	10	137	6	97	2	192	2	257
Kozloduy NPP EAD	5	241	7	248	8	177	7	88	3	178	3	227
Maritsa Iztok 2 TPP EAD	8	186	6	306	6	227	1	260	1	309	4	205
EVN Bulgaria Electric Distribution AD	11	168	13	154	7	190	3	166	4	171	5	179
CEZ Distribution Bulgaria AD	-	-	-	-	-	-	2	201	6	130	6	126
Contour Global – Maritsa Iztok 3 AD	9	185	14	150	17	119	4	114	8	73	7	114
National Electric Company (NEC) EAD	16	126	-	118	-	55	10	33	10	47	9	62

Source: CSD calculation, based on data from the Public Procurement Agency, 2013.

The major factors contributing to heightened corruption risks in the energy sector can be summarized as follows:

• considerable economic interests at stake, strong political lobbies and substantial national and international financial resources involved in the energy sector;

- lack of checks and balances between the inefficient state regulation, the deficiencies of the unliberalized market and the operations of the few large privatized electric distribution companies;
- lack of genuine competition and strong monopolization of individual segments in the energy sector;
- legacy of large investment projects with disproportionate value for the sector and the economy as a whole;
- high share of energy exported via intermediaries;
- lack of transparency, public awareness and independent expert assessment plus restricted access to information on national security grounds;
- the technical complexity of the energy sector;
- the pressing need to strengthen the inspectorates' capacity;
- the need to introduce anti-corruption training of personnel;
- the need to elaborate a policy for increasing employee remuneration as a means of reducing corruption risk (team performance related incentives, outsourcing, etc.).

In terms of competition among the bidders, the procedures for the award of public procurement contracts vary considerably. They fall into three major categories:

- Non-competitive procedures, where a limited number of bidders are allowed to submit a tender, after which negotiations take place. These include negotiation procedures with and without publication of the contract notice under the Law on Public Procurement (LPP), a competitive dialogue procedure, a negotiation procedure following a special invitation, and a selection procedure among three submitted tenders.
- Semi-competitive procedures open for bidding to a limited number of interested parties only by an exclusive invitation from the contracting authorities (i.e. the so-called restricted procedure under the LPP).
- Competitive procedures open for tender submission to all interested parties, including open procedures under the LPP, open contests under the Ordinance on the Award of Small Public Contracts (RSSPP), commodity exchange transactions and, to some extent, design contests (of which there have been only a few in 2011 and 2012, none of which in the energy sector).

The specific nature of Bulgaria's energy sector is conducive to the circumvention of highly competitive procedures. The opaque environment of public procurement in the energy sector is mainly based on the exclusive criteria for access and safety of nuclear energy sites, the effective technology monopoly at the micro level for a number of supplies, the ambiguous legal nature of energy export transactions, the lack of effective in-house financial audits, and the lack of monitoring and control with respect to public procurement efficiency exercised by the State Energy and Water Regulatory Commission or any other control body. The share of open procedures where a single tender has been submitted is indicative of the progressive establishment of discriminatory specifications. Open procedures in principle attract broad interest and the number of submitted tenders would typically be as high as possible. In the energy sector, however, preference is consistently given to non-competitive procedures for the awarding of public procurement contracts. Approximately 40 % of all procedures for the awarding of public procurement contracts in the energy sector for 2012 were non-competitive, encompassing the

various negotiated procedures with or without the publication of a contract notice under the LPP, and negotiated procedures following an invitation under the RSSPP. If the contracts awarded without a public procurement procedure are added to this number, it becomes apparent that avoiding market competition is the rule rather than the exception in the energy sector. For instance, in the 2008 – 2009 period, not a single public tender under the RSSPP was announced.

Table 11. Types of Public Procurement Procedures Followed in the Energy Sector (2008 – 2012)

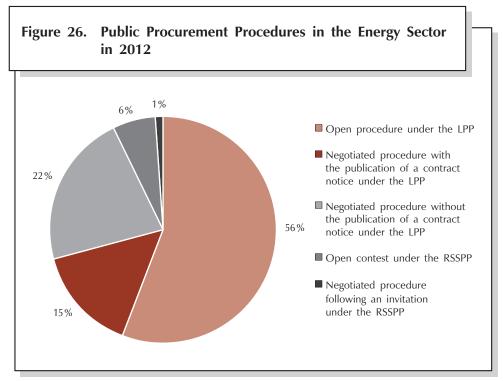
Type of procedure	2008	2009	2010	2011	2012
Open procedure under the LPP	578	348	158	287	626
Restricted procedure under the LPP	74	38	-	2	-
Negotiated procedure with the publication of a contract notice under the LPP	856	534	322	318	164
Negotiated procedure without the publication of a contract notice under the LPP	580	464	130	172	241
Open contest under the RSSPP	782	354	272	220	64
Negotiated procedure following an invitation under the RSSPP	204	84	44	55	15
Project competition	2	0	0	0	0
Total number of awarded public procurement contracts	3,076	1,822	926	1,054	1,110

Source: CSD calculation, based on data from the Public Procurement Agency, 2013.

Data for 2012 shows that 56 % of the contracts have been awarded via an open procedure under the LPP, and 6 % – via an open contest under the RSSPP. Thus, altogether 62 % of the contracts have been awarded via open-bidding procedures. The rest includes 15 % negotiated procedures with the publication of a contract, and 22 % – without the publication of a contract, as well as 1 % following an invitation under the RSSPP. Hence, a total of 38 % of the contracts have been negotiated following non-competitive procedures (Figure 26). Adding to these all the contracts that were awarded without using a PP procedure, it remains the case that in Bulgaria's energy's sector avoiding market competition is the rule, rather than the exception.

Furthermore, the data for public procurement in the energy sector and for all sectors combined could be seen as shaping two main trends:

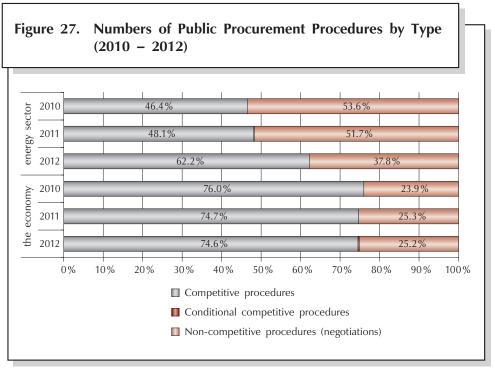
• Share of non-competitive public procurement contracts in the energy sector is systematically higher than the share of competitive contracts for the rest of the economy for the years between 2010 and 2012.



Source: CSD calculation, based on data from the Public Procurement Agency, 2013.

• The number of competitive contracts in the energy sector has, nevertheless, improved compared to previous years. In 2012, the percentage of contracts awarded on competitive basis for the economy as a whole versus the energy sector in particular was 75 % and 62 % respectively. In 2011 and 2010, the difference was much more significant, as the share of contracts awarded on the basis of truly competitive procedures for the entire economy was around 30% higher than the competitive contracts in the energy sector.

The improvement with regard to the public procurement contracts in the energy sector in the period 2010 – 2012 could be interpreted as the result of increased public scrutiny and negative social opinion, expressed by different stakeholders.



Source: CSD calculation, based on data from the Public Procurement Agency, 2013.

Box 12. Public Procurement: NPP Belene

The public procurement (PP) procedure (i.e. negotiation with the publication of a contract notice) for selection of a contractor to engineer, design, deliver, build, and commence the exploitation of blocks 1 and 2 at the NPP Belene was opened in 2005. A review of the PP notice reveals some technical issues with the tender itself, such as the provision of different methodologies for evaluation in different sections of the document, or ambiguity about the guarantees paid by the contractor. More importantly, however, notable irregularities occurred at the stage of selection of a contractor. For example, negotiations with one of the two bidders (i.e. Atomstroyexport, the other bidder being Skoda Alliance) were not finished long after the selection decision was reached. More specifically, an agreement on the index for escalation (in the absence of which, the total price of the project could not be determined) was not reached long after the selection procedure and the actual commencement of project activities. In addition, the selected option (aka, A92) from Atomstroyexport was originally rated lower than another option by the same contractor (A87), yet, was ranked first by the selection committee. Even more importantly, a temporary agreement was signed on the 29th of November 2006, aimed to serve as a guideline in the first 12 months until a final contract is prepared and signed. However, to date, a final contract has not been prepared or signed. Instead, there are 14 amendments and additional agreements that allowed for commencement of project activities in the absence of a final contract with agreed terms, which is at odds with the LPP. Moreover, negotiations between the contracting authority (NEC) and the contractor (Atomstroyexport) on key project characteristics (most notably, the index for escalation of the price, in the absence of which, a total price could not be determined) continued long after project activities have already started. While illogical (i.e. this way NEC signs up for a project of

Box 12. Public Procurement: NPP Belene (Continued)

unknown costs), the latter is also in direct violation of the LPP. Namely, the *Public Procurement Law* does not allow for negotiations on the terms of the contract after a selection procedure of a contractor has taken place. Moreover, the same law does not allow for commencement of project activities before all terms have been negotiated.¹²⁸

¹²⁸ Public Financial Inspection Agency, (2012), Report on the Financial Inspection Carried Out on the National Electric Company.