

APSCS NON-CONVERTIBLE COUPON BEARING BOND

Company Overview

Ashuganj Power Station Company Limited (APSCS) has been incorporated on June 28, 2000 and started commercial operation on 01 June 2003. The Company is engaged in generation and supply of electricity. APSCS is one of the largest power stations in Bangladesh having a capacity of about 19% (as on August, 2018) of total electricity generation capacity in the public sector of the country. At present, the total capacity of the Company is 1,690 MW. All the electricity is generated by natural gas and is supplied to the sole purchaser, Bangladesh Power Development Board (BPDB). Its registered office is situated at Ashuganj, Brahmanbaria and corporate office is at Shahid Syed Nazrul Islam Sarani, Paltan, Dhaka. APSCS currently has no associates or subsidiaries.

The Company has the agreement with Bakhrabad Gas Distribution Company Limited for the supply of gas to the Company's projects. The Company is guaranteed by BPDB for gas supply agreement with required quantity and pressure. As per the PPA, if there is any disruption in gas supply, BPDB will pay the capacity payment which will cover the operating expense as well as financial payments.

The average capacity utilization for 2014-15, 2015-16 and 2016-17 was 88%, 95% and 93% respectively. The forecasted capacity utilization for the next three years is 93%. The capacity utilization has increased due to replacement of older plants with more efficient new plants.

APSCS has taken the initiative to raise the fund from the capital market through Bond Issuance. Initially, in the first phase APSCS has already raised BDT 5,000 million by issuing unlisted Coupon Bearing Redeemable Non-Convertible Bond and will raise BDT 1,000 million by issuing listed Coupon Bearing Redeemable Non-Convertible Bond; and later BDT 4,000 million will be raised in another phase.

Industry Overview

Fuel and power sector is the most important sector for the development of the economy. Like the other developing countries, the demand for electricity is increasing day by day in Bangladesh. **As on June 30, 2019, installed power generation capacity of the country is 18,961 MW where maximum power generation was 12,893 MW as on 29 May 2019.** As of June 2019, public and private sector contribution is 50%-50% of the total power generation in the country.

The government has set a target to bring the country under electricity coverage by 2021. The government plans to raise electricity production to 24,000 MW by 2021 and to 40,000 MW by 2030, as part of its plan to provide electricity to all.

Currently, **natural gas is the prime source of fuel** in Bangladesh. As of June 2019, as per Bangladesh Power Development Board (BPDB) data, **57.37% of power producing plants are natural gas based**, 26.16% are furnace oil based, 7.23% are diesel fuel based, 2.75% are coal based, 1.21% are hydro based and 6.12% are imported.

As per BPDB, present installed generation capacity (MW) of the country as on June 2019 is shown in following table:

Particulars	Installed Generation Capacity (MW)	% of Total
Public Sector		
BPDB	5,498	30.0%
APSCS	1,444	7.6%
EGCB	839	4.4%
NWPGCL	1,395	7.4%
RPCL-BPDB JV	331	1.7%
Sub Total	9,507	50.1%
Private Sector		
IPPs	6,404	33.8%
SIPPs (BPDB)	99	0.5%
SIPPs (REB)	251	1.3%
15 Yr Rental	169	0.9%
3/5 Yr Rental	1,371	7.2%
Power Import	1,160	6.1%
Sub Total	9,454	49.9%
Total	18,961	100%

APSCS: Ashuganj Power Station Company Ltd. (Bangladesh); **EGCB:** Electricity Generation Company of Bangladesh; **NWPGCL:** North West Power Generation Company Ltd.; **RPCL:** Rural Power Company Limited (Dhaka, Bangladesh); **IPPs:** Independent Power Producer; **REB:** Rural Electrification Board;

Bond Issuer's Details

No. of Shares (Post-IPO*) in mn	66.2
Authorized Capital (BDT mn)	30,000.0
Pre-IPO Paid-up Capital (BDT mn)	6,615.0
Post-IPO Paid-up Capital (BDT mn)	6,615.0
NAV per share (BDT) (March 2019)	31.2
9M Annualized EPS (BDT) (2018-19)	6.6

*Since the public offer is a non-convertible, fully redeemable bond issue, there is no change in paid up capital before and after the issue.

	2015-16	2016-17	2017-18	2018-19 (9M Ann)
Financial Information (BDT mn):				
Sales	8,413	15,660	21,773	23,151
Gross Profit	1,455	6,026	10,291	10,693
Operating Profit	718	5,041	9,049	9,387
Profit After Tax	241	1,507	3,296	4,389
Assets	90,719	98,109	106,009	112,682
Long Term Debt	32,632	41,502	39,420	40,988
Short Term Debt	-	-	7,538	7,632
Equity	16,186	17,593	16,094	20,633
Margin:				
Gross Profit	17.3%	38.5%	47.3%	46.2%
Operating Profit	8.5%	32.2%	41.6%	40.5%
Pre Tax Profit	3.8%	10.2%	20.0%	23.5%
Net Profit	2.9%	9.6%	15.1%	19.0%
Growth*:				
Sales	18.6%	86.1%	39.0%	6.3%
Gross Profit	17.7%	314.0%	70.8%	3.9%
Operating Profit	29.9%	602.1%	79.5%	3.7%
Net Profit	-34.5%	526.4%	118.7%	33.2%
Profitability:				
ROA	0.3%	1.6%	3.2%	4.0%
ROE	1.5%	8.9%	19.6%	23.9%
Leverage:				
Debt Ratio	36.0%	42.3%	44.3%	43.1%
Debt-Equity	622.1%	647.6%	782.1%	634.5%
Int. Coverage	1.3	2.2	2.8	2.6

*Overall revenue increased significantly in 2017 compared to 2016 mainly because the 450MW CCPP (South) power plant started its operation in 2017.

APSCL Non-Convertible Coupon Bearing Bond

APSCL will raise BDT 1,000 million through initial public offer (IPO). The amount raised will be used for the purpose of construction, commissioning and operation of the upcoming 400 MW (East) combined cycle power plant (CCPP) Power Plant project. BRAC EPL Investments Limited and ICB Capital Management Limited was the manager to the Issue. S.F. AHMED & CO. was the auditor of the Company.

Bond Details

IPO size in shares: Public Issue	200,000
Total Issue Amount (BDT mn):	1,000.00
Face value per share (BDT)	BDT 5,000
Offer price per share (BDT)	BDT 5,000
Lot Size	1 bond
Tenor (from the date of issue)	7 years
Rate of Return	Reference Rate + Margin
Reference Rate	182-Days T-Bill*
Margin	4%
Range of Coupon Rate	8.5% - 10.5%

*The Reference Rate is the rate of 182 days Bangladesh Treasury Bill (182-Days T-Bill) as published on Bangladesh Bank web site on fixing date.

Key Features of the Bond

- Redeemable Bonds:** Redeemable bonds can be redeemed or paid off by the issuer before it reaches the date of its maturity. The issuer of such bonds is allowed to pay back its obligation to the bondholder before maturity.
- Non-Convertible Bonds:** A Non-Convertible debenture/bond do not have the option of conversion into shares and on maturity the principal amount along with accumulated interest is paid to the holder of the instrument.
- Coupon Bearing Bonds:** The holder of a coupon-bearing bond receives periodic payment (semiannually, annually, etc) during the life of the bond. The bondholders will get at the rate of 1882-days Bangladesh Treasury Bill as published on Bangladesh Bank web site on fixing date along with 4% margin on due date. The range of the return of the APSCL bond is within the 8.5% - 10.0%.
- Coupon Payment Schedule:** The first coupon payment shall be made on the date falling twelve (12) months (date of transferring of fund from Dhaka Stock Exchange to the Issuer's bank account).
 - The date of expiry of twelve (12) month period commencing from the Issue Date and subsequent each 6 months commencing from the date.
 - The first coupon payment shall be known as the "Coupon Payment Date" and the final Coupon Payment Date shall be the Maturity Date.
- Repayment Schedule:** The principal redemptions will be in four tranches, each tranche being 25% of the principal amount commencing at the end of Year-4 from the date of the issuance in the following manner:

Redemption Schedule (of Face Value):	
Year	Redemption
1	Nil
2	Nil
3	Nil
4	25%
5	25%
6	25%
7	25%

- Prepayment, Call Refunding, Conversion Features:** There is no prepayment, call or refunding provision for the bonds.
- Listing:** BDT 1,000.00 million Public Issue portion will be listed with the exchanges
- Transferability/Liquidity:** Freely transferable in accordance with the provisions of the Deed of Trust.
- All coupon payments shall be calculated** based on the outstanding nominal value of the Subordinated Bonds as at the day immediately preceding the Coupon Payment Date.
- The **last payment of coupon** shall be made on the Maturity Date calculated for the period commencing from the previous coupon payment date up to the Maturity Date, or, in the event that such Subordinate Bond shall have been redeemed or otherwise satisfied by the Issuer, as the case may be, period to the Maturity Date, up to the date of redemption or satisfaction, as the case may be, or such Subordinate bond.
- Late Redemption:** The Issuer shall pay a late payment penalty of 2% (two per cent) higher than the coupon rate and be payable on the amount not paid on the due date up till the date of actual payment.
- Default Interest and Delay in Payment:** If the Issuer fails to pay any sum in respect of the Bonds when the same becomes due and payable under these Conditions, interest shall accrue on the overdue sum at the rate of 2.0% per annum plus the Rate of Interest from the due date. Such default interest shall accrue on the basis of the actual number of days elapsed and a 365-day year (366 in case of a leap year).
- As APSCL is issuing non-convertible fully redeemable coupon bearing bond, **bondholders will not be subject to any lock-in** of their shares.
- The issue shall be placed in the "A" category in the DSE and CSE

Implementation Schedule

Use of Proceeds	Amount (BDT mn)	% Fund	Implementation Schedule
Land Development and Civil works	468.00	46.8%	within 36 months of receiving funds
Primary Fuel	300.00	30.0%	within 36 months of receiving funds
Vehicle Purchase	36.00	3.60%	within 24 months of receiving funds
Engineering & Consultancy Service	44.00	4.40%	within 36 months of receiving funds
Working capital	109.90	10.99%	within 36 months of receiving funds
IPO expenses	42.10	4.21%	within 3 months of receiving funds
Total	1,000.00	100%	

Credit Rating Information

Rating Particulars	
Rating Date	December 06, 2018
Issue Rating	AA
Entity Rating	Long Term: AAA Short Term: ST-1
Outlook	Stable
Rated by	Credit Rating Information and Services Limited (CRISL)
Validity	December 05, 2019

Investment Positives

- APSCl has already raised BDT 5,000 million privately through the issuance of bonds, a portion of which will be used for 400MW East along with the proceeds of the BDT 1,000 million public bond. **The Projected COD (Commercial Operation Date) as per contract signed is June 2021.** As per the feasibility study of the project, considering 80% plant factor and at a gas price of BDT 79.82 per mscf (Million standard cubic feet per day) and selling price of BDT 2.00385 per kWh, the **internal rate of return (IRR) is 12.57%**. The Company has the plan to generate 4,980 MW of electricity by 2025 and 7,047 MW by 2030.
- The Bangladesh Power Development Board owns 99.996% of the shares of the Company and rest of the shares is distributed among Ministry of Finance, Ministry of Planning, Power Division, Ministry of Power, Energy and Mineral Resources (MOPEMR) & Energy Division. Hence default risk for the Company is very low.
- Due to the shortage of natural gas in the country, APSCl envisions **expanding its operation from being solely gas based to alternative sources of energy** like HFO, coal and renewable energy.
- The primary technology currently used by APSCl is the combined cycle power plant (CCPP) which is on average around 50% more efficient than a single cycle power system.
- The cost efficiency indicators of the Company improved during FY 2017-18. **The cost to revenue ratio declined to 52.73% in FY 2017-18 from 61.52% in FY 2016-17.** During this period, APSCl has started to operate its machine on merit basis according to fuel efficiency. Therefore, the cost to revenue ratio declined by 14.29%.

Investment Negatives

- The Company has taken loan from ADB and IDB of USD 186.98 million (commitment amount of USD 228 million) and USD 104.86 million (commitment amount of USD 200 million) respectively for 450 MW (North) CCPP project in FY 2014 with tenure of 20 years (grace period of 5 years). The interest rate is 4.00%. **The ADB and IDB loan will be paid through 30 & 20 semi-annual payments respectively. The loan payment will be started from FY 2019 which might have a negative impact on the profitability which will ultimately put pressure on the coverage ratio.**
- Redemption risk arises from the failure of the issuer to redeem the bond at the end of the 4th, 5th, 6th and 7th year from the issue date. APSCl has to pay off the bond subscribers with 25% at the end of each mentioned year. Significant amount of cash outflow from the bank at one time may create pressure on its cash flow as well as liquidity.
- The Company has collected BDT 5,000.00 million through private placement. As the bond is issued under private placement and is not proposed to be listed, the bondholders are exposed to easy transferability risk. Moreover, the Company will collect BDT 1,000.00 million through public offer and it will be listed in DSE/CSE.
- Among the 11 power plant units, Unit - 1, 2, 3, 4, 5 & GT-2 is very old plant. The unit 1 & 2 was commissioned in 1970

followed by Unit- 3,4,5 in 1986, GT-2 in 1986 leading to inefficiency in production. Therefore these plant and machineries are required regular maintenance and overhauling which is very costly.

- The project has dependency risk for availability of natural gas as the scarcity of natural gas is going on, like other the power plants in the country. APSCl might face the shortage of gas in near future which will ultimately affect its business operation. However, as APSCl is a government organization, there is very little chance of such a disruption.

Stocks vs Bonds

Particulars	Stock	Bond
Meaning	Stocks are financial instruments that carries ownership interests, issued by the Company in exchange of cash	Bonds are the debt instruments issued by the companies to raise capital with a promise to pay back the money after some time along with interest
Issued by	Companies at stock exchanges as IPO	Govt. institutions, companies and financial institutions
Owners benefit	Benefitted from good and growing companies shares	Bond holders income is limited to interest income
Return format	Dividend	Interest at predetermined rate
Return guarantee	Stocks are often riskier in short term, given the amount of money the investor could lose virtually overnight. However, in long term, stocks have historically proved to be very valuable.	Bonds are generally considered a safer investment in the short term
Owners	Shareholders	Bondholders
Status of holder	Shareholders are the owners of the Company	Bondholders are the lenders to the Company
Risk	Generally higher risk, higher reward	Generally lower risk, lower reward
Add on benefits	The holders get voting rights	The holders get preference at the time of repayment

Why to invest in bonds

- ✓ They provide a predictable income stream. Typically, bonds pay interest twice a year
- ✓ If the bonds are held to maturity, bondholders get back the entire principal, so bonds are a way to preserve capital while investing
- ✓ Bonds can help diversifying portfolios from more volatile stock holdings
- ✓ Bond holders are more likely than stock investors to get their money back if a Company goes bankrupt

Calculation of Bond IRR (Internal Rate of Return):
Assumptions:

- It is assumed that the investor buys the bond at par and holds the bond till maturity and the issuer does not redeem the bond before maturity;
- It is also assumed that Coupon remains at the stated rate (at floor or at ceiling) all through the bond's life;
- The IRR or YTM on the bond assumes that the Cash Flows/Coupon Flows are reinvested at the IRR;
- The dates are hypothetical; 365 days = 1 year;

Scenario: 01

Par Value BDT 5,000

Coupon Rate (Floor) 8.5%

Year	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
Period	7-Oct-19	6-Apr-20	6-Oct-20	6-Apr-21	6-Oct-21	6-Apr-22	6-Oct-22	6-Apr-23	6-Oct-23	5-Apr-24	5-Oct-24	5-Apr-25	5-Oct-25	5-Apr-26	5-Oct-26
Coupon	0	0	213	213	213	213	213	213	213	159	159	106	106	53	53
Principal	(5,000)	0	0	0	0	0	0	0	1,250	0	1,250	0	1,250	0	1,250
Cashflows	(5,000)	-	213	213	213	213	213	213	1,463	159	1,409	106	1,356	53	1,303
IRR	7.71%														

Scenario: 02

Par Value BDT 5,000

Coupon Rate (Ceiling) 10.5%

Year	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
Period	7-Oct-19	6-Apr-20	6-Oct-20	6-Apr-21	6-Oct-21	6-Apr-22	6-Oct-22	6-Apr-23	6-Oct-23	5-Apr-24	5-Oct-24	5-Apr-25	5-Oct-25	5-Apr-26	5-Oct-26
Coupon	0	0	263	263	263	263	263	263	263	197	197	131	131	66	66
Principal	(5,000)	0	0	0	0	0	0	0	1,250	0	1,250	0	1,250	0	1,250
Cashflows	(5,000)	-	263	263	263	263	263	263	1,513	197	1,447	131	1,381	66	1,316
IRR	9.52%														

The effective IRR of holding the bond will be within 7.71% - 9.52% assuming the bond is bought at par and held up to the maturity;

Note: The rate of 182 days Bangladesh Treasury Bill can be found here: <https://bb.org.bd/monetaryactivity/treasury.php>

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