FINANCIAL MANAGEMENT ASSESSMENT

I. EXECUTIVE SUMMARY

1. A financial management assessment (FMA) has been carried out in according with ADB's most recent guidelines.[1] To provide context, this FMA includes: (i) a country-level FMA focusing on the overall Bangladesh Public Financial Management (PFM) system, including the legislative and institutional frameworks and Public Expenditure Management (PEM) outcomes; and (ii) an assessment of institutional and project-level financial management arrangements for the Ashuganj Power Station Company Limited (APSCL) (output 1), the Power Grid Company of Bangladesh Limited's (PGCB) (output 2) and the Bangladesh Rural Electrification Board (BREB) (output 3). They act as both the executing agencies as well as the implementing agencies, through dedicated Project Management Units. The assessment identifies financial management weaknesses, and determines the degree to which the system is able to manage fiduciary risks.

2. The overall assessment of the Bangladesh's Public Financial Management (PFM)[2] system is weak and, before application of mitigation measures, associated with substantial fiduciary risks. The weakest PFM area is external scrutiny and audit, followed by predictability and control in budget execution, and then accounting, recording and reporting. While an internal audit function is set up in most ministries, it is in almost all cases inadequate due to weak staff capacity, for procedural reasons (often doing pre-audit rather than evaluating the adequacy and effectiveness of controls), and as they lack independence. The Comptroller and Auditor General (CAG) is similarly constrained by a limited number of qualified staff, audit reports are not completed and published in a timely manner, and many audits focus on individual transactions rather than systems.

3. Several material financial management weaknesses have been identified at the entity level, specifically lack of fixed assets insurance (APSCL and PGCB), lack of BREBs recent experience in donor funded projects, significant unresolved audit issues at PGCB, and lack of a fixed assets register at APSCL. In all cases, the level of automation and computerization is not commensurate with the level of activities at the agencies, and integrated fixed asset and financial reporting modules are recommended. Risk action plans have been developed accordingly and financial management covenants suggested. The overall inherent risk rating is Substantial, and the entity level risk rating for APSCL is moderate, for PGCB is Substantial, and for BREB is also substantial. The consolidated risk rating for the Tranche is Substantial.

4. Internal audit is a further weakness across all EAs. Internal audit departments are generally understaffed given the size of respective organizations and lack clear terms of reference against which to perform their duties. On the other hand, BREB and APSCL have not received any material audit clarifications in recent years. PGCB is the exception; a number of audit qualifications have been repeated over many years. Assurance will be sought from PGCB's board of directors that a plan will be formulated to address the issues raised in the audit's qualifications, and from all boards that internal audit departments will be strengthened.

5. All implementing agencies under Tranche 2 (L-3087), including PGCB, have submitted their audited project financial statements for the fiscal year ended June 30, 2014. The auditor issued an unqualified audit opinion. Under Tranche -1(L-2966), APFS have been submitted by NWGCL, but as there were no disbursements to PGCB upto the FY June 30, 2014, no APFS

[1] ADB. 2015. *Financial Management Technical Guidance Note – Financial Management Assessment.* Manila.
[2] This section draws substantially from ADB's FMA –Skills for Employment Investment Program (RRP BAN 42466).

was submitted by PGCB. A memo requesting waiver is in the process of being finalized. APFS under previous loans to PGCB (L-2332) and Ashuganj (L-2679) for the FY 2014 have also been submitted on time, with unqualified audit opinions.

6. It is noted that in the World Banks 2014 Performance Assessment Report under its power sector development technical assistance project and its development policy credit, that the World Bank has assigned several "unsatisfactory" ratings and highlighted serious concerns regarding the financial sustainability of the power sector in Bangladesh.[3] The World Bank noted, *"…little progress towards solvency in the sector and a continuing high level of government subsidies that may not be sustainable"*, and that "…*the politicization of BERC signal(s) a backslide in respect of governance with strong implications for financial sustainability".* In this context, the ongoing challenges for and risks to the financial sustainability of the EAs are noted and reinforce the need for policy dialogue and for genuine commitment from the government to follow through with much-needed reform.

II. PROJECT DESCRIPTION

7. The proposed Tranche 3 of the multitranche financing facility (MFF) to the Government of Bangladesh for development of the Bangladesh's power sector comprises three components and involves three EAs. Output 1 comprises the installation of a 400 MW combined cycle power plant to replace the ageing 130 MW Unit #3 Steam Turbine Power Plant commissioned in 1986. The implementing agency for Output 1 is the Ashuganj Power Station Company Limited (APSCL). Output 2 includes new and upgraded 132 kV lines and substations, and is designed to remove network operation constraints, reduce transmission losses and improve transmission system reliability and availability. The implementing agency for this Output 2 is the Power Grid Company of Bangladesh Limited's (PGCB). Output 3 includes the installation of 700,000 prepayment meters, with an aim to non-technical losses, improve the commercial and financial efficiency of distribution utilities, and contribute to the reduction of total demand through behavioral changes among customers. The implementing agency for Output 3 is the Bangladesh Rural Electrification Board (BREB).

8. The total cost estimate for Tranche 3 is $530 million. ADB will provide $205 million of funding from its Ordinary Capital Resources (OCR) facility. Co-finance will be provided by the Islamic Development Bank ($220 million). The government will contribute $105 million through a mix of loans and equity and the balance will be provided through the EAs internal funds.

III. COUNTRY AND SECTOR FINANCIAL MANAGEMENT ISSUES

9. **Public financial management environment.** The Country Policy and Institutional Assessment (CPIA) for transparency, accountability and corruption in the public sector rating in Bangladesh was last reported to be 2.5 in 2013 (in range from 1 [low] to 6 [high]), as against the world average of 2.9 (World Bank 2013). Transparency, accountability, and corruption in the public sector assess the extent to which the executive can be held accountable for its use of funds and for the results of its actions by the electorate and by the legislature and judiciary, and the extent to which public employees within the executive are required to account for

[3] The World Bank. *Project Performance Assessment Report - The Peoples' Republic Of Bangladesh: Rural Electrification and Renewable Energy Development Project (IDA-36790 IDA-46430 IDA-50130 TF-51301); Power Sector Development Technical Assistance Project (IDA-39130 IDA-H0920); Power Sector Development Policy Credit (IDA-44360)*. June 2014. Washington.

administrative decisions, use of resources, and results obtained. The three main dimensions assessed here are the accountability of the executive to oversee institutions and of public employees for their performance, access of civil society to information on public affairs and state capture by narrow vested interests.

10. **Country Level Financial Management Assessment.** The overall functioning of the government's PFM system can be assessed through the public expenditure and financial accountability (PEFA) based PFM Performance Assessment undertaken in 2011. The scores of the 28 performance indicators included in the assessment were summarized to provide the averages for the six high-level PFM dimensions as well as the overall score. Table 1 shows that the overall score is "C" - indicating an overall substantial risk, and significant room for improvement. The weakest dimensions were external scrutiny and audit, an area that is generally recognized as an ongoing and material challenge for the government, primarily due to lack of resources at the C&AG, and delays in the follow up of audit observations.

Table 1: PEFA Assessment of Bangladesh for 2011

PFM Performance Dimension		Calculated Ratings	Risk Ratings
A	Credibility of the budget	C+	Substantial
B	Comprehensiveness and transparency	C	Substantial
C	Policy-based budgeting	B	Moderate
D	Predictability and control in budget execution	C	Substantial
E	Accounting, recording, and reporting	C	Substantial
F	External scrutiny and audit	D+	High
	Calculated Overall Score	**C**	**Substantial**

PEFA = Public Expenditure and Financial Accountability.

11. **Legislative/Regulatory and Institutional Framework for PFM.** The main legislative instruments for PFM in Bangladesh are the Constitution (part V, chapter II) and the Public Moneys & Budget Management (PMBM) Act, 2009. The PMBM Act defines the core elements of the PFM legal framework and functions as a 'Budget Systems Law'. The regulatory basis for PFM is outlined in Presidential Executive Orders, which include the General Financial Rules (GFR), Treasury Rules and Subsidiary Rules as well as the Account Code. The Ministry of Finance issued a public expenditure management manual in 2005.

12. The government's Rules of Business (revised 2010) governs relations between ministries and departments/divisions/agencies. The Ministry of Finance has several divisions, including the Finance Division (responsible for overall expenditure coordination, budgeting and control) and the Economic Relations Division (focal point for donors and coordination of foreign aid). The Controller General of Accounts (CGA), responsible for compilation and consolidation of government accounts, acts independently under the administrative control of the Finance

Division. The Planning Commission, under the Ministry of Planning, formulates policy planning and develops medium-term (five-year) macro plans, three-year rolling investment programs, and the Annual Development Program (ADP). The Central Procurement Technical Unit (CPTU), under the Ministry of Planning, is in charge of procurement policy and technical matters. External audit is done by the CAG.

13. The CAG continues to be responsible for personnel administration of officers under the CGA, and officers of the combined cadre (Audit and Accounts) are eligible for posting in both audit and accounts positions. It is also noted that Chief Accounts Officers (CAOs) working for the CGA in line ministries have dual reporting lines because refer to the CAG rather the line ministry for personnel management issues. Restructuring of the FM and accounting functions, including a separation of the audit and accounts cadre, has been recommended in a donor-funded review, but does not appear to be part of the government's current PFM reform agenda.

14. **Medium-Term Budget Framework.** The Medium-Term Budget Framework (MTBF) was introduced for FY2008 with medium-term budget estimates for ten ministries, and has since then been extended to all line ministries covering all spending areas. The MTBF serves as a linkage between multi-year fiscal and expenditure planning and the annual budgeting process, specifically seeks to integrate in a phased manner, the development and non-development (revenue) budgets. It thus helps to establish more consistency between policy, planning and budgeting, but much work remains to be done in this area.

15. While the MTBF approach was well received by line ministries, budgeting remains incremental leading to limited resources being stretched, and there remains two parallel budgets. However, the MTBF approach has helped to highlight the ineffectiveness of financial management functions in line ministries, where no single entity is charged with budget management and oversight. A functional approach for forward expenditure estimates is yet to be adopted, but recent efforts to improve the process has been made by the Ministry of Finance and the Planning Commission. It is noted that the main PFM reform project supporting Ministry of Finance's Finance Division and line ministries has prepared a new budget classification structure that is fully in line with international standards, which is yet to be endorsed by the Ministry of Finance.

16. **Annual Budget Process.** The government agencies in charge of budget management are the Ministry of Finance and the Planning Commission. The government's budget is divided into two parts. The non-development (revenue) budget is formulated by the Ministry of Finance based on submission of budget proposals by the line ministries following the annual budget call circular. The other part is the development budget, which is approved by the Planning Commission and presented as a consolidated Annual Development Plan (ADP) following the submission of Annual Operation Plans (AOPs) by each ministry for each project. Both the non-development and the development budget are used to finance recurrent (termed "revenue expenditure") as well as capital expenditure. The government thus in effect has two parallel budgets. A project can be included in the ADP when a Development Project Proforma (DPP), a project document with a detailed expenditure plan, has been approved by the Planning Commission. When the DPP and AOP are approved, the project budget can be released, which means that expenditures can be executed by submitting bills for payment to the CGA. Regarding comprehensiveness and transparency, the government's score in the Open Budget Index (OBI) was 42% in 2008, indicating that it made "minimal information" available to the public on budget and financial activities. The scores for 2010 and 2012 were 48% and 58%, respectively (indicating that "some information" was made available). The latest scores show

that government has made some progress in this area, but also that scope for further improvements remains.

17. **Treasury Management**. Bangladesh Bank and Sonali Bank manage the government's bank accounts where revenue is deposited and from which expenditure is funded. In total, these bank accounts constitute the government's treasury system, and the net of all balances is accounted for against one single account with Bangladesh Bank for cash management purposes (thus resembling a single treasury account system). Cash flows are forecast annually and updated monthly. However, progress in strengthening cash flow planning and management has been slow, and there is a need to improve the reliability of information from line ministries on budget implementation that impacts the cash flow requirement. While quarterly releases are made for the development budget, there are no cash release constraints on the non-development budget. Ministries/agencies can, within their total appropriations, re-allocate their budgets during the year, but overall increases require supplementary appropriations (i.e. parliamentary approval).

18. **Accounting and Internal Control.** The CGA is the key institution for processing of payments, internal control, and accounting. It serves as the treasurer (pay station), accountant, and pre-auditor of government funds. It has accounting offices for all ministries, districts, and upazilas (sub districts). In addition to payment processing, CGA is responsible for compilation of the monthly and annual accounts (Finance Accounts) of the government as a whole. The government's accounting standards do not comply with the cash basis International Public Sector Accounting Standards (IPSAS), but it is noted that developing and adopting new standards could be done with authorization from the CAG (i.e. legislation would not be required). The chart of accounts is unified for both budgets and all government levels. Whether a payment is charged to the non-development or development budget is determined by its legal code entered on the bill (level 1 code). Each ministry and unit within a ministry is recognized by its functional code (level 2 and 3). The project to be charged is determined by its operational unit code (level 4). Finally, the expenditure type (wages, other operational costs, investments) is determined by the economic code (level 5). The payment, accounting, and internal control process follows the same procedure for both the non-development and development budget. All bills submitted for payment are subject to review by CGA before they process the payment, i.e. with some few exceptions, only CGA have access to cash.

19. The CGA uses the Integrated Budget and Accounting System (IBAS), a computerized software system, for budget management and accounting purposes. The CGA records all expenditures (charges made against the government bank accounts) and checks that bills submitted for payment have been authorized through the budget process with total expenditure contained within budget ceilings. All ministries rely on reports from IBAS for monitoring purposes, but also on accounts from their field offices. However, not all ministries/agencies have direct access to the system. For now, the budgeting module is also not integrated with the accounting module of IBAS, and is expected to be integrated once IBAS++ is rolled out in 2015. Government spending is highest in the last quarter of the fiscal year (April-June), which indicates absence of commitment control (i.e. checks that limit commitments to actual cash availability and approved budget allocations). This 'rush of expenditure' has the attendant risk of attracting inferior quality and, at the same time, constrains budget credibility.

20. **Payroll Control.** The government's payroll function is decentralized, and there is a prevalence of manual systems and use of cash salary payments. Also, regular reconciliation of personnel records with payroll data is lacking, which adversely affects the integrity of the payroll. The main PFM reform project Strengthening Public Expenditure Management Program (SPEMP,

which is discussed further below) is overseeing a limited payroll data 'cleansing' exercise to be done by mid-2014, but so far no comprehensive payroll audit has been carried out for the government.

21. **Internal Audit**. At the level of ministries and agencies, there are internal auditors appointed who are to assess compliance with financial regulations. In 2005, an internal audit manual was issued to guide the work of the internal auditors, but the guidelines therein have not been put into practice effectively. While most ministries have internal audit units, they are generally considered inadequate in terms of capacity and staffing, and only to a limited extent conduct regular internal audit functions. More commonly performed tasks are routine voucher checking before payment (i.e. pre-audit). Also, no ordinary internal audit reports are issued and hence no management responses are prepared. Moreover, many internal audit functions lack independence and are responsible to the CAO (rather than the Secretary). It appears that only one line ministry (Ministry of Health & Family Welfare) has complied with government instructions to outsource internal audit to a private entity. Overall there has so far been very limited demand for internal audit, but this may change in future with the Ministry of Finance's Expenditure Control Wing having been charged with developing an internal audit strategy.

22. **Financial Reporting.** The CGA is responsible for preparing financial statements of cash release and expenditure incurred as well as consolidated financial statements. Line ministries are responsible for maintaining the central accounts of all resources received and spent in cash and kind. The CAOs attached to each ministry are responsible for preparing ministries reports, which includes sub-national data. The accounting system can produce monthly and annual expenditure reports comparing budget and actual expenditure at the level of detailed administrative and economic classification, but are seldom produced and used by executives. An annual consolidated financial statement and report is prepared that covers all government expenditures (though some departmentalized entities produce separate reports and, also, foreign loan/grants are not reflected in the annual statements, as IBAS captures uses of funds, but not entirely the sources).

23. Monthly reports are generally prepared with a time lag of four to six weeks, but preliminary data from IBAS is available within 25 days. Preliminary annual accounts are available within a month of year-end. The fiscal year end in Bangladesh is June. The revised and final annual accounts should be available by October and submitted to the CAG by December (i.e. within six months of the year-end), but these dates are usually not met, which subsequently delays the audit carried out by the CAG

24. **Procurement.** The legislative (Public Procurement Act, 2006) and regulatory framework (Public Procurement Rules, 2008) for procurement is comprehensive. It applies to all procurement undertaken with government funds and covers all procuring entities. Open competitive procurement is the default method and situations where other methods may be used are clearly described. However, the use of competitive procurement methods cannot easily be assessed due to a lack of data, but there appears to be only a few contracts where competitive procurement method is being circumvented or bypassed. Contract award information is in some cases incomplete and mandated procurement plans are not always being published.

25. **External Audit.** The CAG conducts external audit through nine separate audit directorates. Each Audit Directorate is headed by a Director General who is responsible for conducting external audits in a specific functional area of the public sector. The main directorates within the CAG are:

(i) Local and Revenue Audit Directorate – Audits all civil government departments, local;
(ii) Civil Audit Directorate – Audits accounts of all CGA offices, thana/upazila accounts offices, district accounts offices, and regional accounts; and
(iii) Foreign-Aided Projects Audit Directorate (FAPAD) – Audits all foreign-funded development, investment and TA programs/projects in the public sector.

26. FAPAD conducts audits in accordance with ToRs jointly agreed between the government and development partners. FAPAD audits are presented within six months of the end of the fiscal year, but only for foreign-aided expenditures.

27. The CAG's annual audit plan covers all large entities and a number of smaller units, the latter being audited over a cycle of three to five years. Draft audit reports of the Directorates are sent to the CAG office for quality assurance and approval, and thereafter via the Prime Minister's Office to the President, who subsequently submits them to parliament. There was earlier a large backlog of audit reports yet to be reviewed by parliament, but the Public Accounts Committee (PAC) has since 2010 made efforts to expedite the review of back-logged annual reports, but the exact details are not made public.

28. The CAG's audits are done using audit manual based on international standards. Regulatory audits are transaction-level compliance tests rather than focusing on systems, and recommendations are made on individual transactions rather than on systemic strengthening. However, issue-based and performance audits as well as audits of foreign-aided projects include control appraisal. Follow- up on audit recommendations is generally weak and unsystematic (i.e. no established monitoring mechanism), which results in many issues raised by the CAG being repeated in subsequent reports with little evidence of progress.

29. Auditors and accountants are, as noted earlier, part of the same cadre, which as such is conflict-of-interest situation in that auditors may be auditing their own work or that of former colleagues. Another human resource issue is the lack of suitably qualified staff.

IV. PROJECT FINANCIAL MANAGEMENT SYSTEM

A. Overview of EAs' Financial Management Systems and Institutional Context

30. A number of the risks highlighted at the country level, are mitigated since all three executing agencies are corporatized state owned enterprises, with their own Board of Directors, and required to follow the financial accounting and reporting requirements under the Companies Act, 1994. Their financial statements are audited by private audit firms, in addition to CAG performance audits. Nonetheless, as wholly owned GOB enterprises, they are affected most by the budgetary allocations and grants, as well as regulatory environment over the energy sector. The assessments focus on: (i) internal controls; (ii) internal audit; (iii) funds flow arrangements; (iv) accounting and financial reporting; (v) budgeting and planning; and (vi) independent audit. Assessments were informed by completion of a Financial Management Assessment Questionnaires (FMAQs),[4] as well as discussions with senior financial management staff of the EAs.

31. Two common characteristics of the EAs' financial managements systems are inadequate levels of computerization and under-performing internal audit functions. There areas require

[4] Available upon request.

special focus and actions to ensure that financial management risks relating to ADB project implementation are minimized.

B. Strengths

32. The EAs' relative strengths in financial management are as follows:

- **APSCL.** The company has two qualified accountants to ensure the proper custodianship of its financial resources.
- The Internal Audit department also has a professional accountant as well as an Audit Committee to oversee its function.
- External auditors have not in the recent past made any material qualifications in the audit reports.
- Timely preparation of budgets and budget revisions.

- **BREB**. The company has a Chart of Accounts, Accounts Manual and an Internal Audit Manual.
- The company has software for stores as well as payroll management.
- Fixed asset are properly accounted for and each asset has its own unique code.
- BREB is also to generate financial reports, albeit manually, on a timely basis. Given the size and geographical spread of the organization, this is a significant achievement.

- **PGCB.** Finance and Accounts department has a number of well qualified staff and it has developed a number of manuals for the guidance of employees in the performance of their duties.
- A detailed budget preparation exercise is also carried out every year as also variance analysis and review.

C. Weaknesses

33. Major weaknesses are as follows:

- **APSCL.** Despite an Audit Committee overseeing the Internal audit function, the IA is understaffed, has not produced written audit reports recently and requires capacity enhancement.
- APSCL does not insure its fixed assets (which are operational) against natural calamities, accidents, etc. leading to a significant risk of arranging for funds to replace such damaged assets.
- Fixed asset recording and management is done manually.

- **BREB.** The company has not implemented any major ADB projects recently and accounting and finance staff is thus not familiar with ADB's policies and procedures.
- Accounts maintained using a basic off-the-shelf package, and financial reports are then generated on a timely basis manually using excel spreadsheets. Commensurate to the scale of operations, an integrated fixed assets and financial reporting module is recommended. Internal audit is understaffed and there is no training policy for internal auditors.
- Financial reports are not disclosed on BREBs website.

- **PGCB.** The company does not have a fully computerized and integrated financial and accounting system, as financial reports are generated manually (excel based) based on MIS generated trial balance, and fixed asset records are also manually updated to the general ledger.
- PGCB does not insure its fixed assets (which are operational) against natural calamities, accidents, etc. leading to a significant risk of arranging for funds to replace such damaged assets.
- No dedicated Director Finance.
- A number of internal audit observations remain unresolved.
- A number of external audit observations remain unresolved, in particular the requirement for valuation exercise for fixed assets and inventory, and obtaining an actuarial valuation for the gratuity scheme.

D. Personnel, Accounting Policies and Procedures, External and Internal Audit

34. **Personnel**. APSCL has a Finance and Accounts department headed by an executive director who is a professional cost and management accountant. He is supported by the Manager (Finance), also a cost and management accountant and a team of five personnel. BREB has separate accounting and finance departments, with each department headed by a Director. The two Directors report to the Board Member for Finance. Under the two departments there are six designations and the total number of personnel is 66. Although BREB has over 100 regional and zonal offices, accounting and finance functions are almost completely centralized.

35. PCGB is headed by a Non-Executive Chairman with the operations headed by a Managing Director. He is assisted by four Executive Directors – in the areas of Finance, Human Resource Management, Planning & Development and Operations & Maintenance. At present, the Executive Director (Human Resource Management) is also holding the Executive Director (Finance) position, which is some cause for concern – the appointment of a dedicated Executive Director (Finance) has not happened for more than a year. PGCB had about 2300 employees on its roles as of June 30, 2014. All employees are employed on a contract basis for an initial period of 5 years, after which the contract is again renewed for a period of 5 years, if found appropriate. PGCB considers training as an important way to upgrade efficiency and effectiveness of its manpower. It endeavors to train each employee for at least 50 hours per year.

36. **Accounting Policies and Procedures.** APSCL has in place various accounting practices and procedures, although it does not have a consolidated accounts manual codifying and formalizing all the relevant procedures. APSCL has developed its own chart of accounts and also uses the government's guidelines rules on "Delegation of Financial Powers and Authority", and "General Power of Attorney". The accounts of the company are prepared on an accrual basis in accordance with the Bangladesh Financial Reporting Standards (BFRS), the Bangladesh Accounting Standards (BAS) and the requirements of the Companies Act, 1994. APSCL's accounts are audited annually by a firm of chartered accountants.

37. BREB has its own accounts manual and chart of accounts, which were initially developed by the National Rural Electric Co-operative Association (USA) and were subsequently updated by BREB. Monthly accounts are prepared manually using spreadsheets.

The accounts of the company are prepared on an accrual basis in accordance with the BFRS, and BAS.

38. The accounts of PGCB are also prepared on the basis of accrual accounting, in line with BFRS, BAS and other applicable accounting standards of the Institute of Chartered Accountants' of Bangladesh. Controls are in place concerning the preparation and approval of all transactions related to expenditure and ensuring that all these transactions are correctly made and adequately explained. The executing of a transaction and its subsequent recording are carried out as per delegation of powers defined and approved by management. All accounting documents are duly signed and authorized by delegated personnel. The company's chart of accounts is adequate to properly account for and report on PGCB's program. PGCB has developed a number of manuals (accounts, delegation administrative and financial authority, and procedure for financial affairs) for the guidance of its staff with a view to enable them to perform their duties efficiently. There are well set out guidelines outlining authorization to execute a transaction and its recording. Clear lines of functional responsibilities are identified in the system.

39. **Bank and Cash Management.** APSCL maintains its bank account with various leading commercial banks, both in the public and the private sectors. Its main banker is Sonali Bank, which is a public limited company, owned by the Government. Bank accounts are reconciled monthly and a reconciliation statement is prepared. All outstanding items are reviewed and corrected within one week.

40. **BREB** also maintains its bank accounts with Sonali Bank. BREB's accounts are reconciled daily and a reconciliation statement prepared. All outstanding issues are reviewed and corrected immediately.

41. PGCB's bank accounts are reconciled each month. The outstanding items of bank reconciliation are reviewed and appropriate action is taken within a reasonable time, with final reconciliation done at the end of the financial period. PGCB also maintains an up-to-date cashbook.

42. **Fixed Assets.** APSCL does not maintain a computerized fixed asset register. All new purchases are manually recorded in a physical register, without proper classification or coding of the assets. The company does not at present have any plans of developing software for the purpose. With the exception of capital work in progress, fixed assets are not covered by insurance. This is considered a major area of weakness in connection with the custodianship of the company's assets. Inventory records are maintained using Oracle-based software. Physical inventory of stores are reconciled with the respective store registers quarterly - the Finance and Accounts Department updates its records on the basis of reconciliation documents received from the Stores department.

43. BREB has a manual (spreadsheet-based) fixed assets register. All assets have a unique ID number and physical location code. Fixed assets of the organization are covered by insurance. The organization has three stores located in Dhaka, Chittagong and Khulna. Inventory records are maintained using spreadsheets. The accounting department updates its records monthly, on the basis of stock statements received from the stores.

44. PGCB presently maintains a manual fixed asset recording system. Subsidiary records of fixed assets and stocks are reconciled and updated regularly with the relevant general ledger accounts. There are safeguards in the system to protect the assets from fraud, waste and

misuse. However, PGCB has not been able to complete fixed assets register updates for assets transferred from other organizations like BPDB (the takeover of which was complete in 2002), and as such the fixed asset register of PGCB is incomplete. This has been repeatedly pointed out by PGCB's external auditor, and PGCB claims to be undertaking the required studies to complete the fixed asset register. PGCB's fixed assets are also uninsured (other than capital works in progress).

45. **Budgeting.** APSCL directly implements all projects irrespective of source of funding. The project office, under the overall supervision of APSCL management, maintains details of expenditures and physical progress. Project budgets giving details of physical and financial components are prepared under the overall supervision of the Finance Department, with input from all relevant departments. Budgets are then presented to the Board for approval. Budget revisions are carried out yearly, usually no more than nine months after project commencement.

46. BREB prepares annual budgets giving full details of financial and physical targets. Budgets are approved by the BREB Board. Regular comparisons are made between budgets and actual expenditures. If required, mid-year revisions are made to the budget.

47. PGCB's annual budgets are prepared including both physical and financial targets. The budgets include all significant activities in sufficient details, so as to facilitate meaningful comparisons with actual results. Approvals of all expenditures in excess of the budget must be obtained on a prior basis. All actual results are compared with budgets, and major variances explained. PGCB's budgets are prepared by the Director Finance and approved by company's Board of Directors

48. **Project Level Financial Reporting and Audit.** All implementing agencies under Tranche 2 (L-3087), including PGCB, have submitted their audited project financial statements for the fiscal year ended June 30, 2014. The auditor issued an unqualified audit opinion. Under Tranche -1(L-2966), APFS have been submitted by NWGCL, but as there were no disbursements to PGCB up to the FY June 30, 2014, no APFS was submitted by PGCB. A memo requesting waiver is in the process of being finalized. APFS under previous loans to PGCB (L-2332) and Ashuganj (L-2679) for the FY 2014 have also been submitted on time, with unqualified audit opinions.

49. **External Audit.** In keeping with the requirements of the Companies Act, 1994, the accounts of APSCL, BREB and PGCB are externally audited annually. Additionally, audit is carried out by the Comptroller & Auditor General of Bangladesh and all externally aided project of the company are also audited by the Foreign Aided Projects Audit Directorate (FAPAD).

50. APSCL's auditor is appointed by the company's Board of Directors. Since 2014, auditors of the company are S.F. Ahmed & Co. Chartered Accountants who are associates of Ernst & Young International, Inc. Audit reports are issued within 90-120 days of the end of the company's financial year. Relevant regulations of the Bangladesh Securities & Exchange Commission (BSEC) require the reports to be issued within a maximum of 134 days. The auditors have not in the recent past made any material qualifications.

51. M/S Shafiq Mizan Rahman and Augustine Chartered Accountants are BREB's auditors for the second consecutive year. No major issues of concern were raised by the auditors during the past three years.

52. Over the last few years, PGCB's external auditors have been persistent in their observations that:

(i) Proper register for fixed assets and inventories not maintained by PGCB.
(ii) Exchange rate fluctuations for completed projects should be added to fixed assets (rather than put through the Profit and Loss Statement).
(iii) Certain disputed amounts shown as receivable are unlikely to be received.
(iv) The company's gratuity scheme is unfunded and no actuarial valuation has been carried out

53. The management's replies however have not been accepted by the auditors as the same observations are being repeated by the auditors over many years.

54. The CAG also has raised a number of audit observations on project related accounts as also works related. As of date, 199 audit observations of the CAG (value of BDT 17.14 billion) yet remain unresolved.

55. **Internal Audit.** APSCL has an internal audit department, headed by a professional accountant. Its line of reporting is to the company's Managing Director. In theory, internal audit covers all areas of the organization, including its projects. However the department has only one additional staff, which is considered inadequate give the size of the organization. It also lacks any definite terms of audit and an audit calendar. The department has however to date not prepared any formal written report. As the department now stands, it does not have the capacity to carry out the work that is needed to properly audit the usage of funds for the project.

56. BREB's internal audit department reports to the Chairman. A report is prepared after each audit. The report is then discussed by the Audit Review Committee, which consists of the Chairman and other Board members. Corrective actions are then approved by the Board and directives issued to the relevant department. After taking the corrective action, the concerned department informs the Audit Review Committee. The organization also has an Internal Audit Manual, initially developed and subsequently revised by BREB. However the department has limitations imposed by the number of staff in the department and its scope of work. It has only seven staff to cover over 100 offices and three stores. As a result of this, each office is audited on an average every two years. This is considered inadequate.

57. PGCB's internal audit is conducted by a separate unit headed by Deputy General Manager (Audit) reporting to the Managing Director. The unit has a staff of nine and is responsible for internal audit of about 70 offices of PGCB. Consequently, it is able to execute its work only partially every year (it takes about 3 years to cover all offices of PGCB). Since establishment in 2005, the internal audit has raised 2,560 audit objections, out of which 1,722 objections have been resolved, leaving 838 audit objections (of estimated value of BDT1.7 billion) unresolved. These objections are classified under various heads like misuse, fraud, shortage, undue payment, etc. and monitored continuously until they are resolved.

E. Financial Reporting Systems

58. APSCL has an information technology (IT) department headed by a Manager, who has a degree in computer science. However little work has been done in the area of development of software. The company's accounts are only partly computerized. Although the basic double entry bookkeeping is done with the help of an off the shelf program, all reports, expenditure analyses, comparisons with budgets etc. are done manually or on spreadsheets. The company

does not have any plans for the introduction or development of an integrated financial management solution. APSCL has its own website which has the annual reports, including the financial statements for the past 5 years, power generation details, projects being implemented and notices of vacancies

59. BREB has an IT department headed by a Director, with a team of 11 officers. The department has only one programmer. The main work of the department is hardware maintenance. Monthly financial reports are prepared manually on spreadsheets. Stores management and payroll functions are partially computerized.

60. PCGB's financial management function is only partially computerized, and significant manual involvement is required for reporting purposes. Also, the accounting information flow (for example, trial balances and bank reconciliations) between the project/operations offices and head office is manual.

61. The lead ministry of BREB, MOPEMR requires that all companies in the power sector must have their own website. BREB too has a website containing information regarding the status of the different PBSs, trainings held, MIS Reports, etc. The MIS reports do not contain any financial details. Also, the site does not have any financial reports of the organization.

F. Disbursement Arrangements and Funds Flow Mechanisms

62. The Loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time), and detailed arrangements agreed upon between the Government and ADB.

63. Under Output 1, there will be one turnkey package of Ashuganj 400MW CCPP (East) and one consulting services package to assist the executing agency to implement the turnkey package. Under Output 2, there will be one turnkey package of 132 kV transmission lines and substations in Chittagong Division. Under Output 3, there will be one supply package of prepayment meters in Dhaka Division. Therefore, direct payment and committee payment are the main disbursement methods for Tranche 3.

V. RISK DESCRIPTION AND RATING

64. Table 2 summarizes the financial management risk assessment, and proposes risk mitigation and management measures.

Table 2: Financial Management Inherent and Control Risk Assessment

Risk Description	Risk Assessment			Mitigation Measures / Management Plan
	APSCL	PGCB	BREB	
Inherent Risk				
Country-Specific – The weakest PFM area is external scrutiny and audit.	Moderate	Substantial	Moderate	Through dialogue between the Government, ADB and the Institute of Chartered Accountants of Bangladesh (ICAB), aimed at: a. Capacity building of the CAG auditors. b. Strengthening of statutory/regulatory

Risk Description	Risk Assessment			Mitigation Measures / Management Plan
	APSCL	PGCB	BREB	
				requirements to ensure that audits look beyond transactions and concentrate on the systems of audited entities. This dialogue needs to commence within 2016. For the EAs, this risk is mitigated by private audit firms conducting audits, although at PGCB audit issues remain unresolved
Country-Specific – There have been instances of delay in release of counterpart funds by the government.	Moderate	Moderate	Moderate	PGCB's proposal for accessing ADB funding for PGCB to be reviewed and cleared by the Ministries of Power and Finance (of GOB) after an assessment of its fiscal situation (including borrowing headroom) and ability to provide counterpart funds. Since the project addresses the key need for power in Bangladesh, GOB is expected to make adequate provision for counterpart funds in its budget
Overall Inherent Risk			**Substantial**	
Control Risk				
Internal Audit – APSCL's and BREB's internal audit require additional staffing and capacity building. BREB does not have enough staff to cover its wide geographical scope, and APSCL internal audit function, despite having an Audit Committee, does not have defined terms of reference and have not prepared any audit reports in recent years. Although PGCB does have a functioning Internal Audit unit, the long outstanding internal audit observations remain a concern	Substantial	Moderate	Substantial	a. Capacity building of existing personnel and hiring of auditors with experience are required. APSCL and BREB need to request ADB for support on capacity building, which can be organized with the assistance of ICAB. ICAB is already represented on the BREB's Board.. b. Personnel with experience in public sector auditing need to be recruited. For this, a proper plan of action needs to be prepared by the organizations' human resources departments.
Information Systems – The MIS in place is not commensurate with the size and scale of operations. In particular, a computerized financial reporting and fixed assets management module is recommended to be integrated into the existing accounting software's in use.	Moderate	Moderate	Moderate	APSCL, BREB and PGCB will prepare TOR to engage consultants to prepare MIS scoping documents, budgetary estimates, and indicative timeframe for staged MIS enhancements. The TOR are to be approved by respective boards by March, 2016 with an aim for full implementation by June 2017.

Risk Description	Risk Assessment			Mitigation Measures / Management Plan
	APSCL	PGCB	BREB	
Insurance of Fixed Assets – Neither APSCL nor PGCB insure fixed assets. This poses a risk to continuity of operations and thus financial sustainability.	Substantial	Substantial	Moderate	Insure all fixed assets by June 2016.
Fixed Asset Recording – APSCL's records all new fixed asset purchase manually without proper classification or coding of the assets. This presents a risk of inaccurate accounting records and impropriety,	Substantial	Moderate	Low	APSCL will create a spreadsheet-based fixed asset register, and will undertake physical verification and numbering of fixed assets by December 2016. PGCB shall complete the fixed assets valuation and verification exercise, as recommended by its external auditors
PMU Experience – BREB's PMU is inexperienced in ADB financial management and disbursement procedures, presenting a risk of incorrectly executed and/or slow disbursement and financial management procedures.	Low	Low	Substantial	Training of PMU of BREB in ADB project financial management processes and procedures will be conducted by December 2016
External Audit – For PGCB, a number of audit observations remain unresolved, many of them for a number of years. This presents a significant risk to the organization in areas relating to procurement of fixed assets and their safeguards and the maintenance of records relating to them.	Low	Substantial	Low	PGCB Board of Directors to commit to final resolution of outstanding audit issues by December 2016.
Financial Sustainability – PGCB has recently received a tariff adjustment from the Bangladesh Energy Regulatory Commission (BERC). The overall increase is about 20%. In addition to receiving this increase of its 132 and 33 KV wheeling charges, it has also received a new category of charge for its 230 KV stations. The tariffs are applicable from 1st Sept. 2015. This will help improve the company's current financial position although further increases are required to ensure full cost recovery	Moderate	Substantial	Moderate	Although this 20% increase in the wheeling charges will improve PGCB's financial position, further measures will be required, and a financial restructuring plan is envisaged under previously approved loan to PGCB ADB will provide consulting support to assist to improve its financial sustainability through a restructuring of PGCB's balance sheet and/or recapitalization of the company. oan covenants to this effect already included in the recently approved SASEC Second Bangladesh India Electrical Grid Interconnection Project (It is recognized that this is an issue of financial sustainability rather than financial management. However, the

Risk Description	Risk Assessment			Mitigation Measures / Management Plan
	APSCL	PGCB	BREB	
				proposed risk mitigation measure will encapsulate a broader review of PGCB's financial management issues.)
Overall Control Risk	**Moderate**	**Substantial**	**Substantial**	
Overall (Combined) Risk			**Substantial**	

VI. PROPOSED ACTION PLAN

65. Based on this assessment, Table 3 summarized an action plans to mitigate the identified financial management weaknesses.

Table 3: Risk Action Plan

	Action	Responsibility	Resources	Timing
1	Insure operational fixed assets	APSCL and PGCB	APSCL and PGCB's own fund	By June 2016
2	Conduct actuarial valuation	PGCB	Capacity development component of Tranche 1 co-financed by EU grant	By June 2016
3	Exercise for fixed asset/ inventory reconciliation	PGCB	Capacity development component of Tranche 1 co-financed by EU grant	By June 2017
4	Fully staff internal audit unit	BREB/APSCL	EA's own fund	By June 2016
5	Training of PMU of BREB in ADB project financial management processes and procedures.	ADB, PMU of BREB	Capacity development component of Tranche 1 co-financed by EU grant	By December 2016
6	Enhance computerized accounting and management system to automate reporting and fixed assets management processes	APSCL, PGCB, and BREB	Capacity development component of Tranche 1 co-financed by EU grant	TOR for procurement and implementation approved by respective boards by March 2016. Implementation completed by June 2017.
7	Create spreadsheet based fixed asset register, and physical verification and numbering of fixed assets	APSCL	APSCL	By December 2016
8	Implement financial restructuring plan for PGCB	Government and PGCB	SASEC Second Bangladesh India Electrical Grid Interconnection Project	By December 2017
9	Disclose Annual audited financial statements on their website	BREB	BREB's own fund	By December annually

ADB = Asian Development Bank, APSCL = Ashuganj Power Station Co., Ltd., BREB = Bangladesh Rural Electrification Board, EU = European Union, PGCB = Power Grid Company of Bangladesh Limited, PMU = project management unit.

VII. SUGGESTED FINANCIAL MANAGEMENT COVENANTS

66. The following financial management covenants are suggested:

APSCL

- The Borrower shall ensure, or cause APSCL to ensure, that the annual accounts receivable ratio is maintained at [120] days by 31 March 2016, at [100] days by 31 March 2017, at [90] days by 31 March 2018, at [75] days by 31 March 2019, and at [60] days by 31 March 2020.

PGCB

- PGCB shall submit timely requests for revision of transmission tariff to BERC.

VIII. FINANCIAL MANAGEMENT CONCLUSIONS

67. The country's public sector, subject to certain risk mitigation and management actions, is financially robust. However, external scrutiny and audit is a recognized weakness at the national level and remains an ongoing financial management challenge and risk for ADB and other development partners. EAs are fully state-owned public limited company, subject to not just the rules of the Companies' Act 1994 but also the various regulations of BSEC with regard to financial management and reporting thereon. Two of the three EAs have recent experience in implementing externally funded projects. Low levels of computerization and inadequate internal audit capacity and capability present a moderate risk at the entity and project levels, and appropriate action plans have been designed to highlight and address these risks. Improvements will not be apparent overnight, however, and care will be required to ensure that these financial management shortcomings do not impinge negatively on project implementation.

IX. HISTORICAL FINANCIAL PERFORMANCE

A. Ashuganj Power Station Company Limited

68. The bases for this analysis are the audited reports and discussions with the company's management. The audited reports mention that the company's accounts are in compliance with requirements of the Bangladesh Financial Reporting Standards (BFRS) as well as the Bangladesh Accounting Standards (BAS) and that the accounts have been audited in accordance with Bangladesh Auditing Standards (BAS) published by the Institute of Chartered Accountants of Bangladesh (ICAB). The latest audited financial statements for the FY 2014 were unqualified.

69. APSCL sells all its generation to the Bangladesh Power Development Board (BPDB) at tariff rates fixed by BPDB, who is its largest shareholder. APSCL generates about 12% of the total electricity generated in the public sector. The company's gross profit margin has remained around 22 % over the past 4 years.

70. During FY2014, the company supplied 3,708 million kWh of electricity to the national grid, approximately 13% lower than FY2013. Fuel cost also correspondingly decreased by about 9% in FY2014, compared to the previous year. This loss in generation was due to the retirement of gas turbine 1 and the steam turbine unit in January 2014.

71. In FY2014, both accounts receivable as well as the gas bill payable figures decreased substantially due to BPDB making a large payment on the amount owed by it to the APSCL, thereby gas arrears to be cleared. Although the power purchase agreements between APSCL and BPDB stipulate a 45-day collection period, the actual average collection period was almost 4 months (120 days) in FY2014, improving from the previous year's comparative figure of 6 months. In fact, over the past 4 years the actual collection period of sales invoices has always been over 4 months, rising to an all-time high of 6 months in FY2013. Collection needs to be more efficient to avoid liquidity problems.

72. The company's noncurrent liabilities have gone up by about 68% between FY2013 and FY2014.This has been mainly due to the Export Agency (ECA) loan for the 450 MW (South) and 225 MW projects.

73. Although APCSL is a profitable company, its financial fortunes are dependent on BPDB, which has a history of staggering losses (loss for the FY2014 was over BDT 68,000 million). So, although chances of default on the sales invoices are negligible, timely availability of cash for the company to meet its financial liabilities is a potential risk. The company's generation plants are on an average over 25 years old. De-rating of these plants is a threat to the company's continued profitability (although it does have in place a replacement plan to mitigate this risk).

74. Summarized historical financial statements of APSCL are given in Table 4 and are detailed in Appendix 1.

B. Bangladesh Rural Electrification Board

75. BREB started its operations in 1977, with the aim of providing electricity to the rural areas of the country. This is done through the rural cooperatives known as "Palli Biddyut Samity" or PBS. BREB also has investments in the Rural Power Company Ltd (RPCL), and the chairman of BREB is also the chairman of RPCL.

76. This analysis has been carried out on the basis of audited statements for the years FY2012, FY2013 and FY2014. The audited reports mention that the Board's accounts are in compliance with requirements of Bangladesh Accounting Standards (BAS) and that the accounts have been audited in accordance with Bangladesh Auditing Standards (BAS) published by the Institute of Chartered Accountants of Bangladesh (ICAB).

77. The Board receives funds from the government, which it on-lends to the cooperatives. It pays 2 % on government loans and charges 3% to the cooperatives, deriving its income from this interest rate spread. BREB does not pay any taxes. PBSs are separate legal entities and have their own books of accounts. They charge their customers for the electricity sold and in doing so, earn their income.

78. The Board's lending to the PBSs increased by 15% from FY2013 to FY2014. Its network construction went up three times during the same period. While these are healthy signs for the provision of rural electricity, the future remains uncertain in the face of the PBSs ability to pay back to BREB - the PBSs have not received any tariff increase in the recent past, negatively affecting their cash flow and with knock-on effects to their ability to continue to make payments to BREB.

79. BREB has invested heavily in its fixed assets during FY2014, with this balance sheet item now standing at BDT 1,557 million. In 2014, fresh loans of BDT 22,406 million were given

to the PBSs. BREB has not, however, made any balance sheet provision for loan underperformance.

80. In 2014, the government increased its equity by BDT 14,000 million. Equity is now three times the total debt position of the organization, reflecting conservative gearing. Table 5 summarizes BREB's audited financial statements for the last two years; detailed are provided in Appendix 1.[5]

C. Power Grid Company of Bangladesh Limited

81. The highlights of the historical performance of the PGCB from FY2011 to FY2014 are shown in Table 6 and are detailed in Appendix 1. In general, PGCB's financial performance has been acceptable. However relatively low utilization of transmission assets and a tariff set below full cost-recovery has begun to adversely impact on financial performance. Debt service cover ratio was barely adequate in 2014, and an expected increase in principal repayment obligations over the next few years will put further pressure on cash flows. Current ratio is also under pressure as a consequence of growing debt service obligations, with a marked increase in interest payable resulting in PGCB's current ratio falling below 1.0 in 2014. Encouragingly, revenue has increased significantly over the period even in the absence of tariff increases.

[5] Only two years of historical financial statements were made available at the time of preparation of this document.

Table 4: APSCL: Summarized Financial Statements – FY2012 to FY2014 (BDT million unless otherwise stated)

Item	2012	2013	2014
Commercial			
Total generation (GWh)	3,900	4,243	3,709
Average revenue (BDT/kWh)	1.9	1.8	1.9
Financial			
Revenue	7,302	7,538	6,971
Operating expenses	1,632	1,787	2,508
Operating profit	1,296	1,135	751
Other expenses	43	48	40
Interest and financing costs	618	288	183
Depreciation & amortization	1,188	1,301	1,919
Other income	233	170	211
Net profit before tax	868	968	801
Capital expenditure	2,891	165	30
Operating cash flow	2,927	3,285	4,048
Investing cash flow	(3,633)	(13,179)	(15,531)
Financing cash flow	(301)	9,201	12,260
Net cash flow	(1,008)	(692)	777
Current assets	5,066	6,208	4,455
Non-current assets	25,785	37,056	50,667
Short term borrowings			
Other current liabilities	739	3,053	1,987
Long term borrowings	16,179	25,381	36,484
Other non-current liabilities	713	926	1,007
Share capital	6,615	6,615	6,615
Retained earnings	1,778	2,464	3,112
Debt-service coverage ratio	3.6	4.6	5.8
Debt (LT) / Debt (LT)+Equity	55%	65%	70%
Current ratio	6.9	2.0	2.2
Average receivables (days)	140	231	119

( ) = negative, GWh = gigawatt-hours, LT = long-term.
Source: Audited Financial Statements of APSCL.

Table 5: BREB: Summarized Financial Results – FY2013 and FY2014 (BDT million)

Item	2013	2014
Revenue	3,742	3,739
Administration	701	984
Interest and financing costs	733	714
Depreciation & amortization	35	27
Other income	12	78
Net profit before tax	2,287	2,092
Capital expenditure	75	156
Operating cash flow	1,907	2,221
Investing cash flow	(14,696)	(2,081)
Financing cash flow	16,380	14,640
Net cash flow	3,591	14,780
Current assets	70,101	73,080
Non-current assets	223	180
Other current liabilities	3,028	3,036
Long term borrowings	45,362	45,198
Other non-current liabilities	(0)	5
Share capital	24,370	38,706
Retained earnings	20,705	22,796
Grant capital	66,153	67,274
Debt-service coverage ratio	3.6	4.1
Debt (LT) / Debt (LT)+Equity	65%	54%
Current ratio	23.2	24.1

( ) = negative, LT = long-term
Source: Audited Financial Statements of BREB.

Table 6: PGCB: Summarized Financial Results – FY2011 to FY2014 (BDT million)

Item	2011	2012	2013	2014
Revenue	6,255	7,142	7,870	8,672
Operating expenses	1,986	1,417	1,612	2,002
Operating profit	1,680	2,822	3,152	2,526
Other expenses	242	301	343	354
Interest and financing costs	1,606	1,629	1,654	2,391
Depreciation & amortization	2,598	2,913	3,119	4,160
Other income	987	941	872	805
Net profit before tax	810	1,822	2,015	571
Capital expenditure	11,322	17,071	19,605	13,345
Operating cash flow	1,669	4,208	5,383	5,890
Investing cash flow	(10,342)	(16,103)	(19,585)	(9,683)
Financing cash flow	6,637	10,978	15,430	3,273
Net cash flow	(2,036)	(917)	1,228	(521)
Current assets	15,277	14,745	18,032	13,269
Non-current assets	47,420	57,664	67,656	70,615
Short term borrowings	1,808	1,991	1,967	3,482
Other current liabilities	5,494	7,368	9,682	12,861
Long term borrowings	44,660	54,002	63,246	64,972
Other non-current liabilities	2,760	3,662	4,410	5,643
Share capital	13,928	16,010	23,583	24,704
Retained earnings	5,853	6,121	5,774	4,614
Debt-service coverage ratio	0.6	1.5	1.7	1.2
Debt (LT) / Debt (LT)+Equity	8%	8%	6%	11%
Current ratio	2.1	1.6	1.5	0.8
Average receivables (days)	80	81	75	71

( ) = negative, LT = long-term
Source: Audited financial statements of PGCB.

X. FINANCIAL PROJECTIONS

A. Ashuganj Power Station Company Limited

82. Financial projections were prepared for APSCL based on the company’s guidance regarding commissioning of new plant currently under construction or committed for construction in the near future (including the 400 MW plant proposed for ADB funding). A total of 1,725 MW of new installed capacity has been modeled, an increase of 180% of current installed capacity. Possible plant additions that are at the early planning or consenting stage were excluded from the projections (including the two large coal-fired stations planned for Barishal Region and Dinajpur). Capital investment funding assumptions reflect the guidance contained in the company’s 2014 annual report.

83. Revenue models were developed for each new plant, based on the existing PPA between APSCL and BDPB and on relevant tariff regulations. Tariffs modeled for existing plant reflect power purchase agreements with BPDB. Plant off-take tariffs consist of capacity and energy components, with the former being fixed and the latter depending on the level of generation from each plant. In effect, APSCL is insulated from fuel and interest costs and is able to pass foreign exchange risks to BPDB.[6] On a levelized, energy-equivalent basis, the average tariff is around 2 BDT/kWh. Revenue is forecast to increase by around 300% over the forecast period.

84. In general, costs were modeled to increase in proportion to gross fixed assets, gross generation and/or domestic inflation. Interest costs were modeled based on the interest rate assumptions for the 400 MW plant proposed for ADB funding and on rates reflected in the company's historical financial statements. The analysis is not sensitive to interest rate assumptions as interest cost is a pass-through.

85. Projections are summarized in Table 7 and are detailed in Appendix 2. In general, APSCL is in good financial shape; the price at which it sells its output is largely cost-reflective, and the company appears to manage costs effectively. Modest accounting profits are expected to continue for the forecast period, and operating cash flow are strong. Gearing is very high however, particularly in early periods of the forecast period, but this is not in itself a concern given that off-take tariffs include a capacity charge that does not vary with plant output (thereby eliminating the risk that the company is unable to meet debt costs if plant is not dispatched). The relatively high gearing ratio also results in the company's debt service cover ratio not rising above 1.2 (but it is still high enough to be sustainable, particularly in light of the favorable tariff structure already discussed).

B. Bangladesh Rural Electrification Board

86. Financial projections for BREB have been constructed based on discussions with the company's management. In the absence of reliable information concerning future loan sources and quantities, limited future expansion of BREB's activities has been modeled and instead, a status quo has more-or-less been assumed. Fresh equity is assumed injected to repay long-term loans as they fall due, and for this reason the company's debt service cover ratio is very low - in practice, other sources of debt may be used, existing debt rolled over, or loans called in from PBSs (depending on the PBSs' liquidity). Table 8 summarizes financial projections and detailed projections are provided in Appendix 2.

87. The main source of revenue for the Board is interest paid by the PBSs. To a large extent, the financial performance of BREB is linked to the performance of the PBSs and in particular their ability to collect revenue from customers. At present the cooperatives have an almost 98% revenue collection from their customers, but their collective ability to maintain this level of collections presents risk to BREB's future performance (this risk is not captured in the financial projections, however observation indicates that the company has sufficient margin to absorb a reasonable level of non-performing loans).

88. In its 2014 Performance Assessment Report for its power sector development technical assistance project and its development policy credit, the World Bank applied several

[6] The extent to which foreign exchange risk can be passed through to BPDB is unclear. Full pass-through has been indicated by APSCL and has been assumed for the purposes of modeling.

“unsatisfactory” ratings and highlighted serious concerns regarding the financial sustainability of the power sector [footnote 2]. It noted, *“…little progress towards solvency in the sector and a continuing high level of government subsidies that may not be sustainable”*, and that “…*the politicization of BERC signal(s) a backslide in respect of governance with strong implications for financial sustainability”.* The assessment commented as follows with respect to rural electrification: “*…shortcomings in institutional capacity, financial performance and governance of REB/PBSs threaten the sustainability of the progress achieved in rural electrification. The financial performance of PBSs has deteriorated significantly over the past ten years as the rapid expansion in rural electrification expansion has outstripped REB’s capacity to monitor their performance. There has also been a gradual decline in the quality of management and governance which is partly attributed to the relatively new practice of appointing generalist civil servants without the requisite background and skills to run a specialized agency like REB”.* The assessment noted the following actions: *“… a reform action plan was developed on three key broad areas: i) strengthening the REB Board with professionals; ii) establishing zonal offices of REB for managing the growing program; and iii) greater delegation of authority to the PBSs”.* This action plan is apparently under review by the relevant ministry. World Bank’s reform action plan is considered an adequate risk mitigating response for the purpose of ADBs loan.

89. In this context, the ongoing challenges for and risks to the financial sustainability of BREB (and PGCB) are noted and reinforce the need for policy dialogue and for genuine commitment from the government to follow through with much-needed reform. Comfort is gained (and risk mitigated) through the ongoing World Bank intervention discussed above. Moreover, the proposed Tranche 3 subproject for which BREB is the EA will unequivocally improve BREB’s financial performance.

C. Power Grid Company of Bangladesh Limited

90. Financial projections for PGCB are summarized in Table 9 and full pro forma financial statements are provided in Appendix 2. Sources for the financial projections of PGCB include historical financial data, existing loans along with repayment schedules and interest rates, available capital expenditure plans, and funding plans for new projects. Revenue has been estimated based on the 2016 tariff determined by BERC in August 2015 (0.28 BDT/kWh), following on from the imposition of a new tariff regulation. PGCB had petitioned for a tariff of 0.38 TK/kWh. BERC’s rationale for setting a tariff significantly lower that PGCB’s petition was not stated. Modest increases in the real tariff have been assumed for the purposes of these projections (a total of 10% increase by 2019 and inflation matched increase subsequently).

91. The new tariff regulation allows for tariff to be revised in line with the changing cost structures and a reasonable return is permitted. The newly determined tariff, the first under the new tariff regulation, appears to be set well below cost recovery levels. If PGCB tariffs stay at near to current levels (as has been modeled here), there would be growth in revenue because of increased transmission capacity and power flows, however, the company’s operating margin and profit margin would decline and cash flows would not be adequate to finance PGCB capital expenditure plans. Additionally, if tariffs are not revised, the company’s liquidity position would worsen and support for debt repayment and equity infusions would be required from the government.

92. Some improvement in PGCB’s performance will also arise from increased utilization of the transmission grid as more base-load generation projects are commissioned. However,

improving financial health to the extent that PGCB becomes commercially viable and self-sustaining lies in the hands of BERC to a large extent, and in particular the ability of BERC to act independently and to allow pass-through of PGCB's efficient costs. It is noted, however, that the government has agreed to consider a debt restructuring plan for PGCB in case the transmission tariff independently determined by BERC is inadequate to cover PGCB's costs. Ongoing dialogue with the government and PGCB will be required to ensure that agreed measures are taken. This is already covenanted in the recently approved loan SASEC Second Bangladesh India Electrical Grid Interconnection Project

Table 7: APSCL: Summarized Financial Projections - FY2015 to FY2024 (BDT million)

Item	2015	2016	2017	2018	2019	…2024
Commercial						
Total generation (GWh)	3,964	3,964	6,513	9,487	12,546	14,433
Average revenue (BDT/kWh)	1.8	1.8	2.0	2.7	2.3	2.1
Financial						
Revenue	7,256	12,990	25,442	28,561	27,953	30,370
Operating expenses	3,199	5,915	8,754	10,252	10,274	13,003
Operating profit	192	1,689	9,509	9,269	8,610	6,968
Other expenses	10	84	475	463	430	348
Interest and financing costs	183	1,694	6,994	7,675	7,039	5,114
Depreciation & amortization	2,535	4,870	7,281	8,396	8,349	10,220
Net profit before tax	(1)	(90)	2,039	1,130	1,140	1,505
Capital expenditure	26,204	33,762	20,400	14,752	9,639	-
Operating cash flow	3,336	5,404	10,077	12,062	11,874	11,741
Investing cash flow	(26,567)	(34,412)	(21,672)	(16,323)	(11,177)	(1,670)
Financing cash flow	25,866	32,768	15,948	8,471	2,834	(9,066)
Net cash flow	2,635	3,759	4,353	4,210	3,532	1,004
Current assets	7,702	13,996	22,321	28,032	31,663	44,396
Non-current assets	76,640	110,044	124,161	130,659	132,089	86,451
Short term borrowings						
Other current liabilities	1,752	2,192	2,993	3,403	3,487	4,186
Long term borrowings	64,786	97,335	111,078	117,840	119,554	78,710
Other non-current liabilities	986	917	1,555	1,866	2,182	4,380
Share capital	6,615	11,345	14,548	16,257	17,377	17,843
Retained earnings	3,111	3,053	4,378	5,113	5,854	10,782
Debt-service coverage ratio	5.2	2.0	1.3	1.4	1.4	1.2
Debt (LT) / Debt (LT)+Equity	84%	85%	85%	84%	84%	77%
Current ratio	4.4	6.4	7.5	8.2	9.1	10.6
Average receivables (days)	121	120	100	90	75	60

( ) = negative, GWh = gigawatt-hours, LT = long-term.
Source: Tranche 3 preparation consultant's estimates.

Table 8: BREB: Summarized Financial Projections - FY2015 to FY2024 (BDT million)

Item	2015	2016	2017	2018	2019	…2024
Revenue	3,856	4,444	4,469	4,494	4,959	5,591
Administration costs	1,104	1,218	1,344	1,484	1,639	2,656
Interest and financing costs	677	683	725	767	781	968
Depreciation & amortization	46	49	52	55	58	75
Other income	82	86	90	95	100	153
Net profit before tax	2,111	2,580	2,438	2,283	2,580	2,046
Capital expenditure	165	176	186	197	209	280
Operating cash flow	2,158	2,629	2,490	2,338	2,638	2,121
Investing cash flow	(17,975)	2,034)	(2,230)	(2,446)	(2,683)	(4,263)
Financing cash flow	4,565	7,176	4,471	4,058	2,680	365
Net cash flow	(11,252)	7,771	4,730	3,950	2,635	(1,778)
Current assets	63,518	73,147	79,921	86,120	91,228	106,684
Non-current assets	180	181	180	180	180	180
Other current liabilities	3,036	3,036	3,034	3,036	3,036	3,036
Long term borrowings	34,255	29,798	25,544	23,059	20,831	13,959
Other non-current liabilities	3	3	3	-	-	-
Share capital	54,216	65,849	74,573	81,117	86,024	97,249
Retained earnings	24,908	27,488	29,926	32,208	34,788	46,798
Grant capital	67,274	67,274	67,274	67,274	67,274	67,274
Debt-service coverage ratio	0.2	0.6	0.6	1.0	1.1	1.7
Debt (LT) / Debt (LT)+Equity	39%	31%	26%	22%	19%	13%
Current ratio	20.9	24.1	26.3	28.4	30.0	35.1

( ) = negative, LT = long-term

Source: Tranche 3 preparation consultant’s estimates.

Table 9: PGCB - Summarized Financial Projections - FY2015 to FY2024 (BDT million)

Item	2015	2016	2017	2018	2019	…2024
Revenue	10,757	12,972	15,893	20,048	22,971	49,221
Operating expenses	2,394	2,837	3,609	4,231	4,983	11,570
Operating profit	8,363	10,135	12,284	15,816	17,989	37,651
Other expenses	376	435	515	595	690	1,491
Interest and financing costs	5,059	7,805	10,361	12,283	13,610	13,711
Depreciation & amortization	5,435	6,163	10,233	11,278	12,629	24,897
Other income	897	965	1,220	1,316	1,434	2,477
Net profit before tax	(1,610)	(3,303)	(7,604)	(7,024)	(7,507)	29
Capital expenditure	114,073	105,691	95,600	60,898	53,591	34,884
Operating cash flow	7,866	3,139	6,171	4,744	8,342	24,540
Investing cash flow	114,073	105,691	95,600	60,898	53,591	34,884
Financing cash flow	104,887	94,557	84,083	53,676	46,538	9,202
Net cash flow	(1,320)	(7,995)	(5,345)	(2,477)	1,288	(1,142)
Current assets	20,868	16,575	12,947	11,727	14,855	(29,968)
Non-current assets	141,683	208,254	266,711	301,421	330,916	320,776
Short term borrowings	5,036	7,530	9,765	11,105	12,253	12,037
Other current liabilities	24,606	25,295	26,301	24,934	26,962	39,916
Long term borrowings	135,429	202,481	262,582	298,629	329,484	323,672
Other non-current liabilities	6,254	5,773	4,128	2,793	1,431	(2,896)
Share capital	58,524	86,509	112,136	131,101	148,145	187,532
Retained earnings	2,665	161	(5,425)	(10,674)	(16,299)	(45,104)
Debt-service coverage ratio	0.8	0.6	0.6	0.7	0.7	1.4
Debt (LT) / Debt (LT)+Equity	7.6%	8.0%	8.4%	8.4%	8.5%	7.8%
Current ratio	0.7	0.5	0.4	0.3	0.4	-0.6
Average receivables (days)	71	71	71	71	71	71

( ) = negative, LT = long-term
Source: Tranche 3 preparation consultant’s estimates.

APPENDIX 1: HISTORICAL FINANCIAL STATEMENTS

Historical Financial Statements - APSCL

Item	2012	2013	2014
Total revenue	7,302	7,538	6,971
Cost of sales	4,374	4,616	3,713
Gross Profit	**2,928**	**2,921**	**3,258**
Administrative expenses	385	371	475
Depreciation	1,188	1,301	1,919
Uncollectable receivables (provision/written off)	59	115	113
Finance expenses	618	288	183
Workers' profit participation fund	43	48	40
Provision No longer Required	-	-	63
Non-operating income	233	170	211
Profit before Income Tax	868	968	801
Income Tax Expenses	250	250	120
Net Profit After Tax	**618**	**718**	**681**

Source: Tranche 3 preparation consultant's estimates.

BALANCE SHEET (BDT million)

Item	2012	2013	2014
ASSETS			
Non Current Assets			
Property, plant & equipment	17,804	16,778	21,586
Project in progress	7,188	6,581	-
Deferred Expenditure	781	854	807
Capital work-in progress	12	12,843	28,274
Total Non-Current Assets	25,785	37,056	50,667
Current Assets			
Inventories	737	619	698
Accounts and other receivables	2,806	4,762	2,282
Advances, deposits and prepayments	28	24	27
Cash and cash equivalents	1,495	803	1,448
Total Current Assets	5,066	6,208	4,455
Total Assets	**30,851**	**43,264**	**55,122**
LIABILITIES			
Capital and Reserves			
Share capital	6,615	6,615	6,615
Equity of BPDB	4827	4827	5573
Direct grant	0	0	344.182
Retained earnings	1,778	2,464	3,112
Total Capital and Reserves	13,220	13,905	15,643
Non-Current Liabilities			
Loans			
Government loan	2,589	2,589	2,894
Foreign loan	3,338	2,912	3,201
Export Credit Agency loan	-	9,627	20,137
Debt service liabilities	10,252	10,252	10,252
New Loans	-	-	-
Total Loans	16,179	25,381	36,484
Provision for Income Tax	713	926	1,007
Total Non-Current Liabilities	16,892	26,306	37,491

Current Liabilities			
Fuel cost payable	648	2,032	962
Prov. for uncollectable receivables	-	56	110
Other payables	-	916	875
Workers' profit participation fund	92	48	40
Total Current Liabilities	739	3,053	1,987
Total Liabilities	**17,631**	**29,359**	**39,479**
Total Equity and Liabilities	**30,851**	**43,264**	**55,122**

Source: Tranche 3 preparation consultant's estimates.

CASH FLOW STATEMENT (BDT million)

Item	2012	2013	2014
Cash Flows from Operating Activities:			
Cash from Operations (including Other Income)	7,059	5,751	9,662
Cash paid to suppliers, contractors, employees, etc.	(3,736)	(2,362)	(5,392)
Interest paid	(354)	(67)	(183)
Income tax paid	(43)	(38)	(39)
Net cash from operating activities	**2,927**	**3,285**	**4,048**
Cash Flows from Investing Activities			
Acquisition of property, plant and equipment	(2,891)	(165)	(30)
Project cost	(12)	(12,831)	(15,431)
Addition to deferred expenditure	(731)	(182)	(69)
Net cash used in investing activities	**(3,633)**	**(13,179)**	**(15,531)**
Cash Flows from Financing Activities			
Long term loans	-	9,648	12,737
Repayment of Loans	(301)	(446)	(543)
Dividend paid	-	-	(66)
Net cash from financing activities	**(301)**	**9,201**	**12,127**
Net increase/(decrease) in cash and cash equivalents	(1,008)	(692)	645

Cash and cash equivalents at the beginning of the year	2,503	1,495	803
Cash and cash equivalents at the ending of the year	1,495	803	1,447

Source: Tranche 3 preparation consultant's estimates.

Historical Financial Statements - BREB

INCOME STATEMENT (BDT million)

Item	**2013**	**2014**
Revenue from loans	3,664	3,659
Other operating revenue	79	80
Total revenue	3,742	3,739
Administrative expenses	701	984
Finance expenses	733	714
Other income	12	78
Depreciation	35	27
Profit before Income Tax	**2,287**	**2,092**

Source: Tranche 3 preparation consultant's estimates.

BALANCE SHEET (BDT million)

Item	**2013**	**2014**
ASSETS		
Non Current Assets		
Property, plant & equipment	1,021	1,288
Capital work-in progress	754	1,557
Term loan to PBS	93,010	107,454
Investment in shares	1,194	2,135
Investment funds	5,679	5,296
Total Non-Current Assets	101,659	117,729
Current Assets		
Plant material and operational supplies (inventory)	19,251	16,893
Prepayments and other receivables	47,821	52,814

L/C margin	79	15
Medium/short term loan	87	69
Loan advance to employees	663	680
Cash and cash equivalents	2,200	2,610
Total Current Assets	70,101	73,080
Deferred assets	223	180
Total Assets	**171,983**	**190,989**
LIABILITIES		
Capital and Reserves		
Equity GOB	24,370	38,706
GOB capital grants	66,153	67,274
Donated capital grants	11,196	12,068
Retained earnings	20,705	22,796
Total Capital and Reserves	122,424	140,844
Non-Current Liabilities		
GOB loan	2,036	2,036
Long-term Foreign loan	42,244	42,080
Long-term liabilities employee benefits	(0)	5
Other loans	1,082	1,082
Total Non-Current Liabilities	45,361	45,203
Current Liabilities		
Current maturity of foreign loan	1,902	1,902
Accounts payable	35	45
Security deposits	1,083	1,043
Miscellaneous liabilities	8	47
Total Current Liabilities	3,028	3,036
Deferred liabilities	1,170	1,907
Total Liabilities	**49,559**	**50,146**
Total Equity and Liabilities	**171,983**	**190,990**

Source: Tranche 3 preparation consultant’s estimates.

CASH FLOW STATEMENT (BDT million)

Item	**2013**	**2014**
Cash Flows from Operating Activities:		
Cash receipts - interest on loan & medium / short term loan	3,249	3,761
Interest paid on loan	(733)	(714)
Miscellaneous revenues	91	158
Miscellaneous operating expenses	(701)	(984)
Net cash from operating activities	**1,907**	**2,221**
Cash Flows from Investing Activities		
Long-term loan to PBS	(14,621)	-
Purchase of stores materials	-	(1,925)
Addition to property, plant and equipment and capital work-in progress	(75)	(156)
Net cash used in investing activities	**(14,696)**	**(2,081)**
Cash Flows from Financing Activities		
Equity from GOB	16,380	14,640
Repayment of foreign loans	-	-
Net cash from financing activities	**16,380**	**14,640**
Net increase/(decrease) in cash and cash equivalents	3,591	14,780
Cash and cash equivalents at the beginning of the year	(678)	2,194
Cash and cash equivalents at the ending of the year	2,914	16,974

Source: Tranche 3 preparation consultant’s estimates.

Historical Financial Statements - PGCB

INCOME STATEMENT (BDT million)

Item	2011	2012	2013	2014
Revenue	6,255	7,142	7,870	8,672
Transmission expenses	1,986	1,417	1,612	2,002
Gross Profit	4,269	5,725	6,258	6,670
Administrative expenses	202	210	243	326
Finance Income	931	826	825	754
Finance expenses	1,606	1,629	1,654	2,391
Other income	55	115	47	52
Depreciation	2,598	2,913	3,119	4,160
Profit before Income Tax	**810**	**1,822**	**2,015**	**571**
Income tax expenses	(115)	639	1,005	600
Net Profit After Tax	**925**	**1,184**	**1,010**	**(29)**

Source: Tranche 3 preparation consultant’s estimates.

BALANCE SHEET (BDT million)

Item	2011	2012	2013	2014
ASSETS				
Non Current Assets				
Property, plant & equipment	35,677	41,850	42,116	77,249
Capital work-in progress	23,550	32,561	48,513	25,758
Total Non-Current Assets	59,227	74,410	90,630	103,007
Current Assets				
Investments	-	4,940	5,860	3,810
Inventories	1,340	1,471	1,659	864
Accounts and other receivables	1,379	1,578	1,607	1,686
Advances, deposits and prepayments	3,982	4,037	4,959	3,482
Advances against expenses, etc	1,354	1,834	2,546	2,947
Deposits	1	1	1	1
Advances given by projects	2,627	2,202	2,412	534
Cash and cash equivalents	8,576	2,719	3,948	3,427
Total Current Assets	15,277	14,745	18,032	13,269
Total Assets	**74,504**	**89,156**	**108,662**	**116,276**
LIABILITIES				
Capital and Reserves				
Share capital	4,190	4,190	4,609	4,609
Deposit for shares	9,738	11,820	18,974	20,095
Retained earnings	5,853	6,121	5,774	4,614
Total Capital and Reserves	19,782	22,131	29,357	29,318
Non-Current Liabilities				
Term loan (interest bearing)	44,660	54,002	63,246	64,972
Grant from SIDA & KFW	126	121	116	129
Deferred gratuity liabilities	514	588	675	921
Deferred tax liabilities	2,120	2,954	3,619	4,593
Total Non-Current Liabilities	47,420	57,664	67,656	70,615
Current Liabilities				
Term loan (interest bearing)	1,808	1,991	1,967	3,482
Interest payable	4,273	5,779	7,929	10,329

Liabilities for expenses	321	206	212	651
Provision for taxes	36	40	44	72
Total Current Liabilities	7,302	9,360	11,649	16,343
Total Liabilities	54,722	67,024	79,305	86,958
Total Equity and Liabilities	**74,504**	**89,156**	**108,662**	**116,276**

Source: Tranche 3 preparation consultant's estimates.

CASH FLOW STATEMENT (BDT million)

Item	**2011**	**2012**	**2013**	**2014**
Cash Flows from Operating Activities:				
Cash receipt from customers	6,235	6,917	7,773	8,530
Cash paid to suppliers, contractors, employees, etc.	(4,205)	(1,600)	(1,719)	(1,750)
Cash generated from operating activities	2,030	5,317	6,053	6,780
Interest paid	(325)	(1,069)	(670)	(890)
Income tax paid	(36)	(40)	-	-
Net cash from operating activities	**1,669**	**4,208**	**5,383**	**5,890**
Cash Flows from Investing Activities				
Interest received	925	852	873	797
Cash receipts from others	55	115	67	814
Addition to property, plant and equipment and capital work-in progress	(11,322)	(17,071)	(19,605)	(13,345)
Received from Investments in Fixed Deposits	-	-	(920)	2,050
Net cash used in investing activities	**(10,342)**	**(16,103)**	**(19,585)**	**(9,683)**
Cash Flows from Financing Activities				
Share capital and deposit for share	1,751	2,082	6,629	723
Long term loan	5,250	9,525	9,219	3,242
Dividend paid	(364)	(629)	(419)	(691)
Net cash from financing activities	6,637	10,978	15,430	3,273
Net increase/(decrease) in cash and cash equivalents	(2,036)	(917)	1,228	(521)
Cash and cash equivalents at the beginning of the year	10,613	3,636	2,719	3,948
Cash and cash equivalents at the ending of the year	8,576	2,719	3,948	3,427

Source: Tranche 3 preparation consultant's estimates.

APPENDIX 2: FINANCIAL PROJECTIONS

<u>**Financial Projections - APSCL**</u>

INCOME STATEMENT (BDT million)

Item	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Total revenue	7,256	12,990	25,442	28,561	27,953	28,663	32,087	31,510	30,937	30,370
Cost of sales	3,865	5,386	7,179	9,041	9,069	9,098	10,284	10,321	10,360	10,399
Gross Profit	**3,391**	**7,604**	**18,264**	**19,521**	**18,884**	**19,565**	**21,803**	**21,188**	**20,578**	**19,971**
Administrative expenses	551	932	1,360	1,742	1,812	1,953	2,361	2,459	2,562	2,670
Depreciation	2,535	4,870	7,281	8,396	8,349	9,274	10,149	10,178	10,195	10,220
Uncollectable receivables (provision/written off)	113	113	113	113	113	113	113	113	113	113
Finance expenses	183	1,694	6,994	7,675	7,039	6,402	7,136	6,467	5,793	5,114
Workers' profit participation fund	10	84	475	463	430	411	459	422	385	348
Profit before tax	-1	-90	2,039	1,130	1,140	1,412	1,585	1,549	1,530	1,505
Income Tax Expenses	(0)	(31)	714	396	399	494	555	542	535	527
Net Profit After Tax	**(1)**	**(58)**	**1,326**	**735**	**741**	**918**	**1,030**	**1,007**	**994**	**979**

Source: Tranche 3 preparation consultant's estimates.

BALANCE SHEET (BDT million)

Item	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Non Current Assets										
Property, plant & equipment	39,013	91,503	120,042	111,786	103,585	126,162	116,176	106,169	96,154	86,123
Deferred Expenditure	685	558	424	425	417	405	403	389	364	327
Capital work-in progress	36,942	17,983	3,696	18,448	28,087	1	1	1	1	1
Total Non-Current Assets	76,640	110,044	124,161	130,659	132,089	126,568	116,580	106,559	96,519	86,451
Current Assets										
Inventories	1,061	1,710	2,982	4,410	5,808	7,241	8,846	10,421	11,968	13,487
Accounts and other receivables	2,400	4,285	6,985	7,057	5,758	4,726	5,289	5,194	5,100	5,006
Advances, deposits and prepayments	27	27	27	27	27	27	27	27	27	27
Cash and cash equivalents	4,215	7,974	12,327	16,538	20,070	22,035	22,754	23,829	24,871	25,876
Total Current Assets	7,702	13,996	22,321	28,032	31,663	34,029	36,915	39,471	41,966	44,396
Total Assets	**84,342**	**124,041**	**146,482**	**158,691**	**163,751**	**160,598**	**153,495**	**146,030**	**138,485**	**130,846**
LIABILITIES										
Capital and Reserves										
Share capital	6,615	11,345	14,548	16,257	17,377	17,843	17,843	17,843	17,843	17,843
Equity of BPDB	5,573	5,573	5,573	5,573	5,573	5,573	5,573	5,573	5,573	5,573
Direct grant	344	344	344	344	344	344	344	344	344	344
Retained earnings	3,111	3,053	4,378	5,113	5,854	6,772	7,802	8,809	9,803	10,782
Total Capital and Reserves	15,643	20,315	24,843	27,287	29,149	30,532	31,562	32,569	33,564	34,542
Non-Current Liabilities										
Loans										
Government loan	2,647	3,188	4,929	4,841	4,229	3,617	3,005	2,393	1,781	1,169
Foreign loan	3,110	3,085	3,060	3,035	3,010	2,985	2,960	2,935	2,910	2,885
Debt service liabilities	10,252	10,252	10,252	10,252	10,252	10,252	10,252	10,252	10,252	10,252
New Loans	48,777	80,810	92,837	99,712	102,063	97,721	89,483	81,189	72,833	64,404
Total Loans	64,786	97,335	111,078	117,840	119,554	114,576	105,700	96,769	87,776	78,710
Provision for Income Tax	986	917	1,555	1,866	2,182	2,591	3,051	3,500	3,943	4,380
Total Non-Current Liabilities	65,772	98,252	112,633	119,706	121,736	117,167	108,751	100,269	91,719	83,090
Current Liabilities										
Fuel cost payable	644	898	1,196	1,507	1,512	1,516	1,714	1,720	1,727	1,733
Prov. for uncollectable receivables	223	335	446	558	670	782	894	1,006	1,117	1,229

Other payables	875	875	875	875	875	875	875	875	875	875
Workers' profit participation fund	10	84	475	463	430	411	459	422	385	348
Total Current Liabilities	1,752	2,192	2,993	3,403	3,487	3,584	3,942	4,023	4,104	4,186
Total Liabilities	**67,523**	**100,443**	**115,627**	**123,109**	**125,223**	**120,752**	**112,692**	**104,292**	**95,823**	**87,276**
Total Equity and Liabilities	**83,166**	**120,759**	**140,470**	**150,397**	**154,372**	**151,284**	**144,255**	**136,861**	**129,387**	**121,818**

Source: Tranche 3 preparation consultant's estimates.

CASH FLOW STATEMENT (BDT million)

Item	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Cash Flows from Operating Activities:										
Cash from Operations (including Other Income)	8,315	13,211	25,473	30,772	30,337	29,630	31,451	31,533	30,961	30,394
Cash paid to suppliers, contractors, employees, etc.	(4,734)	(6,065)	(8,240)	(10,473)	(10,876)	(11,046)	(12,448)	(12,774)	(12,915)	(13,063)
Interest paid	(183)	(1,694)	(6,994)	(7,675)	(7,039)	(6,402)	(7,136)	(6,467)	(5,793)	(5,114)
Income tax paid	(22)	(39)	(76)	(86)	(84)	(86)	(96)	(95)	(93)	(91)
Workers' profit participation fund	(40)	(10)	(84)	(475)	(463)	(430)	(411)	(459)	(422)	(385)
Net cash from operating activities	**3,336**	**5,404**	**10,077**	**12,062**	**11,874**	**11,665**	**11,360**	**11,738**	**11,738**	**11,741**
Cash Flows from Investing Activities										
Acquisition of property, plant and equipment	(26,204)	(33,762)	(20,400)	(14,752)	(9,639)	(3,610)	-	-	-	-
Addition to deferred expenditure	-	-	-	(143)	(140)	(143)	(160)	(158)	(155)	(152)
Addition to stocks and spares	(363)	(650)	(1,272)	(1,428)	(1,398)	(1,433)	(1,604)	(1,575)	(1,547)	(1,519)
Net cash used in investing activities	**(26,567)**	**(34,412)**	**(21,672)**	**(16,323)**	**(11,177)**	**(5,187)**	**(1,765)**	**(1,733)**	**(1,702)**	**(1,670)**
Cash Flows from Financing Activities										
Long term loans	26,356	29,832	19,198	13,214	8,519	3,144	-	-	-	-
Equity Drawdown	-	4,730	3,203	1,709	1,120	466	-	-	-	-
Repayment of Loans	(490)	(1,795)	(6,452)	(6,452)	(6,805)	(8,123)	(8,876)	(8,930)	(8,993)	(9,066)
Net cash from financing activities	**25,866**	**32,768**	**15,948**	**8,471**	**2,834**	**(4,513)**	**(8,876)**	**(8,930)**	**(8,993)**	**(9,066)**
Net increase/(decrease) in cash and cash equivalents	2,635	3,759	4,353	4,210	3,532	1,966	719	1,075	1,043	1,004
Cash and cash equivalents at the beginning of the year	1,447	4,083	7,842	12,195	16,406	19,937	21,903	22,622	23,696	24,739
Cash and cash equivalents at the ending of the year	4,083	7,842	12,195	16,406	19,937	21,903	22,622	23,696	24,739	25,743

Source: Tranche 3 preparation consultant's estimates.

Financial Projections - BREB

INCOME STATEMENT (BDT million)

Item	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Revenue from loans	3,761	4,325	4,325	4,325	4,764	4,764	5,247	5,247	5,247	5,247
Other operating revenue	95	119	144	169	195	222	250	280	311	344
Total revenue	3,856	4,444	4,469	4,494	4,959	4,986	5,497	5,527	5,558	5,591
Administrative expenses	1,104	1,218	1,344	1,484	1,639	1,811	1,993	2,193	2,413	2,656
Finance expenses	677	683	725	767	781	783	828	878	926	968
Other income	82	86	90	95	100	105	115	127	139	153
Depreciation	46	49	52	55	58	61	65	68	71	75
Profit before Income Tax	**2,111**	**2,580**	**2,438**	**2,283**	**2,580**	**2,435**	**2,727**	**2,515**	**2,287**	**2,046**

Source: Tranche 3 preparation consultant's estimates.

BALANCE SHEET (BDT million)

Item	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Non Current Assets										
Property, plant & equipment	1,391	1,492	1,590	1,685	1,777	1,866	1,951	2,033	2,112	2,187
Capital work-in progress	1,573	1,599	1,635	1,682	1,742	1,814	1,899	1,998	2,112	2,242
Term loan to PBS	123,573	123,573	123,573	123,573	123,573	123,573	123,573	123,573	123,573	123,573
Investment in shares	2,135	2,135	2,135	2,135	2,135	2,135	2,135	2,135	2,135	2,135
Investment funds	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296
Total Non-Current Assets	133,968	134,094	134,229	134,371	134,522	134,683	134,854	135,035	135,228	135,433
Current Assets										
Plant material and operational supplies (inventory)	18,582	20,440	22,484	24,733	27,206	29,927	32,920	36,211	39,833	43,816
Prepayments and other receivables	52,814	52,814	52,814	52,814	52,814	52,814	52,814	52,814	52,814	52,814
L/C margin	15	15	15	15	15	15	15	15	15	15
Medium/short term loan	69	69	69	69	69	69	69	69	69	69
Loan advance to employees	680	680	680	680	680	680	680	680	680	680
Cash and cash equivalents	(8,642)	(871)	3,859	7,809	10,444	11,609	12,265	12,034	11,069	9,290
Total Current Assets	63,518	73,147	79,921	86,120	91,228	95,113	98,762	101,823	104,479	106,684
Deferred assets	180	181	180	180	180	180	180	180	180	180
Total Assets	**197,666**	**207,423**	**214,330**	**220,671**	**225,930**	**229,976**	**233,795**	**237,038**	**239,886**	**242,296**
LIABILITIES										
Capital and Reserves										
Equity GOB	54,216	65,849	74,573	81,117	86,024	89,703	92,461	94,532	96,084	97,249
GOB capital grants	67,274	67,274	67,274	67,274	67,274	67,274	67,274	67,274	67,274	67,274
Donated capital grants	12,068	12,068	12,068	12,068	12,068	12,068	12,068	12,068	12,068	12,068
Retained earnings	24,908	27,488	29,926	32,208	34,788	37,223	39,950	42,465	44,752	46,798
Total Capital and Reserves	158,465	172,678	183,840	192,666	200,154	206,267	211,753	216,338	220,178	223,388
Non-Current Liabilities										
GOB loan	2,036	2,036	2,036	2,036	2,036	2,036	2,036	2,036	2,036	2,036
LT Foreign loan	31,137	26,680	22,426	19,941	17,713	15,643	13,975	12,632	11,641	10,841
LT liabilities employee benefits	3	3	3	-	-	-	-	-	-	-
Other loans	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082
Total Non-Current Liabilities	34,258	29,801	25,547	23,059	20,831	18,761	17,093	15,750	14,759	13,959

Current Liabilities										
Current maturity of foreign loan	1,902	1,902	1,902	1,902	1,902	1,902	1,902	1,902	1,902	1,902
Accounts payable	45	45	45	45	45	45	45	45	45	45
Security deposits	1,043	1,043	1,043	1,043	1,043	1,043	1,043	1,043	1,043	1,043
Miscellaneous liabilities	47	47	45	47	47	47	47	47	47	47
Total Current Liabilities	3,036	3,036	3,034	3,036	3,036	3,036	3,036	3,036	3,036	3,036
Deferred liabilities	1,907	1,908	1,909	1,910	1,910	1,912	1,914	1,914	1,914	1,914
Total Liabilities	**39,201**	**34,745**	**30,490**	**28,005**	**25,777**	**23,709**	**22,043**	**20,700**	**19,709**	**18,909**
Total Equity and Liabilities	**197,666**	**207,423**	**214,331**	**220,672**	**225,931**	**229,977**	**233,796**	**237,038**	**239,887**	**242,297**

Source: Tranche 3 preparation consultant’s estimates.

CASH FLOW STATEMENT (BDT million)

Item	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cash Flows from Operating Activities:										
Cash receipts - interest on loan & medium / short term loan	3,761	4,325	4,325	4,325	4,764	4,764	5,247	5,247	5,247	5,247
Interest paid on loan	(677)	(683)	(725)	(767)	(781)	(783)	(828)	(878)	(926)	(968)
Miscellaneous revenues	177	205	234	264	295	327	365	406	450	497
Miscellaneous operating expenses	(1,104)	(1,218)	(1,344)	(1,484)	(1,639)	(1,811)	(1,993)	(2,193)	(2,413)	(2,656)
Net cash from operating activities	**2,158**	**2,629**	**2,490**	**2,338**	**2,638**	**2,496**	**2,792**	**2,583**	**2,358**	**2,121**
Cash Flows from Investing Activities										
Long-term loan to PBS	(16,120)	-	-	-	-	-	-	-	-	-
Purchase of stores materials	(1,689)	(1,858)	(2,044)	(2,248)	(2,473)	(2,721)	(2,993)	(3,292)	(3,621)	(3,983)
Addition to property, plant and equipment and capital work-in progress	(165)	(176)	(186)	(197)	(209)	(222)	(235)	(249)	(264)	(280)
Net cash used in investing activities	**(17,975)**	**(2,034)**	**(2,230)**	**(2,446)**	**(2,683)**	**(2,942)**	**(3,228)**	**(3,541)**	**(3,885)**	**(4,263)**
Cash Flows from Financing Activities										
Equity from GOB	15,510	11,633	8,724	6,543	4,908	3,681	2,760	2,070	1,553	1,165
Repayment of foreign loans	(10,945)	(4,457)	(4,254)	(2,485)	(2,228)	(2,070)	(1,668)	(1,343)	(991)	(800)
Net cash from financing activities	**4,565**	**7,176**	**4,471**	**4,058**	**2,680**	**1,611**	**1,092**	**727**	**562**	**365**
Net increase/(decrease) in cash and cash equivalents	(11,252)	7,771	4,730	3,950	2,635	1,164	656	(231)	(965)	(1,778)
Cash and cash equivalents at the beginning of the year	2,603	(8,649)	(877)	3,853	7,803	10,437	11,602	12,258	12,027	11,062
Cash and cash equivalents at the ending of the year	(8,649)	(877)	3,853	7,803	10,437	11,602	12,258	12,027	11,062	9,284

Source: Tranche 3 preparation consultant's estimates.

Financial Projections - PGCB

INCOME STATEMENT (BDT million)

Item	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	10,757	12,972	15,893	20,048	22,971	26,671	30,245	35,467	41,900	49,221
Transmission expenses	2,394	2,837	3,609	4,231	4,983	6,059	7,504	8,609	9,951	11,570
Gross Profit	8,363	10,135	12,284	15,816	17,989	20,612	22,741	26,858	31,949	37,651
Administrative expenses	376	435	515	595	690	810	960	1,107	1,282	1,490
Finance Income	841	903	1,152	1,241	1,352	1,613	2,044	2,121	2,222	2,348
Finance expenses	5,059	7,805	10,361	12,283	13,610	14,267	14,138	13,879	13,746	13,711
Other income	57	62	68	75	82	90	98	108	118	129
Depreciation	5,435	6,163	10,233	11,278	12,629	16,589	23,494	23,754	24,233	24,897
Profit before Income Tax	**(1,610)**	**(3,303)**	**(7,604)**	**(7,024)**	**(7,507)**	**(9,352)**	**(13,708)**	**(9,655)**	**(4,973)**	**29**
Income tax expenses	339	(799)	(2,019)	(1,775)	(1,883)	(2,401)	(3,612)	(2,325)	(980)	465
Net Profit After Tax	**(1,949)**	**(2,504)**	**(5,585)**	**(5,250)**	**(5,624)**	**(6,951)**	**(10,096)**	**(7,330)**	**(3,993)**	**(436)**

Source: Tranche 3 preparation consultant’s estimates.

BALANCE SHEET (BDT million)

Item	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Non Current Assets										
Property, plant & equipment	96,034	110,242	213,793	231,757	256,900	351,036	520,623	504,146	493,288	486,974
Capital work-in progress	115,612	200,931	182,747	214,403	230,222	165,534	36	22,775	41,851	58,151
Total Non-Current Assets	211,645	311,174	396,541	446,160	487,122	516,570	520,659	526,921	535,139	545,126
Current Assets										
Investments	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810
Inventories	4,443	7,549	7,073	8,272	8,918	6,782	1,148	2,018	2,775	3,449
Accounts and other receivables	2,091	2,522	3,090	3,898	4,466	5,185	5,880	6,895	8,146	9,569
Advances, deposits and prepayments	3,727	4,286	6,522	7,316	8,314	10,656	14,517	15,205	16,111	17,243
Advances against expenses, etc	1	1	1	1	1	1	1	1	1	1
Deposits	4,688	4,295	3,684	2,141	1,768	1,271	176	270	355	431
Advances given by projects	8,416	8,582	10,207	9,458	10,083	11,928	14,695	15,476	16,467	17,675
Cash and cash equivalents	2,107	(5,888)	(11,233)	(13,710)	(12,423)	(30,608)	(44,599)	(56,587)	(63,329)	(64,471)
Total Current Assets	20,868	16,575	12,947	11,727	14,855	(2,902)	(19,066)	(28,388)	(32,132)	(29,968)
Total Assets	**232,514**	**327,749**	**409,488**	**457,887**	**501,977**	**513,668**	**501,593**	**498,533**	**503,007**	**515,157**
LIABILITIES										
Capital and Reserves										
Share capital	4,609	4,609	4,609	4,609	4,609	4,609	4,609	4,609	4,609	4,609
Deposit for shares	53,915	81,900	107,527	126,492	143,536	158,073	165,344	170,765	176,624	182,923
Retained earnings	2,665	161	(5,425)	(10,674)	(16,299)	(23,249)	(33,345)	(40,675)	(44,668)	(45,104)
Total Capital and Reserves	61,189	86,670	106,711	120,427	131,846	139,433	136,609	134,699	136,566	142,428
Non-Current Liabilities										
Term loan (interest bearing)	135,429	202,481	262,582	298,629	329,484	333,092	326,083	323,206	322,477	323,672
Grant from SIDA & KFW	129	129	129	129	129	129	129	129	129	129
Deferred gratuity liabilities	1,225	1,582	2,005	2,503	3,094	3,794	4,624	5,609	6,780	8,170
Deferred tax liabilities	4,900	4,062	1,995	161	(1,791)	(4,273)	(7,975)	(10,407)	(11,512)	(11,194)
Total Non-Current Liabilities	141,683	208,254	266,711	301,421	330,916	332,742	322,861	318,537	317,874	320,776
Current Liabilities										
Term loan (interest bearing)	5,036	7,530	9,765	11,105	12,253	12,387	12,126	12,019	11,992	12,037
Interest payable	11,341	12,902	14,974	17,431	20,153	23,007	25,834	28,610	31,359	34,101

Liabilities for expenses	824	947	1,441	1,617	1,837	2,355	3,208	3,360	3,560	3,810
Provision for taxes	104	143	191	251	320	400	491	597	723	871
Total Current Liabilities	29,642	32,825	36,066	36,039	39,215	41,492	42,123	45,297	48,568	51,953
Total Liabilities										
Total Equity and Liabilities	**232,514**	**327,749**	**409,488**	**457,887**	**501,977**	**513,668**	**501,593**	**498,533**	**503,007**	**515,157**

Source: Tranche 3 preparation consultant's estimates.

CASH FLOW STATEMENT (BDT million)

Item	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Cash Flows from Operating Activities:										
Cash receipt from customers	10,757	12,972	15,893	20,048	22,971	26,671	30,245	35,467	41,900	49,221
Cash paid to suppliers, contractors, employees, etc.	(2,770)	(3,272)	(4,124)	(4,826)	(5,673)	(6,869)	(8,464)	(9,716)	(11,233)	(13,061)
Cash generated from operating activities	7,987	9,700	11,769	15,221	17,299	19,801	21,782	25,751	30,667	36,160
Interest paid	(4,162)	(6,840)	(9,141)	(10,967)	(12,176)	(12,564)	(11,995)	(11,651)	(11,406)	(11,234)
Income tax paid	(339)	799	2,019	1,775	1,883	2,401	3,612	2,325	980	(465)
Increase in current assets	(8,919)	(3,702)	(1,717)	(1,258)	(1,839)	(428)	2,172	(2,666)	(2,998)	(3,306)
Increase in current liabilities	13,299	3,182	3,241	(27)	3,176	2,278	631	3,174	3,270	3,385
Net cash from operating activities	**7,866**	**3,139**	**6,171**	**4,744**	**8,342**	**11,488**	**16,202**	**16,933**	**20,512**	**24,540**
Cash Flows from Investing Activities										
Interest received	-	-	-	-	-	-	-	-	-	-
Cash receipts from others	-	-	-	-	-	-	-	-	-	-
Addition to property, plant and equipment and capital work-in progress	(114,073)	(105,691)	(95,600)	(60,898)	(53,591)	(46,037)	(27,583)	(30,017)	(32,450)	(34,884)
Received from Investments in Fixed Deposits	-	-	-	-	-	-	-	-	-	-
Net cash used in investing activities	**114,073**	**105,691**	**95,600**	**60,898**	**53,591**	**46,037**	**27,583**	**30,017**	**32,450**	**34,884**
Cash Flows from Financing Activities										
Share capital and deposit for share	33,820	27,985	25,627	18,966	17,043	14,538	7,271	5,420	5,860	6,299
Long term loan	71,067	66,572	58,456	34,711	29,494	1,826	(9,882)	(4,324)	(663)	2,903

Dividend paid	-	-	-	-	-	-	-	-	-	-
Net cash from financing activities	104,887	94,557	84,083	53,676	46,538	16,364	(2,610)	1,096	5,196	9,202
Net increase/(decrease) in cash and cash equivalents	(1,320)	(7,995)	(5,345)	(2,477)	1,288	(18,185)	(13,992)	(11,988)	(6,742)	(1,142)
Cash and cash equivalents at the beginning of the year	3,427	2,107	(5,888)	(11,233)	(13,710)	(12,423)	(30,608)	(44,599)	(56,587)	(63,329)
Cash and cash equivalents at the ending of the year	2,107	(5,888)	(11,233)	(13,710)	(12,423)	(30,608)	(44,599)	(56,587)	(63,329)	(64,471)

Source: Tranche 3 preparation consultant’s estimates.