Overview:

This study is a continuation of our comparative research on the listed electricity generation companies. Our previous coverage on the sector was made in April, 2013. This is a continuation of the coverage where performance of the companies for the years 2013, 2014 and 2015 (Q1/Q3) has been considered.

Bangladesh has achieved great success in the power sector in the last six years. The power generation capacity has increased from 4,924MW in 2009 to 11,532 currently as of June, 2015 according to the Bangladesh Power Development Board (BPDB). Presently, 68% of the population has been brought under power supply coverage and the per capita generation is 348kw/h. The average daily generation currently is around 6500-8000MW (Day-Evening Peak).

Bangladesh Power Sector at a glance (July 2014)	
Generation capacity	10,648 MW
Per Capita generation	348KWH
Access to electricity	68%
Generation capacity by sector :	
Public	55%
Private	40%
Power Import	5%

Figure: 1 (Source: Bangladesh Power Development Board)

Power System Master Plan (PSMS) has a vision to achieve generation capacity of 24,000 MW by 2021 and 40,000 MW by 2030. The present generation capacity is 11,532 MW as of July, 2015 and actual average generation is 6500 (Day peak)/7900 (Night peak). The present fuel mixes of power generation as per the presentation of Secretary Power Division in a Seminar in Dhaka in March 2015 are as follows:

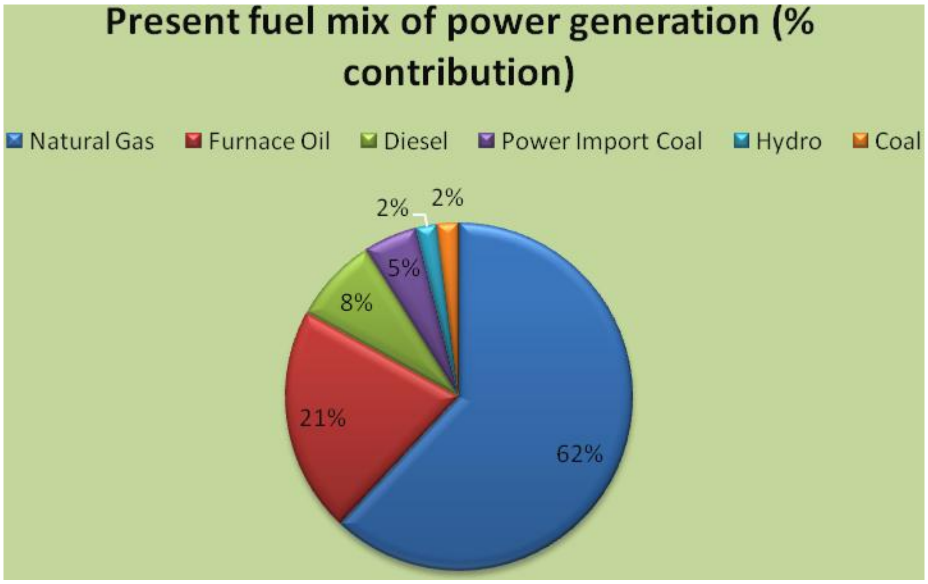


Figure: 2 (Source: Ministry of Power, Energy and Mineral Resources) (YEAR: 2014)

The demand is rising in the country is rising with sustained GDP growth and it is expected to rise at 10% growth rate in the next five to six years. Government policy suggests shifting electricity production from Natural gas and fuel (HFO, Diesel) to coal as it is a cheaper and sustainable option in the long term. There is already a gas shortage and electricity consumption is becoming expensive due to high cost of running fuel powered power plants. Various initiatives have been taken to boost the supply of electricity for economic growth. There has been a plan to import 6,500MW electricity by 2030 from neighboring countries like India, Nepal, Bhutan and Myanmar. The government has also taken a bold step for a long term solution by undertaking a plan to generate 2,000MW and 4,000MW electricity from nuclear energy by 2022 and 2030 respectively. The first project for Nuclear power generation with active support and assistance at Roopur is advancing in the right direction. On our previous report prepared during April 2013 we showed a forecast of Peak Demand for the next nine years as per Bangladesh Power Development Board (BPDB). The demand is growing at an average of 11% a year.

Fiscal Year	Peak Demand
2012	7,518
2013	8,349
2014	9,268
2015	10,283
2016	11,405
2017	12,644
2018	14,014
2019	15,527
2020	17,304

Figure: 3 (Source: Bangladesh Power Development Board)

The next great challenge for the country is the transitional shift of resources from NG powered power plants to coal powered power plants. Natural gas is a valuable resource and its estimated reserve is small in our country. An appropriate strategy for gas utilization, stepping up gas and coal exploration and conservation of gas in households and in factories can ensure better and more lasting impact in the field of producing and supplying electricity to meet the ever increasing demand of our country. Both the public and the private sector are contributing to the electricity generation. The share of private sector now stands at 40% and it is increasing day by day. The listed power generation companies have a combined rated capacity of 1044 MW using NG/HFO as fuel. Some plants can run in dual mode others are only NG/HFO based. It should be mentioned that all the private power generation except UPGDCL sell their electricity output exclusively to Bangladesh Power Development Board (PDB)/Rural Electrification Board.

Particulars (2014)	SPL	BARAKA	SPPCL	SPCL	UPGDCL	KPCL	TOTAL
Net Profit after tax	2,839,838,999	310,766,689	726,341,594	243,290,555	2,464,628,035	831,429,857	7,416,295,729
Growth of NPAT (YOY)	0.35%	44.69%	0.52%	-3.51%	38.90%	-24.54%	
Forward EPS	3.26	3.00	4.78	8.44	8.18	6.36	6
Forward P/E	12.76	10.88	11.46	17.69	19.36	9.21	14
Market Price (as on 24th June'15)	38.6	31.6	52.3	143.3	157.1	69.3	82
Net Profit Margin	46.49%	19.75%	53.07%	8.89%	55.22%	11.22%	32
Debt to Equity Ratio	**0.16**	1.800	0.130	0.990	0.290	0.740	0.68
Energy sold MWH	1,953,669	393,973	488,683	543,261	879,778	**479,839**	4,739,203
Capacity MW	316.55	101	66	137	158	265	1,044
Net Profit/MWhr	1453.592701	788.8019966	1486.32466	447.8336472	2801.420398	1732.726721	1564.882477

Figure: 4 (Source: Empire Capital Research and Annual Reports of companies)

Abbreviations KPCL: Khulna Power Company Limited: SPL: Summit Power Limited: BARAKA: Baraka Power SPPCL: Summit Purbanchol Power Company Limited: SPCL: Shahjibazar Power Company Limited: UPGDCL: United Power Generation and Distribution Company Limited

Out of the six electricity producing and selling companies KPCL and SPCL are the ones showing a negative year on year growth in terms of Net profit after tax. KPCL showed a negative trend due to merger of the company with its subsidiaries, where by the revenue and profits of its subsidiaries for first 9 months of 2014 was excluded from consolidated financial reporting of KPCL. However the current turnover growth and liquidity position of the industry is satisfying. The largest private power generating company, SPL is showing a healthy net profit margin of 46.49% which makes it as the third highest profit earning company after UPGDCL and SPPCL of 55.22% and 53.07% respectively in percentage terms. The debt to equity ratio of SPPCL is the lowest with SPCCL registering the second lowest debt to equity ratio. Baraka has the lowest forward P/E with a relatively healthy growth of 19.75% in NPAT in 2014.

A BRIEF PROFILE OF THE LISTED POWER GENERATION COMPANIES

Khulna Power Company Ltd (DSE: KPCL) was incorporated in Bangladesh on 15 October 1997 as a private limited company under the Companies Act (#18) 1994 and has subsequently been converted into public limited company on July 19, 2009. The plant came into operation on October 13, 1998 for 15 years and after successful completion of that tenor the company awarded extension for another 5 years starting from October 12, 2013. Project was initially sponsored by Summit Group and United Group along with their foreign partner El Paso Corporation (El Paso), USA, one of the worlds largest and most diversified natural gas exploration and pipeline companies and Wärtsilä Corporation (Wärtsilä), Finland, a leading power plant manufacturer of the world. From the below information it can be seen that as the KPCL plants run on HFO which is an expensive fuel compared to NG, average Plant Factor of the power units of KPCL are running below 40% on average.

KPCL								
Company/ Subsidiaries	**Location**	**Capacity MW**	**Plant factor**	**Energy Generated/ Sold (MWH)**	**Energy used in plant**	**Operation starting date**	**End of operation**	**Project type**
KPCL-1	Goalpara, Khulna	110	37.26%	359,910	HFO	Oct-98		IPP
KPCL-2	Goalpara, Khulna	115	33.67%	85,453	HFO	11-Jun	16-May	Rental for 5 yrs
KPCL-3	Noapara, Jessore	40	39.00%	34,476	HFO	11-May	16-Apr	Rental for 5 yrs

Figure: 5 (Source: Annual Reports of companies and company website) need to change to units sold not produced

Summit Power Limited (DSE:SUMITPOWER) is a public limited company incorporated in Bangladesh on June 7, 2004 under the Companies Act (#18) 1994. The company was initially registered as a private limited company on March 30, 1997 and was later subsequently been converted into public limited company during November 2005. It has three subsidiaries named Summit Purbanchol Power Company Limited, Summit Uttaranchol Power Company Limited and Summit Narayangonj Power Limited.

The principal activity of the company/group is to generate and supply electricity. Besides this SPL also owns a 17% stake in KPCL (Available for sale financial asset) and a 30% stake in 305/335 (HFO/NG) based Summit Meghnaghat Combined Cycle Power Plant. This unit was running in simple cycle mode and as of June, 2015 and is yet to resume combined power cycle generation. The average plant factor of SPL units was 71% as of December 31, 2014.

SPL								
Company/Subsidiaries	**Location**	**Capacity MW**	**Plant factor**	**Energy Generated/Sold (MWH)**	**Energy used in plant**	**Operation starting date**	**End of operation**	**Project type**
Summit Power Limited								
Ashulia Power Plant Unit-1	Savar,Dhaka	11	60%	57,577	NG	Feb-01	Feb-16	IPP
Ashulia Power Plant Unit-2	Savar,Dhaka	33.75	57%	167,443	NG	Dec-07	Dec-22	IPP
Madhabdi Power Plant Unit-1	Narsingdi	11	71%	68,544	NG	Apr-01	Mar-16	IPP
Madhabdi Power Plant Unit-2	Narsingdi	24.3	62%	130,961	NG	Dec-06	Dec-22	IPP
Chandina Power Plant Unit-1	Comilla	11	79%	76,108	NG	Jun-01	May-16	IPP
Chandina Power Plant Unit-2	Comilla	13.5	61%	72,034	NG	Oct-06	Nov-21	IPP
Summit Purbanchol Subsidiary								
Rupgonj Power Plant	Narayanganj	33	85%	246,951	NG	Jun-09	Jun-24	IPP
Jangalia Power Plant	Comilla	33	84%	241,752	NG	Jun-09	Jun-24	IPP
Summit Uttaranchol Subsidiary								
Maona Power Plant	Gazipur	33	86%	249,763	NG	May-09	May-24	IPP
Ullapara Power Plant	Sirajganj	11	72%	69,506	NG	Mar-09	Mar-24	IPP
Summit Narayanganj Subsidiary								
Madanganj Power Plant	Narayanganj	102	65%	573,030	HFO	Apr-11	Mar-15	Rental for 5 years

Figure: 6 (Source: Annual Reports of companies and company website)

Baraka Power (DSE: Baraka) is a joint collaboration of local and a group of Non Resident Bangladeshi (NRB) entrepreneur. Baraka Power is the only private sector power generating company developed by a group of NRB investors. The company was incorporated in Bangladesh on 26 June 2007 as a Private Limited Company. On 25 September 2008 the Company was converted to Public Limited Company under the Companies Act 1994.

Baraka Power took part in the tendering process initiated by Bangladesh Power Development Board (BPDB) and wins the bid for implementation, generation & supply of electricity from a 51MW power plant at Fenchugonj, Sylhet for a period of 15 years on BOO basis and signed an agreement with Bangladesh Power Development Board on 28 April 2008. For project financing the company appointed Infrastructure Development Company Limited (IDCOL) as lead arranger to arrange syndicated loan for the project. Accordingly a syndication loan facility for Taka 125 crore could be arranged from 6 (six) financial institute. The average plant factor of the power producing units of Baraka was 72.25 as of 31st December, 2015.

BARAKA								
Company/Subsidiaries	**Location**	**Capacity MW**	**Plant factor**	**Energy Generated/Sold (MWH)**	**Energy used in plant**	**Operation starting date**	**End of operation**	**Project type**
Fenchuganj Power Plant	Sylhet	51	75.78%	338,817	NG	Oct-09	Oct-24	BOO Basis
Patenga Power Plant	Chittagong	50	68.72%	55,156	NG	Mar-13	Mar-28	BOO Basis

Figure: 7 (Source: Annual Reports of companies and company website)

Summit Purbanchol Power Company Limited (DSE: SPPCL) is a subsidiary of Summit Power Limited and sponsored by Summit Industrial and Mercantile Corporation (Pvt.) Ltd. The Company established in 2007 as Independent Power Producer (IPP) and successfully entered in the business by implementing two power plant projects of 33 MW capacities each at Rupganj, Narayanganj and Jangalia, Comilla.

The Company was converted from Private Limited Company into Public Limited Company on 3 May 2010 and consequently enlisted with Dhaka Stock Exchange and Chittagong Stock Exchange by 15 January 2013. Trading of share was started on 4 February 2013 after successful completion of IPO process. In terms of expansion, the company had a significant achievement of acquiring 20% shares of Summit Narayanganj Power Limited. Summit Purbanchol Power Company Limited had raised fund through IPO and has utilized them to acquire 20% holding of Summit Narayanganj Power Limited. The average plant factor of SPPCL units is 84.5%.

SPPCL								
Company/Subsidiaries	**Location**	**Capacity MW**	**Plant factor**	**Energy Generated/Sold (MWH)**	**Energy used in plant**	**Operation starting date**	**End of operation**	**Project type**

Jangalia Power Plant	Comilla	33	84%	241,732	NG	Jun-09	Jun-24	IPP
Rupganj Power Plant	Narayan ganj	33	85%	246,951	NG	Jun-09	Jun-24	IPP

Figure: 8 (Source: Annual Reports of companies and company website)

Shahjibazar Power Company Ltd (DSE: SPCL) is one of the largest and most modern, rental Power Generation Company in Bangladesh. SPCL has started its operation in January 2009. Since it's inspection due to hard work, sincerity and honesty, it has become renowned in Bangladesh within this short span of time. It is situated at Fatehpur, Shahjibazar, Hobigonj, Sylhet Division. Shahjibazar Power Company Ltd also has an associate in the name of **Midland Power Co. Limited (MPCL)** which is a gas based 51MW capacity Independent Power Plant (IPP) located at Ashugonj, B.Baria. MPCL is a joint venture company developed by Viyellatex Limited having its 51% ownership share and Shahjibazar Power Co. Ltd with 49 % share. MPCL has been in commercial operation since 7th December, 2013. SPPCL also owns a subsidiary Petromax Refinery Ltd (PRL), is a privately owned petroleum oil refinery having capacity of 2500 BPSD, based on Natural gas condensate as feedstock. Refinery Plant is located at Mongla Industrial Area on the bank of Poshur River. The average plant factor of the power generation units of SPCL was 69.23% for the latest reporting period.

SPCL								
Company/Subsidiaries	**Location**	**Capacity MW**	**Plant factor**	**Energy Generated/Sold (MWH)**	**Energy used in plant**	**Operation starting date**	**End of operation**	**Project type**
Shahjibazar Power Plant	Sylhet	86	73.46%	543,261	HFO	Feb-09	Feb-24	IPP
Midland Power Plant	Sylhet	51	65%	335,789	NG	Dec-13	Dec-24	IPP

Figure: 9 (Source: Annual Reports of companies and company website)

United Power Generation & Distribution Company Ltd. (DSE: UPGDCL) was incorporated in Bangladesh on 5th January 2007 under the Companies Act (#18) 1994 under registration no: C-65291(2783)/07 dated 15 January 2007 with its registered office at United Center, Road No. 51, and House No. NW (J) 6, Gulshan-2, Dhaka-1212,Bangladesh.The Company was initially registered as a Private Limited Company formerly known as Malancha Holdings Ltd. (MHL) and subsequently converted into a Public Limited Company. The authorized share capital of the Company is Tk. 10,000,000,000 (Taka One Thousand crore) only divided into 800,000,000 (Eight Hundred million) ordinary shares of Tk. 10 (Tk. ten) each and 200,000,000 (Two Hundred million) redeemable preference shares of Tk. 10 (Tk. ten) each.

The principal activity of the Company is to generate electricity by two gas fired power plants, one at DEPZ with 86 MW capacity and the other at CEPZ with 72 MW capacity and to sell generated electricity to the export processing industries located inside DEPZ and EPZ with the provision of selling surplus power outside the Export Processing Zones (EPZs) after fulfilling their requirement.

UPGDCL								
Company/Subsidiaries	**Location**	**Capacity MW**	**Plant factor**	**Energy Generated/Sold (MWH)**	**Energy used in plant**	**Operation starting date**	**End of operation**	**Project type**
Dhaka EPZ Plant	Dhaka	86	63%	434,542	NG	Dec-08	Dec-23	IPP

Chittagong EPZ Plant	Chittagong	72	77%	445,254	NG	Aug-09	Aug-23	IPP

Figure: 10 (Source: Annual Reports of companies and company website)

FINANCIAL PERFORMANCE ANALYSIS OF SIX POWER GENERATING COMPANIES OF BANGLADESH

Ratio analysis for the year 2013, 2014 and latest quarter end has been done separately on six selected energy generating companies listed in DSE and CSE to make a comparative financial performance analysis. Liquidity ratios, Profitability ratios and other ratios as financial indicators have been shown below. **The ratio analysis for the year 2013 is shown in Figure 11.**

RATIO ANALYSIS (2013)	Formula	KPCL	SPL	BARAKA	SPPCL	SPCL	UPGDCL	Industry Average	Comments
Current Ratio	current asset/cu. Lia.	0.96	2.54	0.30	1.30	2.13	1.28	1.42	higher is better
Quick Ratio	cash+ar+wip/cur. Liab.	0.81	2.24	1.32	0.60	0.44	0.43	0.98	higher is better
Inventory Turnover	COGS/inventory	34.58	1.78	1.73	1.71	6.23	4.14	8.36	higher is better
Average Collection Period	AR/SALES-AR	0.20	0.48	0.48	0.22	0.36	0.25	0.33	lower is better
Fixed Asset Turnover	SALES/Property,plant etc	2.86	0.47	0.35	0.47	0.49	0.36	0.83	higher is better
Total Asset Turnover	SALES/ASSET	0.98	0.28	0.14	0.27	0.28	0.29	0.37	higher is better
Debt Ratio	TL/TA	0.41	0.22	0.45	0.20	0.45	0.40	0.36	lower is better
Debt-to-Equity	Total Liabilities/Equity	0.70	0.35	0.93	0.25	0.80	0.66	0.62	lower is better
Gross Profit Margin	GROSS PRO./SALES	5.73%	61.66%	54.02%	56.23%	43.61%	69.42%	48.44%	higher is better
Operating Profit Margin	OPR. PROF./SALES	13.56%	53.49%	42.66%	48.57%	21.64%	62.28%	40.37%	higher is better
Net Profit Margin	NET PRO./SALES	14.31%	45.70%	31.80%	54.23%	17.43%	52.25%	35.95%	higher is better
Return on Total Assets (ROA)	EBIT/Total net assets	14.09%	12.84%	4.30%	14.79%	4.93%	15.19%	11.03%	higher is better
Return on Equity (ROE)	Net income/Sh.Equity	23.91%	20.39%	8.85%	18.56%	8.89%	25.27%	17.65%	higher is better

Figure: 11 (Source: Annual Reports of companies) *the best performing companies are marked in green and the worst marked in yellow

Liquidity position of power sector:

The liquid assets in hand of the six selected companies in 2013 were mediocre as indicated by the industry average of current asset ratio and quick asset ratio of 1.42 and 0.98 respectively. The listed power generation companies showed varied capability to pay off their respective current liabilities as shown by the acid test/quick asset ratio. The liquidity positions of the companies are marginal. Summit Power and Baraka Power were having liquidity margin above the industry average. A 2.24 times more liquid asset in hand of SPL than the current liability it held as of 2013 signifies it as a highly liquid company amongst the others. Baraka Power is the second highest liquid company with a quick ratio of TK. 1.32 against one taka current liability. The lowest liquidity levels were that of SPCL and UPGDCL at 0.44 and 0.43 respectively.

Turnover of assets:

Turnover ratio shows how many times a company's inventory is sold and replaced over a period. Inventories of power companies consisting of maintenance of spare parts lube oil and fuel. These are used in operation and maintenance of power plants. Inventory Turnover of the industry is 8.36 which may be higher than other industries in the economy due to high demand for power and contractual basis selling of electricity where companies face competition during bidding procedure for power plants.

Individually none of the company had shown inefficiency in inventory management, Summit Purbanchol Power Limited generated lowest turnover to asset in 2013.

Leverage ratio:

Debt ratio reveals that SPPCL was the best in terms of leveraging its operation with external liability. It financed only 20% of its asset with debt. SUMITPOWER had been also operating along with debt leverage of below industry average of 36% of total asset.

Profitability ratios:

A profitability ratio is a measure of profitability, which is a way to measure a company's performance. Profitability is simply the capacity to make a profit, and a profit is what is left over from income earned after all costs and expenses related to earning the income are deducted. UPGDCL has the highest gross and operating profit margin along with the highest percentage of ROA and ROE in the industry. KPCL on the contrary has the lowest gross and net profit margin in the industry although it's ROA and ROE is above the industry average. This underperformance of KPCL however is partially of accounting nature due to merger/amalgamation of the company in October 2014.

The ratio analysis for the year 2014 is shown in Figure 12.

RATIO ANALYSIS (2014)	Formula	KPCL	SPL	BARAKA	SPPCL	SPCL	UPGDCL	Industry Average	Comments
Current Ratio	current asset/cu. Lia.	0.98	2.36	1.41	1.77	1.56	1.29	1.56	higher is better
Quick Ratio	cash+ar+wip/cur. Liab.	0.75	2.10	1.24	1.13	0.50	0.48	1.03	higher is better
Inventory Turnover	COGS/inventory	6.10	2.14	1.54	3.00	6.33	6.29	4.23	higher is better
Average Collection Period	AR/SALES-AR	0.68	0.87	3.21	0.41	0.38	0.24	0.96	lower is better
Fixed Asset Turnover	SALES/Property,plant etc	0.88	0.47	0.32	0.49	0.44	0.48	0.51	higher is better
Total Asset Turnover	SALES/ASSET	0.52	0.22	0.21	0.27	0.25	0.36	0.30	higher is better
Debt Ratio	TL/TA	0.43	0.12	0.60	0.12	0.50	0.23	0.33	lower is better
Debt-to-Equity	Total Liabilities/Equity	0.74	0.16	1.80	0.13	0.99	0.29	0.69	lower is better
Gross Profit Margin	GROSS PRO./SALES	13.72%	58.22%	32.85%	51.09%	43.40%	64.54%	43.97%	higher is better
Operating Profit Margin	OPR. PROF./SALES	13.14%	51.68%	26.24%	44.05%	20.19%	63.20%	36.42%	higher is better
Net Profit Margin	NET PRO./SALES	11.22%	46.49%	19.75%	53.07%	16.99%	55.22%	33.79%	higher is better
Return on Total Assets (ROA)	EBIT/Total net assets	5.80%	10.30%	4.07%	14.34%	4.17%	20.10%	9.80%	higher is better
Return on Equity (ROE)	Net income/Sh.Equity	10.09%	13.65%	12.19%	16.21%	8.30%	25.98%	14.40%	higher is better

Figure: 12 (Source: Annual Reports of companies) *the best performing companies are marked in green and the worst performing are marked in yellow

Liquidity position of power sector:

The liquid assets in hand of the six selected companies in 2014 has shown improvement from that of the previous year as indicated by the industry average of current asset ratio and quick asset ratio of 1.56 and 1.03 respectively. The power industry is now in a better position to pay of its current liability as shown by the acid test/quick asset ratio. SPL, Baraka Power and SPPCL were having liquidity margin above the industry average. A 2.10 times more liquid asset in hand of SPL than the current liability it held as of 2014 signifies it as a highly liquid company amongst the others. Baraka Power is the second highest liquid company with a quick ratio of TK. 1.24 against one taka current liability. SPL and SPPCL are also placed in a better position than its peers on paying off its obligations in the short term with a current ratio of 2.36 and 1.77 respectively.

Turnover of assets:

Turnover ratio shows how many times a company's inventory is sold and replaced over a period. Inventories of power companies consisting of maintenance of spare parts lube oil and fuel. These are used in operation and maintenance of power plants. Inventory Turnover of the industry has seen a slight fall from its previous year with an average of 4.23 which may have attributed due to a fall in inventory turnover of KPCL which had the largest contribution to the rise in inventory turnover of the industry with 34.58 in 2013. However such high inventory levels are unhealthy as they represent an investment with a low rate of return. On the other hand SPCL and UPGDCL has shown good inventory turnover higher than the industry average of 6.33 and 6.29 respectively.

Leverage ratio:

Debt ratio reveals that SPPCL and SPL was the best in terms of leveraging its operation with external liability. Both financed only 12% of its asset with debt. UPGDCL had also been operating along with debt leverage of below industry average of 23% of total asset.

Profitability ratios:

A profitability ratio is a measure of profitability, which is a way to measure a company's performance. Profitability is simply the capacity to make a profit, and a profit is what is left over from income earned after you have deducted all costs and expenses related to earning the income. UPGDCL has maintained the highest gross and operating profit margin in 2014 from that of the previous year along with the highest percentage of ROA and ROE in the industry. KPCL on the contrary has the lowest gross and net profit margin in the industry.

The ratio analysis for the latest quarter of the current year 2015 is shown in Figure 13.

RATIO ANALYSIS (Latest Quarter End)	Formula	KPCL (Q1)	SPL (Q1)	BARAKA (Q3)	SPPCL (Q1)	SPCL (Q3)	UPGDCL (Q1)	Industry Average	Comments
Current Ratio	current asset/cu. Lia.	1.15	2.60	1.48	2.45	1.40	2.61	1.95	higher is better

Quick Ratio	cash+ar+wip/cur. Liab.	0.80	2.51	0.65	1.68	0.53	1.68	1.31	higher is better
Inventory Turnover	COGS/inventory	1.88	0.56	2.48	0.59	6.76	1.45	2.29	higher is better
Average Collection Period	AR/SALES-AR	7.57	-2.19	0.56	6.97	0.49	1.89	2.55	lower is better
Fixed Asset Turnover	SALES/Property,plant etc	0.41	0.12	0.52	0.13	0.38	0.13	0.28	higher is better
Total Asset Turnover	SALES/ASSET	0.24	0.06	0.36	0.07	0.22	0.08	0.17	higher is better
Debt Ratio	TL/TA	0.35	0.10	0.58	0.10	0.42	0.18	0.29	lower is better
Debt-to-Equity	Total Liabilities/Equity	0.55	0.14	1.66	0.12	0.72	0.22	0.57	lower is better
Gross Profit Margin	GROSS PRO./SALES	25.18%	58.82%	25.01%	59.09%	36.88%	68.96%	45.66%	higher is better
Operating Profit Margin	OPR. PROF./SALES	24.39%	51.10%	20.57%	53.50%	19.17%	63.68%	38.73%	higher is better
Net Profit Margin	NET PRO./SALES	24.34%	55.03%	16.60%	63.30%	13.22%	60.43%	38.82%	higher is better
Return on Total Assets (ROA)	EBIT/Total net assets	5.93%	3.05%	6.00%	4.28%	2.89%	4.81%	4.49%	higher is better
Return on Equity (ROE)	Net income/Sh.Equi	9.17%	3.97%	17.23%	4.78%	4.96%	5.88%	7.66%	higher is better

Figure: 13 (Source: Annual Reports of companies) *the best performing companies are marked in green and the worst marked in yellow

LEARNINGS FROM THE RATIO ANALYSIS 2014 and CURRENT QUARTER ending March, 2015

Particulars (2014)	SPL	BARAKA	SPPCL	SPCL	UPGDCL	KPCL	TOTAL
Net Profit after tax	2,839,838,999	310,766,689	726,341,594	243,290,555	2,464,628,035	831,429,857	7,416,295,729
Growth of NPAT (YOY)	0.35%	44.69%	0.52%	-3.51%	38.90%	-24.54%	
Forward EPS	3.26	3.00	4.78	8.44	8.18	6.36	6
Forward P/E	12.76	10.88	11.46	17.69	19.36	9.21	14
Market Price (as on 24th June'15)	38.6	31.6	52.3	143.3	157.1	69.3	82
Net Profit Margin	46.49%	19.75%	53.07%	8.89%	55.22%	11.22%	32
Debt to Equity Ratio	**0.16**	1.800	0.130	0.990	0.290	0.740	0.68
Energy sold MWH	1,953,669	393,973	488,683	543,261	879,778	**479,839**	4,739,203
Capacity MW	316.55	101	66	137	158	265	1,044
Net Profit/MWhr	1453.592701	788.8019966	1486.32466	447.8336472	2801.420398	1732.726721	1564.882477

United Power Generation and Distribution Company Limited (UPGDCL) has shown the best gross and operating profit margin on consecutive two years of 2014 and 2013 and is also firmly placed at 68.96% gross profit margin and 63.68% operating profit margin at the end of 1st quarter of 2015 where the industry average is 45.66% and 38.73% respectively. The YOY net profit growth of 38.90% from 2013 to 2014 is also higher than its peers except Baraka Power. In figure 13 we can see that UPGDCL is in the best position to pay off its short term debts than its peers and its high quick ratio also shows it has adequate liquid assets to cover any of its obligations. UPGDCL enjoys the highest Per MWhr sales of BDT 5073.24. With higher production in the future UPGDCL is likely to surpass its previous earnings in 2014 and is set to be one of the highlighting companies of 2015. However considering a bottom approach in investing and considering forward PE of UPGDCL to be the highest at 19.36 vs. industry average (simple) of 14 amongst the power generation companies, we recommend UPGDCL for SELL.

Summit Purbanchol Power Company Limited (SPPCL) is another company besides UPGDCL which has consistently showed strength in net profit margin in the last two years. In its current quarter (Q1) of 2015 its net profit margin is highest out of all the six companies with 63.30% where as the industry average is only 38.82%. The ability to pay off its short term obligations as shown in figure 13 by current ratio is also the second best after UPGDCL. The return on equity and assets is also higher than the industry average. We expect them to surpass the production rate compared to 2013 and 2014 thus eventually resulting in promising and improved earnings. SPPCL as on 24th June, 2015 was trading at forward PE of 11.46 which is below industry average (simple) of 14. SPPCL can be a BUY.

We believe there is undiscovered value in Summit Power Limited (DSE: SUMITPOWER) who owns a 30% strategic stake in Summit Meghnaghat Combined Cycle Power Plant (SMCCPP) 305/335 (HFO/NG). While SPL has already reported some profits from the operation of SMCCPP we believe once this plant fully resumes production, it will yield considerable profitability for SPL. The 30% stake of SPL in SMCCPP corresponds to a 91.5/100.5 (HFO/NG) in total rated capacity of SPL. Our studies also indicate full capacity production either with HFO/NG will accrue significant profits for SPL. Besides SPL has a number of other units which are showing consistent profits and can be expected to go public. SPL also has the lowest debt to equity ratio in the industry of 0.16 compared to 0.68 for the industry indicating the company is in a position to further leverage its growth through fresh installation of power plants/acquisition of existing power plants. As part of the potential rewards for SPL from operation of SMCCPP a 1 year projection has been made.

Year 1	HFO	NG	Assumptions/Comments
Annual electricity produced per 1 MW	5617	6451	Industry Average
Power rating HFO/NG 305/335 MW	1713185	2161085	Calculated on basis of present average plant factor for HFO and NG operation for listed companies
Revenue	9,622,960,145	13,941,159,335	Revenue calculated on basis of present average revenues of listed companies from HFO and NG operation
COGS (-)	7,217,220,109	8,699,283,425	Based on average cost structures of listed power generation companies for HFO and NG based electricity production
General Administrative Expense (-)	769,836,812	1,115,292,747	Considered at 8% of Gross Revenue
Operating Profit	1,635,903,225	4,126,583,163	
Forex Loss (-)	0	0	The average cost of debt has been considered at 7.5% considering average depreciation of BDT against USD since 2005
Finance Income (+)	0	0	Not considered
Finance Expense (-)	1,080,000,000	1,080,000,000	Considered on a 10 year repayment period of USD 190 million and total project cost USD 316 million. The long term loan is repayable in 12 year quarterly installment at 35 day LIBOR + 4.5%. However considering average taka depreciation against USD the cost of fund has been assumed to be

			7.5% . In case of raise in LIBOR the company may swap foreign currency loans to local currency ones by arranging favorable credit lines with domestic lenders. Hence we assume 7.5% is the maximum average cost of fund for the project
Profit before Income Tax	555,903,225	3,046,583,163	
Income Tax	0	0	Tax exemption for 15 years
NPAT	555,903,225	3,046,583,163	
SPL Profit Share	166,770,967	913,974,949	30% share of SPL in SMCCPP

Figure: 14 (Source: Empire Capital Research)

However as **SMCCPP** is only an associate of **SPL** this will not result in incremental Income/Profit/EPS for SPL until cash dividend has been declared by SMCCPP. Considering the low overall debt equity ratio of SPL further acquisition of majority stake of SMCCPP by SPL cannot be ruled out. A majority stake in SMCCPP would raise the overall leverage of SPL and at the same time result in a significant increase in the NPAT/EPS of SPL shares in the years to come. We recommend SPL as a STRONG BUY.

A look up at the cost of energy generation and dividend payout ratio of all six companies for the year 2013 and 2014

Company (Energy Cost)	2013 Tk	2014 Tk	% Change
KPCL (HFO)	6,650,107,795	5,897,439,234	-11%
SPL (Natural Gas)	1,138,909,855	1,099,502,557	-3%
Baraka (Natural Gas)	219,905,404	247,785,186	13%
SPPCL (Natural Gas)	390,406,280	385,311,500	-1%
SPCL (Natural Gas)	493,727,545	465,765,470	-6%
UPGDCL (Natural Gas)	538,240,027	733,200,397	36%
TOTAL	**9,431,296,906**	**8,829,004,344**	**-6%**

Figure: 15 (Source: Annual Reports of companies)

Heavy fuel oil (HFO) consists of 75% generation of total energy cost of all the above listed six companies. It was 76% a year ago in 2013. KPCL-1, 2, 3 and the Dhaka and Chittagong EPZ Power plants of UPGDCL runs on HFO. The total capacity of KPCL and UPGDCL are 265MW and 158MW respectively. Since the price of HFO is costlier than that of natural gas the percentage electricity generation from HFO is less. Recently BPC has issued a no objection certificate for the rentals to import free duty free furnace oil. Now the rentals can directly import furnace oil which saves them a lot of money and can have an impact on the future earnings.

Company	2013.00	2014.00	CDPR 2013	CDPR 2014	EPS 2013	EPS 2014	Dividend Growth
KPCL	2.50	4.00	78.13	173.91	3.20	2.30	123%
SPL	1.50	1.00	40.65	30.67	3.69	3.26	-25%
Baraka	1.00	1.70	69.93	89.47	1.43	1.90	28%
SPPCL	1.00	2.50	19.12	52.30	5.23	4.78	174%
SPCL		2.50	0.00	107.30	2.21	2.33	NA
UPGDCL	3.50	3.00	58.53	36.14	5.98	8.30	-38%
Average			53.27	81.63	3.62	3.81	

Figure: 16 (Source: Annual Reports and DSE Website) ***CDPR** stands for Cash Dividend Payout Ratio

In the above figure we can see a healthy cash dividend payout ratio by almost all the companies in both 2013 and 2014. A higher dividend payout ratio means a company is managing its earnings well to support the dividend payments. On the other hand, an excessively high payout ratio suggests that the company might be paying out more than it can comfortably afford. SPL and UPGDCL are the only two companies with a positive year on year cash dividend payout ratio with a growth rate of respectively.

<u>Per megawatt hour sales of unit of all the six companies</u>

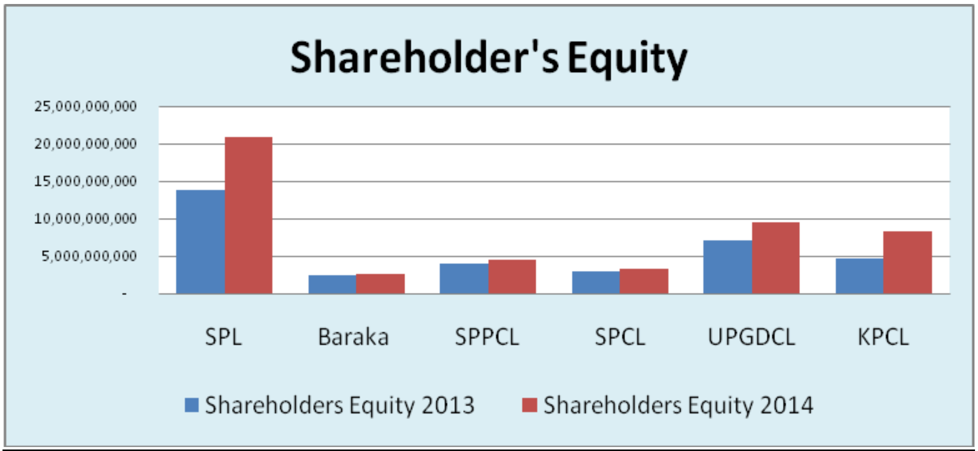
Company	Total Sales	Units Sold MWH	Per MWH Sales
KPCL (HFO)	7,413,311,440	479,839	15,449.58
SPL (Natural Gas)	6,109,044,517	1,953,669	3,126.96
Baraka (Natural Gas)	1,573,361,307	393,973	3,993.58
SPPCL (Natural Gas)	1,368,660,493	488,683	2,800.71
SPCL (Natural Gas)	1,432,197,494	543,261	2,636.30
UPGDCL (Natural Gas)	4,463,323,168	879,778	5,073.24

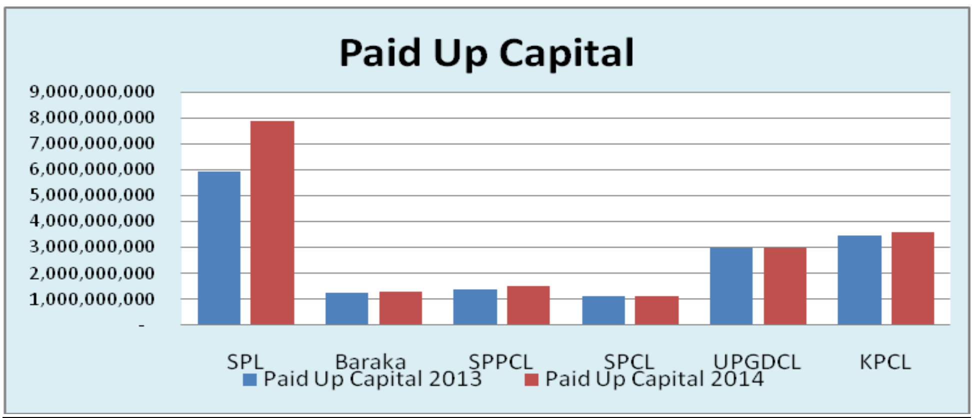
Figure: 17 (Source: Annual Reports and DSE Website)

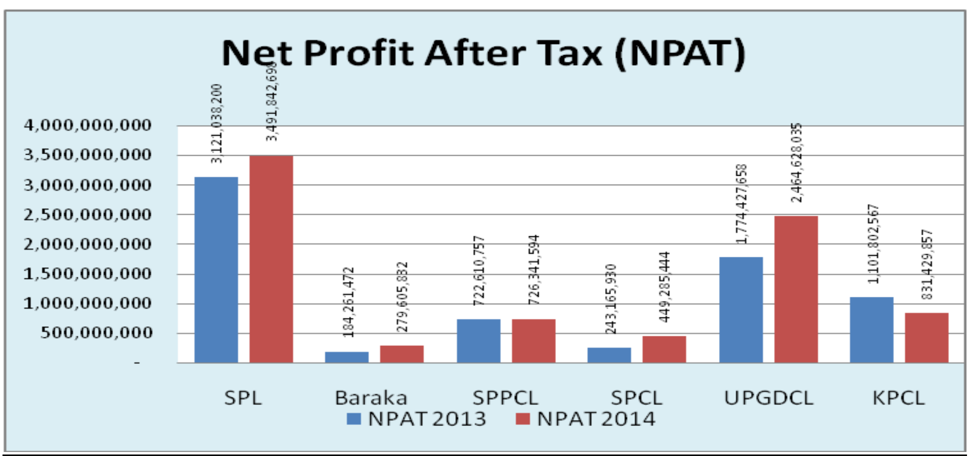
From the above we can see that KPCL enjoys the highest revenue per MWhr. While this is favorable it also means KPCL is the most vulnerable to consumption shifting by BDPB the sole buyer of its electricity to other plants with lower costs. Already KPCL has the lowest Plant Factor for all the listed power generation companies below 40% against industry average of 58% for the listed power generation companies. Hence we believe all the HFO based power plants face significant business risk in the coming days as the Government implements big power projects through Government to Government initiatives and other large power projects. While fresh large power generation units will take at least another 3 years to commence operation, we expect significant business risk for KPCL given its HFO based production portfolio in the midterm. However the declining trend in cost of HFO has allowed KPCL to maintain output at current levels. Any upward increase in the price of HFO internationally will adversely affect the pricing and electricity output sold of KPCL. Hence at current price level we maintain a BUY for KPCL as its Forward PE of 9.21 is competitive against industry average of 14.

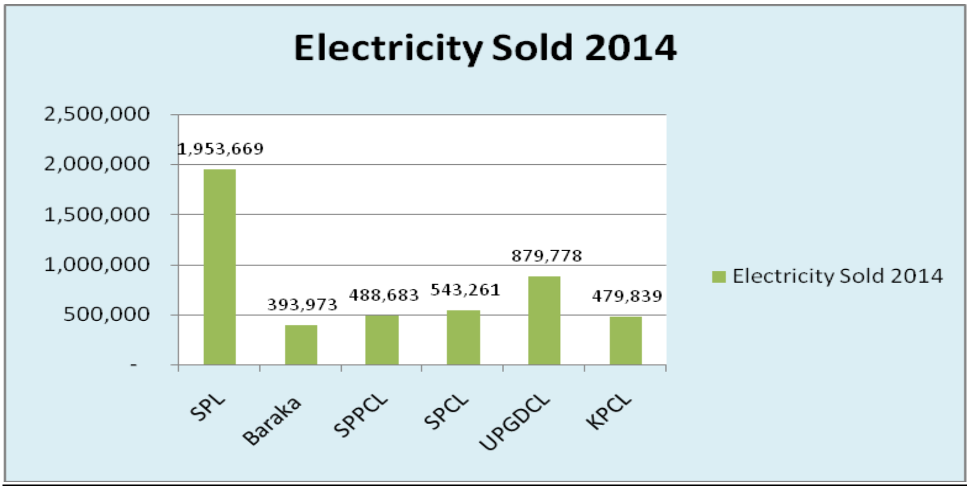
SPCL has broadly two lines of business, electricity generation and gas condensate based petroleum products production through its subsidiary Petromax Refinery. A look at the salient features of SPCL suggests the company is currently trading at a Forward PE of 17.64 on July 2, 2014. Considering adverse business risks due to adverse changes in price of gas condensate in coming days and its Forward PE above industry PE and higher debt to equity ratio than industry average our recommendation for SPCL is NEUTRAL.

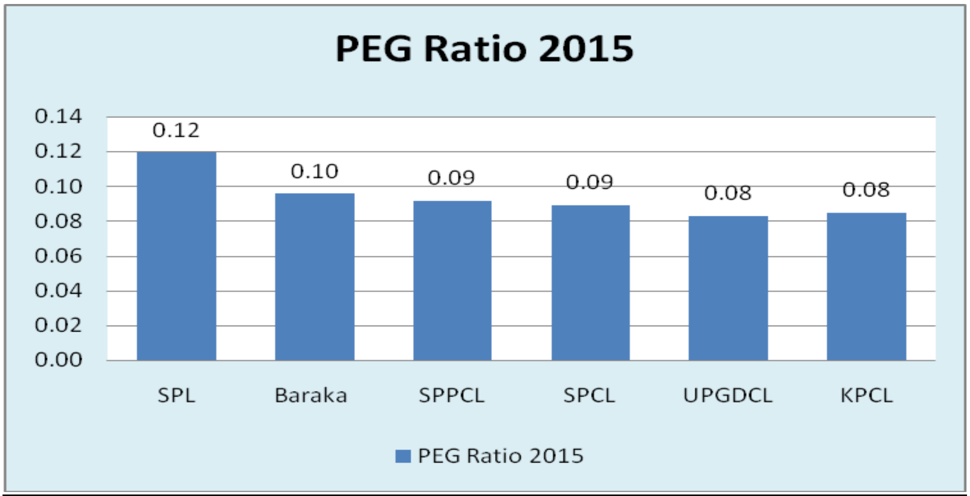
GRAPHICAL REPRESENTATION OF THE IMPORTANT DETERMINATS

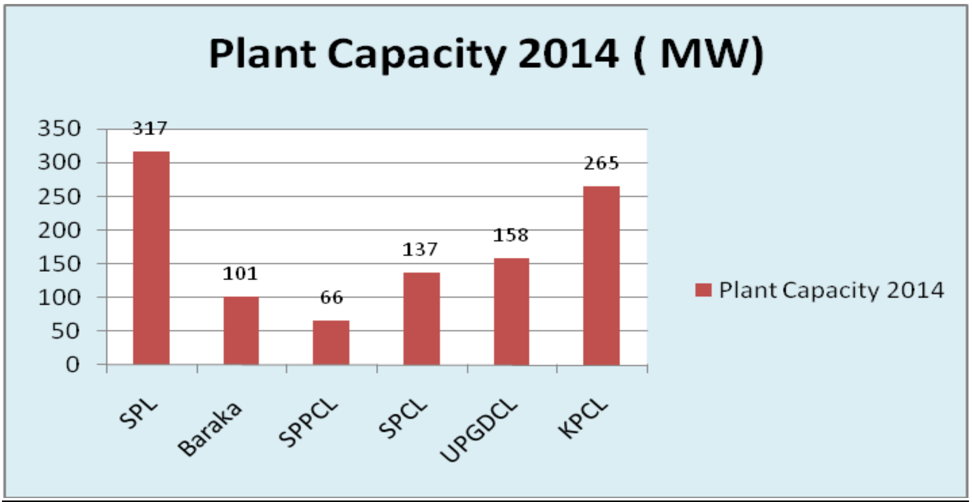

Shareholder's Equity
25,000,000,000
20,000,000,000
15,000,000,000
10,000,000,000
5,000,000,000
-
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
Shareholders Equity 2013
Shareholders Equity 2014

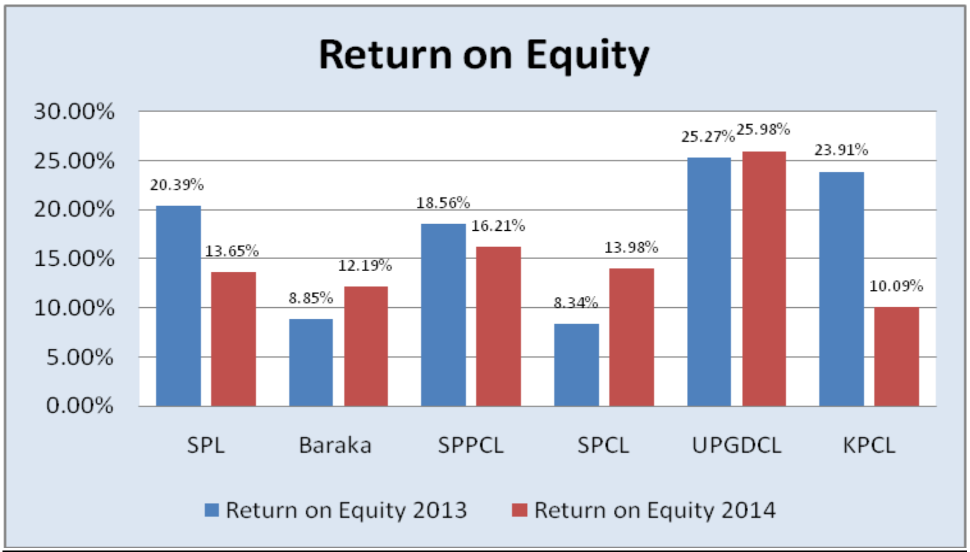

Paid Up Capital
9,000,000,000
8,000,000,000
7,000,000,000
6,000,000,000
5,000,000,000
4,000,000,000
3,000,000,000
2,000,000,000
1,000,000,000
-
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
Paid Up Capital 2013
Paid Up Capital 2014

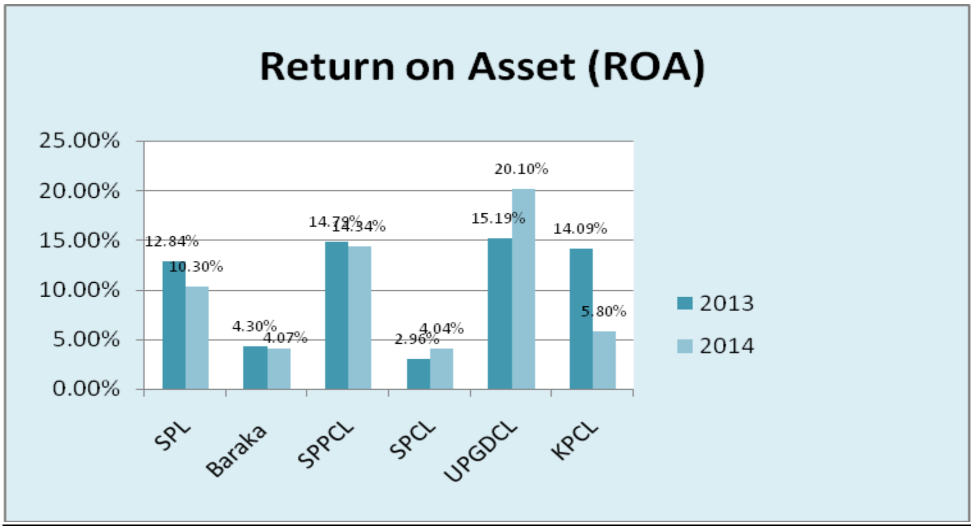

Net Profit After Tax (NPAT)
4,000,000,000
3,500,000,000
3,000,000,000
2,500,000,000
2,000,000,000
1,500,000,000
1,000,000,000
500,000,000
-
3,121,038,200
3,491,842,698
184,261,472
279,605,832
722,610,757
726,341,594
243,165,930
449,285,444
1,774,427,658
2,464,628,035
1,101,802,567
831,429,857
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
NPAT 2013
NPAT 2014

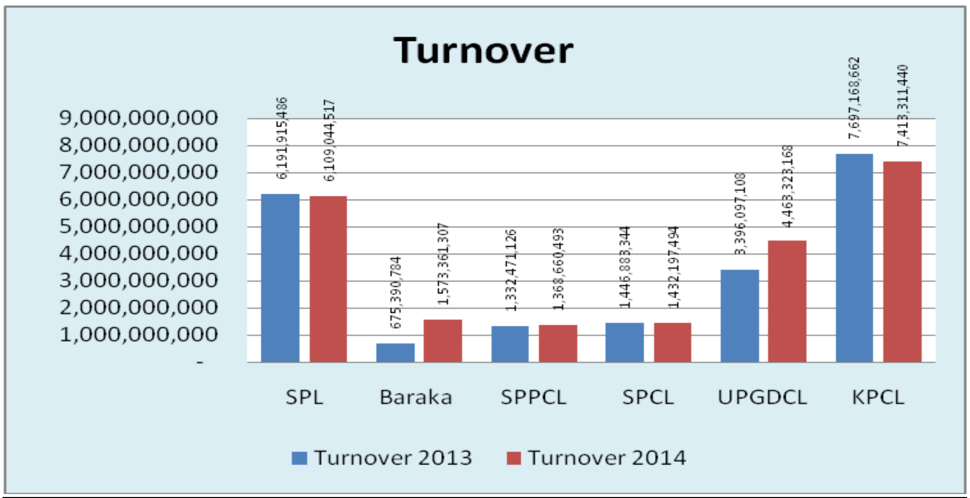

Electricity Sold 2014
2,500,000
2,000,000
1,500,000
1,000,000
500,000
-
1,953,669
393,973
488,683
543,261
879,778
479,839
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
Electricity Sold 2014

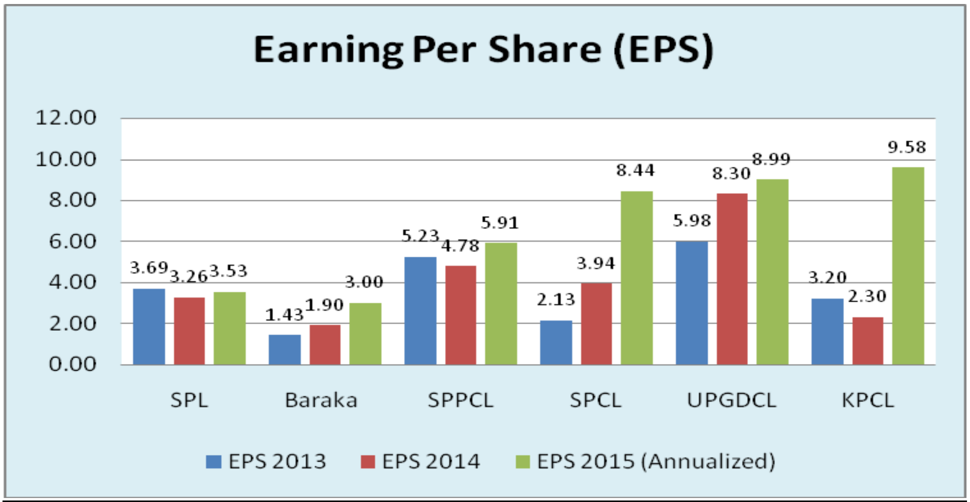

PEG Ratio 2015
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0.12
0.10
0.09
0.09
0.08
0.08
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
PEG Ratio 2015

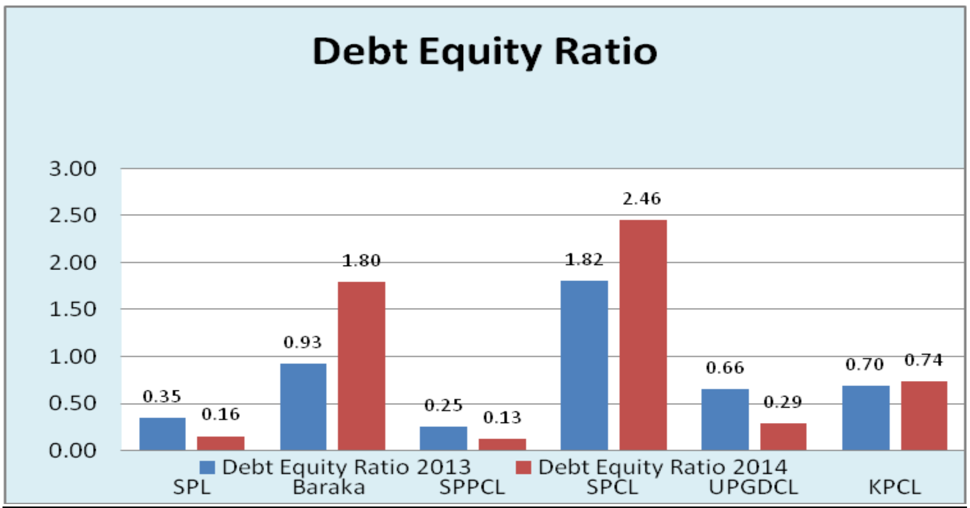

Plant Capacity 2014 (MW)
350
300
250
200
150
100
50
0
317
101
66
137
158
265
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
Plant Capacity 2014

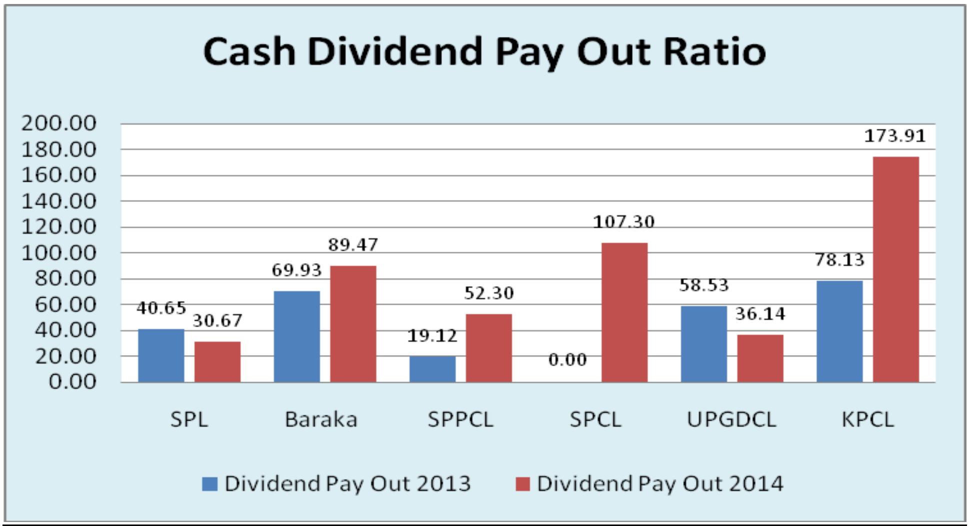

Return on Equity
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
20.39%
13.65%
8.85%
12.19%
18.56%
16.21%
8.34%
13.98%
25.27%
25.98%
23.91%
10.09%
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
Return on Equity 2013
Return on Equity 2014


Return on Asset (ROA)
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
12.84%
10.30%
4.30%
4.07%
14.79%
14.34%
2.96%
4.04%
15.19%
20.10%
14.09%
5.80%
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
2013
2014


Turnover
9,000,000,000
8,000,000,000
7,000,000,000
6,000,000,000
5,000,000,000
4,000,000,000
3,000,000,000
2,000,000,000
1,000,000,000
-
6,191,915,486
6,109,044,517
675,390,784
1,573,361,307
1,332,471,126
1,368,660,493
1,446,883,344
1,432,197,494
3,396,097,108
4,463,323,168
7,697,168,662
7,413,311,440
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
Turnover 2013
Turnover 2014


Earning Per Share (EPS)
12.00
10.00
8.00
6.00
4.00
2.00
0.00
3.69
3.26
3.53
1.43
1.90
3.00
5.23
4.78
5.91
2.13
3.94
8.44
5.98
8.30
8.99
3.20
2.30
9.58
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL
EPS 2013
EPS 2014
EPS 2015 (Annualized)


Debt Equity Ratio
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.35
0.16
0.93
1.80
0.25
0.13
1.82
2.46
0.66
0.29
0.70
0.74
Debt Equity Ratio 2013
Debt Equity Ratio 2014
SPL
Baraka
SPPCL
SPCL
UPGDCL
KPCL



SWOT Analysis

Strength:

1. The first three months of 2015 were marred by violent political unrest in Bangladesh. However the numbers suggest no down turn in revenue and profits of the listed power generation companies because of the inherent demand-supply gap in the industry. As the political situation has eased now and industrial production resumes with upcoming growth targets of Bangladesh GDP growth rate to be 7% and/or above, further acceleration in demand and production of Industry may be expected. The track record of the listed electricity generation companies with the favorable tax holiday of 15 years suggest this sector to be a thrust for economic development of Bangladesh. With electricity penetration at 68% of the country and per capital electricity consumption of only 348/Kwhr per year, we can expect high single or low double digit growth rates for the electricity generation industry.

2. Discover of new gas fields is also aiding the supply of natural gas the raw material for electricity production.

3. A favorable price regime for petroleum and its derivatives are existing worldwide. Price of HFO is variable with petroleum price. With flat prices for petroleum products, this should also help the HFO based power producers to sustain production and profitability in the coming days.

Weakness:

1. The Government/BDPD has already identified HFO based power production to be expensive. Also considering the upcoming and the huge investment gap, the Government of Bangladesh is soliciting for mega power projects using

coal, nucleur power as alternative fuels. These projects are in various stages of implementation but no major capacity addition by the mega projects can be expected for the coming three years. Hence the short term risk for the HFO power plants is less. However in mid-long term we expect HFO based power production to be substituted by coal/nuclear power in the future starting 2018.

2. Any adverse rise in price of petroleum will adversely affect the cost of power generation using HFO.
3. Any adverse downgrade of the potential recoverable gas reserves of Bangladesh can affect the production and profitability of the natural gas based power producers.

Opportunity:

1. A number of listed power producers namely SumitPower, UPGDCL and KPCL have already acquired significant experience in running of power plants. These companies have also been able to earn confidence of local and international lenders for large infrastructure project financing. If in case HFO based power production is phased out, some of these companies may opt to expand internationally and relocate their plant and equipment to other developing nations. This is contingent however on capital investment abroad permission granted by Bangladesh Bank and approval of the same investment by the appropriate authorities of those countries where they might expand.
2. Government to Government negotiation for power generation is a lengthy process. Most projects face cost escalations. Rundown condition of the existing plant capacity of indigenous plants of BDPB may also reflect positively on the listed electricity generation producers.

Threat:

Recently Anil Ambani-led Reliance Power of India signed an agreement to invest $3 billion in setting up a mega power plant and a floating LNG import terminal in Bangladesh. Reliance Power will set up a 2 million tonnes a year floating LNG import terminal as well as 3,000 megawatt power plant, according to a memorandum of understanding (MoU). The company will use the equipment it had contracted for its Samalkot project in Andhra Pradesh, India for setting up the power plant in Bangladesh in three years from the date of signing power purchase agreement (PPA).The equipment will be under appropriate warranties from General Electric (GE), USA and the other global suppliers, the company said in a statement.

Source:
http://economictimes.indiatimes.com/articleshow/47563686.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

1. The initial rated capacity of the Reliance Power proposed is about 2200 MW. Although such PPA has not yet been signed it may be expected that investment by dynamic company like Reliance Power may come as a bane for the small power producers.

2. The Meghnaghat 450MW Combined Cycle gas-fired power plant is located on a 25.09ha site 22km south of Dhaka on the northern bank of the Meghna River. The $289.6m plant was built by US-based AES (Allied Energy Systems) Corp over a 22-year Power Purchase Agreement (PPA) with Bangladesh Power Development Board (BPDB). The engineering, procurement and construction (EPC) contract for the facility was awarded to Hyundai Heavy Industries. Operations at the plant began in November 2002. At present, the plant is held 76% by Pendekar Energy and 24% by Pendekar Energy Ventures (PEVL).
   The Bangladesh Government has been purchasing electricity from the Meghnaghat power plant at a price below 2 cents per unit. This is considered to be the lowest ever electricity price in the world. The plant load factor was 88.21% in 2007. Only SPPCL has plant factor matching this foreign private investment in the power sector of Bangladesh.

   Pendekar Energy Group has sought approval from the Power Ministry for enhancing the capacity of the Meghnaghat power plant by 170MW.

Existing power generation units of BDPD (Public and Private):

Power Generation Units (Fuel Type Wise)

Installed Capacity of BPDB Power Plants as on July 2015		
Fuel Type	**Capacity(Unit)**	**Total (%)**
Coal	250.00 MW	2.17 %
Gas	7278.00 MW	63.11 %
HFO	2358.00 MW	20.45 %
HSD	916.00 MW	7.94 %
Hydro	230.00 MW	1.99 %
Imported	500.00 MW	4.34 %
Total	11532.00 MW	100 %

Derated Capacity of BPDB Power Plants as on July 2015		
Fuel Type	**Capacity(Unit)**	**Total (%)**
Coal	200.00 MW	1.83 %
Gas	6809.00 MW	62.26 %
HFO	2301.00 MW	21.04 %
HSD	897.00 MW	8.2 %
Hydro	230.00 MW	2.1 %
Imported	500.00 MW	4.57 %
Total	10937.00 MW	100 %

Figure: 17 (Source: http://www.bpdb.gov.bd/bpdb/index.php?option=com_content&view=article&id=150&Itemid=16)

Considering the overall derived demand for power to accelerate with accelerated economic activity in Bangladesh. In the near future (2-3 years) we may not see any adverse impact on the overall power production and selling by the listed private power generation companies. However based on the individual circumstances of the listed companies and their varying financials and features, we recommend a mixed approach to investment in the power sector. Overall we feel SPL (DSE:Sumitpower) has considerable long term potential to emerge as a winning stock given its future growth potential, low debt and industry experience. Hence we recommend it as a **STRONG BUY**. We also see value in investment in SPPCL, Baraka which we recommend as **BUY**. KPCL is a cautious **HOLD**. We recommend UPGDCL for **SELL** and are **NEUTRAL** about SPCL. As a subsector of the Fuel & Power Sector, we are **OVERWEIGHT** on the listed electricity generation company's performance.

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STOCK RECOMMENDATION GUIDELINES

STRONG BUY: positive total returns of 25% or more over the next 12 months.

BUY: Expected positive total returns of 15% or more over the next 12 months.

HOLD: Expected total returns of between -15% and +15% over the next 12 months.

SELL: Expected negative total returns of 15% or more over the next 12 months.

STRONG SELL: Expected negative total returns of 25% or more over the next 12 months.

TRADING BUY: Expected positive total returns of 15% or more over the next 3 months.

NEUTRAL : We have no recommendations regarding such stock

SECTOR RECOMMENDATIONS

OVERWEIGHT: The industry, as defined by the analyst's coverage universe, is expected to outperform the relevant primary market index over the next 12 months.

NEUTRAL: The industry, as defined by the analyst's coverage universe, is expected to perform in line with the relevant primary market index over the next 12 months.

UNDERWEIGHT: The industry, as defined by the analyst's coverage universe, is expected to underperform the relevant primary market index over the next 12 months.

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