

## Financial Performance and Financial Statement Projections

### A. Introduction and Approach

1. The Georgian State Electrosystem (GSE), EA of the project, is a 100% state owned Limited Liability Company responsible for transmission operation and dispatch throughout Georgia. GSE is required to maintain its accounting and reporting in accordance with IFRS requirements.

2. Financial statement (FS) projections for GSE were developed to project financial performance of the EA, to assess profitability and debt service ability, and to test tariff required for the EA to raise funds for the Project construction and to achieve cost recovery during operation period. Major capital expenditures of the EA are important assumptions and inputs for the projections.

### B. Historical Financial Performance

3. GSE operated at a significant loss up to 2006, and was near bankruptcy caused by customers' failures to pay bills to GSE. To avert bankruptcy GSE entered into a legally binding Rehabilitation Plan in 2008 with its creditors, largely the Ministry of Finance. The plan sets out plans of investment and operating expenditure and a schedule of debt repayment in 17 years. GSE currently repays debt of around GEL 3 million per annum under the Plan. Problems of revenue collection have been resolved since 2007, with most amounts invoiced collected by GSE (Table 1). Table 1 shows low transmission losses from 2007 to 2009. GSE reported profit in 2007 and 2008 of GEL 27.5 and 27.8 million respectively. In 2009 and consistent with IFRS requirements, GSE undertook a full revaluation of system assets. GSE shows significant loss of GEL 12.3 million in 2009 due to an impairment loss of GEL 57.7 million resulted from assets revaluation to fair value and an increase in annual depreciation and amortization from GEL 12 million to about GEL 30 million. GSE does not envisage any further revaluation in the next 4 to 6 years. Electricity sales revenues also declined 8% in 2009 compared to 2008 sale revenues, which can be attributed to a fall in electricity sales volumes in the first part of 2009. 2010 unaudited financial statements show substantial improvement of the GSE financial performance, though GEL 1.35 million losses in 2010 are reported.

**Table1: Collection Rates and Technical Losses (%)**

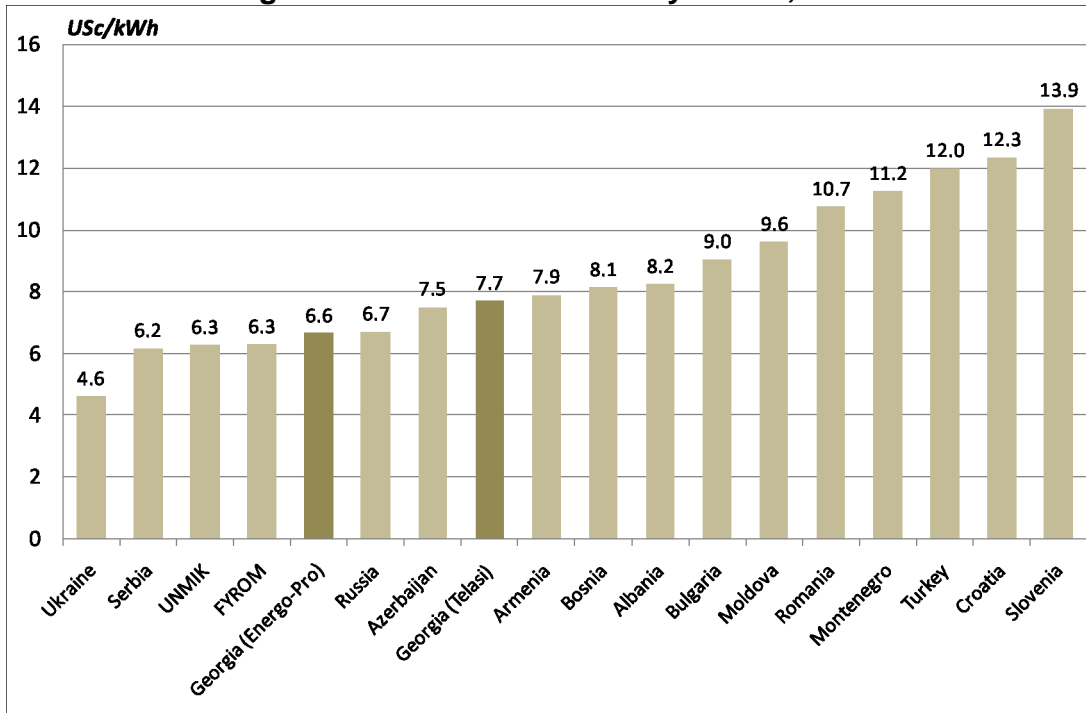
	2004	2005	2006	2007	2008	2009	2010
Collection rate	25.0%	30.0%	55.0%	95.0%	97.5%	100.0%	99%
Technical				1.9%	1.9%	1.7%	

### C. Tariffs and Electricity Sales

4. Georgia's electricity tariffs for household are relatively low compared to household tariffs across transition economies in the region, as illustrated in Figure 1. These low tariffs are primarily due to the low regulated tariff for HPPs, reflecting the fact that much of the existing capacity is old and fully depreciated. The largest generator, Enguri HPP, has a regulated tariff of only 1.128 Tetri/kilowatt-hour<sup>1</sup> (approximately \$0.64 /kilowatt-hour). Tariffs for other existing HPPs range up to 3.85 Tetri/kilowatt-hour (about \$2.2/kilowatt-hour).

<sup>1</sup> 1 GEL=100 Tetri.

**Figure 1: Household Electricity Tariffs, 2009**



FYROM = Former Yugoslav Republic of Macedonia, UNMIK = United Nations Interim Administration Mission in Kosovo

5. Current electricity tariffs are unlikely to encourage efficient energy use. As tariffs do not change by time of day or season, there are no incentives to reduce demand at times of peak consumption. As tariffs are purely volume-based there is also no incentive on distribution licensees to encourage energy efficiency measures, as this will reduce their revenues.

6. GSE customers include distribution companies, directly connected customers, and exporters. GSE's tariffs were last revised in 2006 and comprise tariff for (i) dispatch (0.15 tetri/kilowatt-hour); (ii) transmission for 35kv-110 kilovolt-220 kilovolt (0.50 tetri/kilowatt-hour); (iii) transmission for 6 kilovolt-10 (1.109 tetri/kilowatt-hour); and (iv) Exports from Georgia to neighbouring countries incur the export, and transit through Georgia that are subject to negotiations. Historical electricity sales volumes including dispatch, transmission, and export are summarized in Table 2.

**Table 2: Historical Sales Volumes (GWh)**

	2007	2008	2009	2010
Dispatch (total)	7,185	7,482	7,033	8,589
Transmission (35 kilovolt-110 kilovolt-220)	5,705	5,530	4,895	5,588
Transmission (6 kilovolt -10 kilovolt)	563	580	590	602
Transmission - Exports	381	279	263	508

7. Since 2006 GSE has not sought a tariff increase, relying on electricity volume growth without increasing tariff since then. GSE is subject to an element of volume risk, particularly in a scenario where (i) proposed growth in electricity volumes does not materialize; and (ii) GSE has to operate under constant prices.

#### **D. Major Assumptions Used in FS Projections**

8. The Rehabilitation Plan signed in 2008 sets out financial forecasts up to 2023 showing absolute losses declining. The pro forma FS projections have been developed taking into account the substantially improved FS in 2010, GSE's latest projected revenues including sales volumes and tariffs, operating expenditure, major capital expenditures, depreciation, loan balances and interest payments, etc.

9. GSE considers maintaining and increasing its profitability through increased sales volume rather than increased prices, and there has been no tariff increase since 2006. In the FS projections, the base case scenario assumes that tariffs will be raised by 10% every 5 years starting from 2015.

10. Operating expenditure will grow by around 5% per annum over the forecast period, largely in line with ADB projected inflation rate. Other operating and maintenance costs given in the financial projections prepared by GSE have been reviewed and discussed, found acceptable, though with minor modification as appropriate.

11. Corporate income tax rate is 15%. GSE is liable for the income tax if the 5-year cumulative before tax income is positive. GSE currently pays a tax of 1% on property, plant and equipment and approximately GEL 300,000 per year on land tax, which are included as part of operating expenditure

12. GSE's self-funded investment plan by year and other major capital expenditures were considered in the projections. Two percent average interest rate per annum on international loans is to determine interest payments, and 15-year loan repayment period is assumed.

13. About GEL 60 million restructured liabilities in the balance sheet of GSE in 2010 is to be repaid at a constant rate, with its residual value assumed to be zero in 2023 as per the Rehabilitation Plan.

14. GSE depreciates buildings and construction in 20 years, power transmission lines in 20 years, vehicles and equipment in 5 years, and other in 6 to 7 years. The projections use GSE's estimates of depreciation and amortization.

15. Other main assumptions for the projections include (i) accounts receivables are assumed to be of 45 days of annual sales revenues; (ii) inventories is 12.5% of sales revenue; and (iii) accounts payable is 30 days of operating costs.

16. Income statement, balance sheet and cash flow statement projections cover the period from 2011 to 2020. It is assumed that all components of the project are to be commissioned at end of 2014, and become fully operational in 2015. Construction in progress is transferred to the balance sheet as fixed assets at end of the implementation period at the year-end of 2014.

#### **E. Financial Statement Projections and Conclusions**

17. Detailed financial statement projections from 2006 to 2020, including projected income statement, balance sheet and cash flow statement are presented in Tables 3, 4 and 5, including major financial ratios.

18. Financial statement projections have shown satisfactory results. GSE would incur a net loss up to 2013, after which its financial performance will turn around substantially, mainly due to increased revenue driven partly from increased export sales. Throughout the forecast period, GSE would maintain a strong cash position, with debt service coverage ratio of above 2.5 for the whole forecast period and also satisfactory Self Financing Ratio. GSE would have sufficient capacity to repay debt obligations.

19. To assess risk, only 20% of the projected revenues were assumed to reflect a scenario that only lower than projected export volume would be achieved and tariff would not be appropriately adjusted in a timely manner. For this scenario, GSE would continue to make a net loss until 2017, but debt service coverage ratio would be greater than 1.9 in all the years from 2013, sufficient to comply with financial covenants.

20. The EA agreed to minimum levels of financial performance, and these will be included as loan covenants. Periodic tariff reviews will be required to overcome the risk of poor financial performance, to achieve long-term sustainability, and to ensure that the Project does not have an adverse fiscal impact on GSE and the government. The government committed to adjust tariff according to Electricity Tariff Methodology, Setting Rules and Procedures approved by Georgian National Electricity Regulatory Commission in 1998.

**Table 3: GSE Income Statement Projection (GEL'000)**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Total sales revenue</b>	<b>57.409</b>	<b>52.540</b>	<b>61.898</b>	<b>83.918</b>	<b>57.541</b>	<b>57.158</b>	<b>65.476</b>	<b>76.421</b>	<b>84.582</b>	<b>99.778</b>	<b>100.548</b>	<b>124.378</b>	<b>126.918</b>	<b>129.431</b>	<b>145.132</b>
Less operating expenditure	40.661	7.219	17.917	34.262	29.665	23.697	25.847	27.522	29.402	31.406	33.352	35.293	37.238	39.293	41.476
Earning before interest, taxes, depreciation and amortization (EBITDA)	16.748	45.321	43.981	49.656	27.876	33.461	39.629	48.899	55.180	68.372	67.196	89.085	89.680	90.138	103.655
Less depreciation and amortization	12.565	13.85	12.430	84.593	30.557	31.828	38.111	43.152	43.987	47.053	47.258	49.735	51.601	47.431	49.338
Earnings before interest and taxes	4.183	9	31.551	-34.937	-2.681	1.634	1.518	5.747	11.194	21.320	19.938	39.350	38.078	42.707	54.317
Less finance costs	2.271	2.594	975	6.805	493	6.341	6.669	7.021	6.483	5.896	5.317	4.747	4.186	3.631	3.084
Less taxation	6.333	1.320	2.813	-29.416	-1.824	0	0	0	0	2.314	2.193	10.212	5.084	5.861	7.685
<b>Net Profit</b>	<b>-4.421</b>	<b>27.548</b>	<b>27.763</b>	<b>-12.326</b>	<b>-1.350</b>	<b>-4.708</b>	<b>-5.152</b>	<b>-1.273</b>	<b>4.710</b>	<b>13.110</b>	<b>12.427</b>	<b>24.390</b>	<b>28.809</b>	<b>33.215</b>	<b>43.548</b>
<b>Loan covenant ratios</b>															
Accounts receivables (months)	2,82	5,25	5,96	2,27	1,92	1,45	1,46	1,46	1,46	1,46	1,46	1,47	1,47	1,47	1,47
Debt service coverage	6,02	11,33	7,52	-3,70	-8,79	2,53	2,58	2,78	2,75	3,36	3,38	4,19	4,59	4,66	5,40
Self financing ratio	66%	76%	53%	65%	65%	8%	36%	32%	100%	100%	100%	100%	100%	100%	100%
Free cash flow/debt service	3,9	4,3	7,4	-1,0	-8,2	1,9	2,5	2,6	2,7	3,3	3,5	4,4	4,8	5,0	5,6
<b>Other ratios</b>															
Profit margin (%)	-7,7%	52,4%	44,9%	-14,7%	-2,3%	-8,2%	-7,9%	-1,7%	5,6%	13,1%	12,4%	19,6%	22,7%	25,7%	30,0%
Operating margin	7,3%	59,9%	51,0%	-41,6%	-4,7%	2,9%	2,3%	7,5%	13,2%	21,4%	19,8%	31,6%	30,0%	33,0%	37,4%
% Return on Net Fixed Assets	-4,6%	24,1%	17,5%	-3,7%	-0,4%	-1,3%	-1,3%	-0,3%	1,2%	3,7%	3,8%	8,1%	10,7%	13,8%	20,6%
Liquidity ratio	1,43	1,45	1,64	1,47	1,31	2,38	2,59	3,15	3,90	5,31	6,66	9,08	11,52	13,95	17,00
Gearing	-156,1%	-815,9%	88,4%	48,9%	45,3%	54,4%	56,4%	58,0%	54,7%	50,0%	45,6%	39,5%	34,1%	28,9%	23,7%

Source: Georgian State Electrosystem

**Table 4: GSE Balance Sheet Projection (GEL'000)**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Assets</b>															
<b>Non current assets (net fixed assets)</b>	<b>96.530</b>	<b>114.255</b>	<b>158.294</b>	<b>336.721</b>	<b>367.939</b>	<b>371.048</b>	<b>388.671</b>	<b>407.705</b>	<b>383.719</b>	<b>356.666</b>	<b>329.408</b>	<b>299.673</b>	<b>268.072</b>	<b>240.641</b>	<b>211.302</b>
<b>Current assets</b>	<b>23.785</b>	<b>32.113</b>	<b>48.907</b>	<b>36.132</b>	<b>40.065</b>	<b>46.255</b>	<b>50.723</b>	<b>62.184</b>	<b>77.421</b>	<b>106.320</b>	<b>134.466</b>	<b>184.902</b>	<b>236.307</b>	<b>288.528</b>	<b>354.602</b>
cash	6.550	4.408	14.293	16.163	23.651	32.186	34.590	43.333	56.543	81.669	109.625	154.144	204.918	256.515	318.690
inventories	3.762	4.707	3.880	4.113	7.199	7.145	8.184	9.553	10.573	12.472	12.569	15.547	15.865	16.179	18.141
accounts receivable	13.473	22.998	30.734	15.856	9.215	6.924	7.949	9.298	10.305	12.178	12.273	15.211	15.524	15.834	17.770
<b>Total assets</b>	<b>120.315</b>	<b>146.368</b>	<b>207.201</b>	<b>372.853</b>	<b>408.004</b>	<b>417.303</b>	<b>439.394</b>	<b>469.889</b>	<b>461.140</b>	<b>462.986</b>	<b>463.874</b>	<b>484.575</b>	<b>504.378</b>	<b>529.168</b>	<b>565.904</b>
<b>Liabilities and equity</b>															
Opening equity						206.360	181.608	183.126	188.873	200.067	221.386	241.324	280.674	318.752	361.460
Net profit						-4.708	-5.152	-1.273	4.710	13.110	12.427	24.390	28.809	33.215	43.548
Dividends						-20.044	6.669	7.021	6.483	8.209	7.510	14.960	9.269	9.493	10.769
<b>Closing equity</b>	<b>-106.342</b>	<b>-75.268</b>	<b>17.858</b>	<b>171.006</b>	<b>206.360</b>	<b>181.608</b>	<b>183.126</b>	<b>188.873</b>	<b>200.067</b>	<b>221.386</b>	<b>241.324</b>	<b>280.674</b>	<b>318.752</b>	<b>361.460</b>	<b>415.776</b>
<b>Total non current liabilities</b>	<b>209.966</b>	<b>199.449</b>	<b>159.541</b>	<b>177.259</b>	<b>171.111</b>	<b>216.293</b>	<b>236.690</b>	<b>261.300</b>	<b>241.202</b>	<b>221.564</b>	<b>202.355</b>	<b>183.546</b>	<b>165.111</b>	<b>147.025</b>	<b>129.265</b>
Long term loans	64.817	67.050	86.129	109.699	110.926	160.121	184.530	213.152	197.067	181.441	166.244	151.448	137.025	122.951	109.203
Restructured liabilities	0	0	50.364	54.251	60.185	56.173	52.160	48.148	44.136	40.123	36.111	32.099	28.086	24.074	20.062
Other liabilities	145.149	132.399	23.048	13.309	0	0	0	0	0	0	0	0	0	0	0
<b>Total current liabilities</b>	<b>16.691</b>	<b>22.187</b>	<b>29.802</b>	<b>24.588</b>	<b>30.533</b>	<b>19.402</b>	<b>19.578</b>	<b>19.716</b>	<b>19.871</b>	<b>20.035</b>	<b>20.195</b>	<b>20.355</b>	<b>20.515</b>	<b>20.684</b>	<b>20.863</b>
Trade and other payables	15.393	16.086	23.047	17.260	13.079	1.948	2.124	2.262	2.417	2.581	2.741	2.901	3.061	3.230	3.409
Other current liabilities	1.298	6.101	6.755	7.328	17.454	17.454	17.454	17.454	17.454	17.454	17.454	17.454	17.454	17.454	17.454
<b>Total equity and liabilities</b>	<b>120.315</b>	<b>146.368</b>	<b>207.201</b>	<b>372.853</b>	<b>408.004</b>	<b>417.303</b>	<b>439.394</b>	<b>469.889</b>	<b>461.140</b>	<b>462.986</b>	<b>463.874</b>	<b>484.575</b>	<b>504.378</b>	<b>529.168</b>	<b>565.904</b>

Source: Georgian State Electrosystem

**Table 5: Cash Flow Statement Projection (GEL'000)**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Operating cashflows</b>															
Net profit	-4.421	27.548	27.763	-12.326	- 1.350	-4.708	-5.152	-1.273	4.710	13.110	12.427	24.390	28.809	33.215	43.548
Plus: depreciation	12.565	13.878	12.416	84.574	30.557	31.828	38.111	43.152	43.987	47.053	47.258	49.735	51.601	47.431	49.338
Finance costs	2.271	2.594	975	6.805	493	6.341	6.669	7.021	6.483	5.896	5.317	4.747	4.186	3.631	3.084
Income tax expense (credit)	6.333	1.320	2.813	-29.416	-1.824	-	-	-	-	2.314	2.193	10.212	5.084	5.861	7.685
Decrease in inventories	641	- 945	827	-233	-3.086	54	-1.040	- 1.368	-1.020	-1.900	-96	-2.979	-317	-314	- 1.963
Decrease in operating receivables	-26.913	-9.525	-7.736	14.878	6.641	2.291	-1.025	-1.349	-1.006	-1.874	-95	-2.938	-313	-310	-1.936
Increase in operating payables	1.534	693	6.961	-5.787	-4.181	- 1.131	177	138	155	165	160	160	160	169	179
Other adjustments	14.698	-18.930	-3.330	-36.297	367	-	-	-	-	-	-	-	-	-	-
<b>Net cashflow from operating activities</b>	<b>6.708</b>	<b>16.633</b>	<b>40.689</b>	<b>22.198</b>	<b>27.617</b>	<b>24.676</b>	<b>37.741</b>	<b>46.319</b>	<b>53.308</b>	<b>64.764</b>	<b>67.165</b>	<b>83.328</b>	<b>89.209</b>	<b>89.683</b>	<b>99.936</b>
<b>Investing cashflow</b>															
Capital investment	-8	-24.007	-26.185	-42.292	-42.362	-34.937	-55.733	-62.187	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000
<b>Net investing cashflow</b>	<b>-8</b>	<b>-24.007</b>	<b>-26.185</b>	<b>-42.292</b>	<b>-42.362</b>	<b>-34.937</b>	<b>-55.733</b>	<b>-62.187</b>	<b>-20.000</b>	<b>-20.000</b>	<b>-20.000</b>	<b>-20.000</b>	<b>-20.000</b>	<b>-20.000</b>	<b>-20.000</b>
<b>Financing cashflow</b>															
Debt and other repayments	-1.729	-3.885	-5.473	21.350	3.379	-13.203	-15.337	-17.577	-20.098	-19.638	-19.209	-18.809	-18.435	-18.086	-17.761
Additional borrowings	-	9.117	849	588	20.000	32.000	35.733	42.187	-	-	-	-	-	-	-
<b>Net financing cash flow</b>	<b>1.729</b>	<b>5.232</b>	<b>-4.624</b>	<b>21.938</b>	<b>23.379</b>	<b>18.797</b>	<b>20.397</b>	<b>24.610</b>	<b>-20.098</b>	<b>-19.638</b>	<b>-19.209</b>	<b>-18.809</b>	<b>-18.435</b>	<b>-18.086</b>	<b>-17.761</b>
NET CASH INCREASE	4.971	- 2.142	9.880	1.844	8.634	8.535	2.404	8.743	13.211	25.126	27.956	44.519	50.774	51.597	62.176
Opening cash balance	1.579	6.550	4.408	14.288	15.017	23.651	32.186	34.590	43.333	56.543	81.669	109.625	154.144	204.918	256.515
Closing cash balance	6.550	4.408	14.288	16.132	23.651	32.186	34.590	43.333	56.543	81.669	109.625	154.144	204.918	256.515	318.690

Source: Georgian State Electrosystem