

FINANCIAL MANAGEMENT ASSESSMENT

I. INTRODUCTION

1. The financial management assessment (FMA) has been completed for Power Grid Company of Bangladesh Limited (PGCB) for the Southwest Transmission Grid Expansion Project. The primary objective of the assessment was to provide assurance that PGCB will have a sufficiently strong financial management system in place to properly manage the project. A previous FMA for the PGCB was completed in 2016 under ADB loan¹ to ensure PGCB's fulfillment of ADB fiduciary requirements. This FMA has been updated in February 2018 for this proposed project in accordance with ADB's *Guidelines for the Financial Management and Analysis of Projects* (2005), *Financial Due Diligence a Methodology Note* (2009), and *Financial Management Technical Guidance Note* (2015).²

2. The FMA reviewed two types of risks: (i) inherent risks; i.e., risks outside the direct control of the financial management of the executing agency, and (ii) control risks; i.e., risks concerning the internal functioning and control of the finance and accounting section of the executing agency. The FMA also evaluated the risks associated with project financial management arrangements, as the project funds should be used economically and efficiently.

3. The FMA included; (i) the completion of ADB's financial management assessment questionnaire through interviews with key staff of PGCB; (ii) evaluation of personnel, accounting policies and procedures, internal and external auditing, financial reporting, and budgeting based on responses to the financial management assessment questionnaire and other documents; (iii) identification of potential risks and mitigation measures.

II. PROJECT DESCRIPTION

4. The proposed project is aligned with the national target of "electricity for all" by 2021.³ Key interrelated project components include construction of: (i) a new Gopalganj (North) 400/132 kilovolt (kV) substation, rated at 3x325 magavolt-ampere, (ii) a new transmission network in southern Bangladesh with a 126 kilometer (km) Barisal (North)-Gopalganj (North)-Faridpur 230 kV double circuit transmission line, (iii) a new transmission network in western Bangladesh with a 104 km Bogra (West)-Rohanpur 400 kV double circuit line and (iv) a capacity development program for the electric utility industry to promote socially inclusive growth with gender equality through support for (a) undergraduate students with scholarships under an exchange program; and (b) continuing education of PGCB staff through a grant funded scholarship program established in universities.

III. COUNTRY AND SECTOR FINANCIAL MANAGEMENT ISSUES

5. Using the existing diagnostics and available reviews, this section provides a country level public financial management (PFM) progress report based on the public expenditure and financial accountability (PEFA) assessment conducted by the government in 2015 with the support of the

¹ ADB. [Bangladesh: Bangladesh Power System Enhancement and Efficiency Improvement Project](#).

² ADB. 2005. *Financial Management and Analysis of Projects*. Manila; ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila; and ADB. 2015. *Financial Management Technical Guidance Note*. Manila.

³ Government of Bangladesh, Ministry of Planning, Planning Commission. 2012. *Perspective Plan of Bangladesh, 2010–2021: Making Vision 2021 a Reality*. Dhaka.

World Bank.⁴ This PFM progress report reviews the performance of Bangladesh's PFM system in 2015 based on 31 performance indicators, categorized into seven critical pillars of performance.

6. **Rating results in 2015.** The ratings of the individual performance indicators for 2015 by applying the upgraded 2016 framework is summarized in the Annex 1. The summary result shows that Bangladesh ranked above B+ (representing performance near good international practice) in only 1 indicator, B (performance ranging from good to medium) in 7 indicators, and C+ and C (performance ranging from medium to poor) in 10 indicators, and D+ and D (ineffective or nonfunctioning process or procedure, or no process or procedure exists at all) in the 13 remaining indicators.

7. **Comparison with 2010 result.** This report also compared the scores of the individual performance indicators in 2015 with the results in 2010 by applying 2011 framework as summarized in Annex 2. There was no improvement in credibility, comprehensiveness, and transparency of budget. Performance of other dimensions in the budget cycle improved. Of 28 parameters measured in PEFA 2010, seven performance indicators improved, 14 remained the same, and seven deteriorated in the PEFA 2015 assessment. The performance indicator on credibility of the budget suffered as a result of political turmoil and exchange rate fluctuations as well as overoptimistic estimates of revenue and expenditure. Predictability and control in budget execution; accounting, recording and reporting; and external scrutiny, and audit remain weak in the PFM system.

A. Review of PFM Performance by Seven Pillars

8. **Overall.** The institutional framework of PFM in Bangladesh is under transition and several improvements have been made or are being attempted. The dominant role of the Ministry of Finance in budget management has contributed to the country's strong record of fiscal discipline. The country's PFM systems have affected PFM performance in the areas of (i) aggregate fiscal discipline, (ii) strategic allocation of resources, and (iii) efficient use of resources for service delivery.

9. **Budget reliability.** The credibility of the budget has steadily deteriorated between fiscal year (FY)2011–2012 and FY2013–2014 in aggregate terms, both on the expenditure and revenue sides. This trend is also somewhat reflected in the variation between sectoral and economic categories of expenditure, which has also increased since FY2011–2012. Reasons for shortfall in actual expenditure include the institutionalization of a supplementary budget and rendering original budgets of less importance. Political instability has also been cited as a reason for the worsening credibility as economic activity has decreased and revenue targets not realized, with subsequent impact on expenditures. Revenues were also affected by exchange rate fluctuations.

10. **Transparency of public finances.** Bangladesh performed well with respect to the comprehensiveness of budget documentation and also public access to key fiscal information. The poor scoring for this pillar results from the delay in the preparation and approval of audit reports rather than lack of disclosure. Performance information on service delivery has generally scored well, reflecting a positive application of integrated budgeting and accounting system as well as the existence of monitoring committees at both ministry/department/agency and Planning

⁴ Government of Bangladesh. 2016. *Public Financial Management Performance Report*. Dhaka. The assessment covered the central and local government and the public corporation sector from FY2011–2012 to FY2013–2014.

Commission level. Unfortunately, any monitoring is not strongly linked to budgeted expenditures and the lack of performance audits have weakened the overall score.

11. **Management of assets and liabilities.** Asset and liability management is generally weak, with no centralized asset registers. Fiscal risk management is weak with no comprehensive monitoring of contingent liabilities of public corporation sector. The finance division operates a flagging system dealing with risk on a one-by-one basis rather than consolidating all risk into a report. The “C+” score is only achieved because local government is prohibited from taking out loans. Contingent liabilities are in the process of being reported on comprehensively, but this has not occurred yet.

12. **Policy-based fiscal strategy and budgeting.** A comprehensive, medium-term expenditure framework exists. Macroeconomic forecasts have been prepared but lack analysis of risk to revenue as well as various optimistic or pessimistic scenarios. Revenue forecasting lacks documentation of the methodology and assumptions, including impact of policy changes. Evidence indicates that the forecasts for a majority of ministries were used as a guide for the next year’s ceiling for both the development and non-development budget. Sector strategies exist and are well costed for only three large ministries (primary education, health and agriculture). The separation of the recurrent and development budgets is generally reflected in the lack of fully costed strategies. Related to this is the lack of bottom-up reconciliation of sector strategies to the medium-term budget framework.

13. **Predictability and control in budget execution.** Revenue administration has structural weaknesses. Most worrying is the lack of data on tax arrears which has not been routinely submitted by field officers. The government has reduced the number of bank accounts considerably; but these are not fully consolidated although all funds transferred to the treasury single account are reconciled and tracked individually. On the expenditure side, a cash-forecasting model is established at the beginning of the year for each month, and this is updated based on actual collection/expenditure. Personnel and payroll records are manually updated. Overall financial management controls are in place with good segregation of duties and procedures.

14. **Accounting and reporting.** Financial data integrity is sound because access and changes to integrated budgeting and accounting system records are restricted and recorded, resulting in an audit trail that is checked by the Internal Control Unit within the Ministry of Finance. The quality of in-year budget reports is good, but timeliness could be improved. Data inaccuracies are limited to revenue estimates. The production of annual financial reports is incomplete and delayed; this undermines the credibility of annual financial reports. Modified cash accounting standards are used and are easily understood.

15. **External scrutiny and audit.** Timeliness of legislative scrutiny, which is a key factor in the effectiveness of the accountability function, is hampered by the backlog of audit reports submitted to parliament. The external audit of government financial statements has never been completed in a timely manner. Audit reports are 2 years behind their due submission date. The audit department is active in carrying out mainly compliance audits as well as some follow-up audits on departments, projects, and statutory bodies.

B. Public Financial Management Reforms⁵

16. The government's PFM reforms comprised (i) improving budgetary processes e.g., budget preparation; (ii) spending prioritization; and (iii) strengthening budget implementation. Areas marking notable progress include (i) introduction of medium term budget framework, (ii) strengthening debt management capacity, (iii) use of macroeconomic modeling to prepare medium term macroeconomic framework, (iv) introducing new budget classification conforming to international standards, (v) improving human resource management, and (vi) reforms to broaden revenue base.

17. However, more progress needs to be made in (i) improving quality and timeliness of government accounting and auditing to bring them up to international standards, (ii) improving cash management and cash flow forecasting, (iii) improving internal oversight through more effective internal audit, and (iv) a further integrated accounting framework.

C. Overall Improvement on PFM Processes and Procedures from 2011 to 2015

18. Overall there has been a renewed focus on PFM activities and a continued emphasis on improving PFM processes and procedures. The major PFM reform project, "Deepening Medium-Term Budget Framework and Strengthening Financial Accountability Project", was completed in 2014. The development of an integrated budgeting and accounting system continues and is expected to strengthen many control procedures, and address weaknesses in accounting and recording when implemented.

19. Improvements in procurement processes are ongoing as e-procurement increases coverage. Bringing the audit of government accounts up to date by preparing the annual financial statements in a timely manner is an important task. A scrutiny by the Public Accounts Committee has started but is yet to reach the level of operating to its full potential. A new VAT Act was enacted in 2012. However, other elements of the government's tax modernization plan have not been affected.

IV. PROJECT FINANCIAL MANAGEMENT SYSTEM

A. Overview of PGCB

20. PGCB is a public limited company incorporated in 1996 under the Companies Act, 1994. Bangladesh Power Development Board (BPDB), a wholly government-owned entity, owns 76.25% of the share capital of PGCB, with the balance held by various institutions and individual shareholders. PGCB is listed in the Dhaka Stock Exchange and Chittagong Stock Exchange.

21. PGCB has the responsibility to own, operate and expand the national power grid. PGCB completed the takeover of transmission assets from BPDB and Dhaka Electric Supply Authority by December 2002. PGCB had an employee strength of 2,413 as of June 30, 2017. PGCB's customers are (i) BPDB, (ii) Dhaka Power Distribution Company Limited, (iii) Dhaka Electric Supply Company Limited, (iv) West Zone Power Distribution Company Limited, and (v) *palli bidyut samitis* (rural electricity cooperatives) of Bangladesh Rural Electrification Board.

⁵ This section draws from the risk assessment and risk management plan prepared to inform the country partnership strategy between Asian Development Bank and Bangladesh for 2016–2020.

B. Strengths

22. **Vast experience of managing donor-financed projects.** PGCB has been implementing a number of projects with ADB and other donor agencies. PGCB has more than seven projects with ADB support and the performance of PGCB was considered satisfactory. Project completion report for Bangladesh-India Electrical Grid Interconnection Project,⁶ was submitted on September 2016. The report indicates that PGCB's performance as an executing agency, is rated as satisfactory, noting that PGCB complied with all loan covenants and the project was successful because of strong performance by the government and PGCB even though there were many critical challenges. PGCB was also assessed to be very familiar with the requirements for reporting, financial management and disbursement of ADB.

23. **Strong capacity for planning and budgeting, and well-structured organization.** PGCB currently has adequate technical and planning capabilities to prepare plans and budgets for its projects and a well-established project management setup. Also, a detailed budget preparation exercise and review are carried out periodically and budget variations go through a precise review system for approval.

24. PGCB has a total of 2,413 employees across departments including plan and design, operation and maintenance, human resources and administration, and finance and accounting. Each department is headed by a general manager or Chief Engineer and each department is staffed by experienced staffs with relevant qualifications. Organization chart of PGCB is included in Annex 4.

C. Weakness

25. **Urgent need to strengthen the finance function.** The main top positions of finance, executive director finance, general manager finance, and deputy general manager project finance remain vacant as of February 2018. The executive director finance was previously held by a civil servant without any accounting and/or finance qualification for a long time and the general manager finance position has been vacant for more than a year. The vacancy and unqualified manager for these major positions in the finance department led to a lack of guidance and direction for the division including the absence of a and led to lack of driving force or leadership to strengthen the finance function.

26. Moreover, the level of staffing in the finance department can be further enhanced to meet its current operation. PGCB finance department currently has 29 professional staff and it needs more staff considering PGCB's operation size and future investment projects. PGCB is presently handling 35 projects at various stages based on the investment plan.

27. **Incomplete and non-integrated manual information reporting system.** PGCB does not have a fully integrated computerized management information system (MIS) and accounting system. Currently the financial and accounting function relies only on excel spreadsheets to generate financial information reports. Also, PGCB has limited data storage or backup facilities. These leave the reporting practices susceptible to possible risks of manual errors and data security issues. With the evolution of PGCB, the importance of implementing resource planning (ERP) will increase to integrate the functions of various departments into single application. The implementation of ERP system is urgently needed considering expansion of its activities.

⁶ ADB. [Bangladesh: Bangladesh-India Electrical Grid Interconnection Project](#). One of PGCB's project which was approved in 2010 and completed in 2013.

28. **Foreign exchange risk.** PGCB bears the foreign exchange risk since loans from international development agencies are relend to PGCB from the government of Bangladesh in foreign currency. Hence, the exposure of PGCB to foreign exchange fluctuation is high considering current depreciation of Bangladesh taka currency and growing external foreign borrowing in the future. In addition, the effects of changes in foreign exchange rates have not been recognized as a loss in the statement of profit or loss and other comprehensive income.⁷ PGCB has recorded a foreign exchange loss of Tk1.1 billion and Tk0.7 billion in FY2015–2016 and FY 2017–2018, respectively.

29. **Weak internal audit function.** More staff is required in the audit department. Audit finding shall be directly reported to the audit committee or the chairman on a regular basis. Currently, the internal audit department has only 15 staff, which cannot perform at a high satisfaction to conduct internal audit of all the ongoing projects every year.

30. **Incomplete fixed asset management.** The fixed asset register of PGCB is incomplete and managed manually. PGCB has not been able to complete the creation of a fixed assets register for assets transferred from BPDB and Dhaka Power Distribution Company Limited (DPDC).

31. **Persistent qualified opinion on the audited entity financial statement over the last few years.** The external auditors gave a qualified opinion based on their observations that:

- (i) Proper register for fixed assets and inventories have not been maintained by PGCB;
- (ii) Exchange rate fluctuations have not been recognized in the income statement;
- (iii) Certain disputed amounts shown as account receivable are unlikely to be received; and
- (iv) Actuarial valuation should be performed for provision of gratuity.

D. Personnel

32. **Corporate governance.** The board of directors of PGCB is constituted according to the stipulations of the Bangladesh Securities and Exchange Commission that at least one-fifth of the board of directors should be constituted by independent directors. Currently, PGCB's board consists of 12 directors, including four independent directors. There are five committees of the board: (i) audit committee, (ii) administrative affairs committee, (iii) corporate governance committee, (iv) legal affairs committee, and (v) procurement committee.

33. PGCB produces a corporate governance report, which is published in its annual report. The corporate governance report is to be certified by a practicing-chartered accountant or a company secretary. The report provides a level of confidence that the corporate governance system in PGCB is functioning.

34. As part of its commitments as a public-sector undertaking, PGCB, has key performance targets annually set by the Power Division, Government of Bangladesh. Assessment of PGCB is

⁷ PGCB has a qualified opinion on provisions of foreign exchange income or loss for FY2016–2017. As per para 28 of Bangladesh Accounting Standard, the foreign exchange loss, which amounts to Tk739 million, should be recognized as a loss in the income statement. However, this exchange loss is capitalized with the relevant assets in line with Companies Act 1994.

done on various parameters including technical parameters like transmission loss, transmission line availability, substation availability, system power factor, and financial parameters like current ratio, quick ratio, debt service coverage ratio, etc. The various parameters are given weights which total 100 and the company's performance is evaluated against this benchmark.

35. **Overall personnel.** PGCB has a diversified pool of human resources, which is composed of personnel with high academic background. PGCB's personnel are well qualified and experienced in their area of work. PGCB's organizational structure is based on functional responsibilities of the personnel. PGCB is headed by a non-executive chairman with the operations headed by a managing director. The managing director is assisted by four executive directors — in the areas of finance, human resource management, planning and development, and operations and maintenance. The managing director is also supported by the company secretary and deputy general manager (audit). These senior management personnel are supported by a number of qualified executives in the execution of their functions. PGCB had about 2,413 employees as of June 30, 2017. All employees are employed on a contract basis for an initial period of 5 years, after which the contract is renewed every 5 years, if found appropriate.

36. **Training.** PGCB's training program is a well-organized and has systematic series of activities designed to enhance an individual's work-related knowledge. PGCB has an overall company policy to support staff training and it provides specific targets or staff entitlements for training. In FY2016–2017, the training target hours were 169,260 hours and total achieved hours totaled to 171,751 hours. For accounting and finance staff, training is provided on an as-required basis.

37. PGCB has conducted training programs on its own arrangement as well as in joint ventures with local and foreign organizations. In order to create the basis for developing future skilled officials for PGCB, continuous long-term departmental foundation training is being conducted jointly in light of technical, management and leadership.

38. **Finance and accounting function.** The finance department is headed by the executive director (finance). The executive director reports to the managing director and supervises the general manager (finance). As of February 2018, the top positions of finance, i.e., executive director finance, general manager finance and deputy general manager project finance are vacant. The executive director finance was previously held by a civil servant without any accounting/finance qualification for a long time and the general manager finance position has been vacant for more than a year. The vacancy of these key positions as well as lack of qualifications by former executive director (finance) and led to a lack of guidance and direction for the division, including the absence of a driving force or leadership to strengthen the finance function in PGCB.

39. Moreover, the level of staffing in the finance department is not adequate to meet its current operation. PGCB finance department currently has 29 professional staff and it is not adequate considering PGCB's operation size and future investment projects. In addition, there is a need to increase staff and strengthen finance function to deal with the increasing activity of Bangladesh Electricity Regulatory Commission (BERC) such as revenue requirement filing and regulatory affairs management and dealing with growing external debt from the upcoming projects. PGCB is presently handling 35 projects at various stages based on the investment plan as listed in the Annex 3.

40. The department is responsible for following functions: (i) policy formulation in respect of accounting and finance, (ii) arrangement and management of funds and finance management

information system, (iii) budgeting, (iv) employee salary processing, (v) tax compliance, (vi) preparation of corporate accounts, (vii) tariff and regulatory affairs, and (viii) information technology initiatives, etc.

E. Accounting Policies and Procedures

41. **Accounting principle.** PGCB's accounts are maintained and financial statements are prepared on an accrual basis in accordance with Bangladesh Financial Reporting Standards and Bangladesh Accounting Standard (BAS), the Companies Act 1994 and other applicable laws and regulations. The accounts are maintained in accordance with the standards issued by the Institute of Chartered Accountants of Bangladesh, which are in line with International Accounting Standards. Specific accounting policies based on the accounting standards issued by Institute of Chartered Accountants of Bangladesh (ICAB) have been adopted.

42. **Qualified opinion on the audited entity financial statement.** PGCB's financial statements are prepared in accordance with Bangladesh Accounting Standards which are largely consistent with international accounting standards. However, the auditor issued a qualified opinion last year, meaning that the financial statements are fairly presented with some exceptions covering the specified areas. The auditor noted six matters on accounting issues of PGCB for FY2016–2017 as cited below;

- (i) Proper register for fixed assets and inventories not maintained by PGCB. No register has been found for property, plant, and equipment (PPE), which is needed to be implemented by PGCB incorporating detailed information. Some items are of PPE have been transferred from BPDB and DPDC without conducting physical verification and valuation thereon.
- (ii) Improper inventory management. The auditor found unrecorded inventories of Tk93 million, which indicates incomplete reporting in the financial statements. In addition, the inventory register was not maintained properly.
- (iii) Certain disputed amounts shown as account receivables are unlikely to be received. Certain amount in the account receivables are carried forward from FY2015, and it is unlikely that the amount will be recovered in full.
- (iv) Exchange rate fluctuations were not recognized in the income statement. PGCB has reported an amount of Tk739 million as addition to PPE resulting from exchange rate fluctuation related with the outstanding principal amount of loan even though effects of changes in foreign exchange rates should be recognized as a loss in the statement of profit or loss and other comprehensive income per BAS. The exchange loss is capitalized with the relevant assets in line with Companies Act 1994.
- (v) Unconfirmed amount from BPDB is recorded.
- (vi) Actuarial valuation should be performed for provision of gratuity. PGCB carries an unfunded gratuity scheme for its employees and provision was made as per Company's gratuity policy for which no actuarial valuation was performed which is required to be done as per BAS.

43. **Policies and procedures.** PGCB's accounting system allows for the proper recording of transactions, and the allocation of all relevant expenditures as required by the respective components, disbursement categories and sources of funds. The present Chart of Accounts is adequate to properly account for and report on PGCB's program. PGCB has prepared a number of manuals for the guidance of its staff with a view to enable them to perform their duties efficiently.

Some of these manuals include accounts manual, manual for delegation of administrative and financial authority, procedure for financial affairs, etc.

44. PGCB's finance department disburses, records, and reports all transactions incurred by PGCB. There are well set out guidelines outlining authorization to execute a transaction and its recording. Clear lines of functional responsibilities are present in the system to ensure that the functions mentioned are carried out by different persons.

45. **Cash and bank.** PGCB maintains record of receipts, payments, and cashbooks. The receipts start from collection, timely deposit, and coding thereof are properly controlled. The cash balance and cash book are periodically verified to ensure control and accuracy. The bank accounts are reconciled systematically after the closing of each month. The outstanding items of bank reconciliation are reviewed, and appropriate action is taken within reasonable time, with final reconciliation at the end of the year. The execution of a transaction and its subsequent recordings are carried out as per delegation of powers defined and approved by the Management of PGCB. All accounting documents are duly signed and authorized by delegated personnel.

46. **Safeguard over assets.** PGCB presently maintains its fixed assets recording system manually. 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 creation of fixed assets register for assets transferred from other organizations like BPDB (the takeover was completed as early as 2002), thus, the fixed asset register of PGCB is incomplete. This has been repeatedly pointed out by the external auditor. PGCB is undertaking the required studies to complete the fixed asset register including with support under an EU technical assistance grant for ADB-funded Bangladesh Power System Expansion and Efficiency Improvement Investment Program.⁸

47. PGCB does not insure its operating assets after completion due to huge amount of insurance expenses, which could be up to Tk500 million per year for transmission assets across the country. However, project assets which are under implementation do have insurance cover taken by the Contractor during the construction period.

F. Internal and External Audit

48. **Internal audit.** PGCB has its in-house internal audit unit headed by a deputy general manager reporting to the managing director. This unit which has nine staff, 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). At the beginning of FY2016–2017, there had been 131 internal audit objections pending. 261 internal audit objections raised; and 233 internal audit objections resolved during the FY2016–2017.

49. The scope of internal audit covers all major activities of the entity including externally funded projects. All major purchases and payments, projects and corporate actions are subject to internal audit procedures. The scope of internal audit includes: (i) verification of invoice/bill, books of accounts, various registers, bank reconciliation statements; (ii) compliance with internal rules and regulation such as delegation, service rules, tender documents/contracts; (iii) compliance with relevant laws and regulations such as income tax and VAT laws and subsequent amendments; (iv) compliance with donor agencies disbursement procedures;

⁸ADB. [Bangladesh: Power System Expansion and Efficiency Improvement Investment Program.](#)

(v) compliance with accounting standard for presentation of financial statements; (vi) verification of budgetary control mechanism; (vii) verification of timely repayments of interest during the construction; and (viii) physical verification of assets and stores etc.

50. The internal audit department reports directly to the managing director but does not reports to the chairman or the audit committee. This provides potential room for the management to hide malpractices happening within the organization from the board of directors.

51. **External audit for entity level.** PGCB's external audit is conducted by a firm of chartered accountants and reports are submitted every year to the PGCB management and stakeholders within six months after the end of the fiscal year. PGCB is also subject to annual statutory audits of the Office of the Comptroller and Auditor General (CAG)⁹ of Bangladesh for government-funded projects and entity level of operations. Audit issues are brought to the notice of management for follow-up and the necessary actions are taken to settle audit observations.

52. **External audit for project level.** Foreign-aided projects are annually audited by the Foreign-Aided Project Audit Directorate under the CAG (footnote 9). This unit has expertise on loan procedures and loan negotiation documents. The unit reviews compliance with actual procedures based on the approved loan agreements, including tax payments, and disbursements.

G. Reporting and Monitoring

53. PGCB has periodically prepared the following management information reports: (i) quarterly unaudited financial reports within 45 days from the end of each quarter to fulfill requirements of the Securities Exchange Commission of Bangladesh, (ii) annual audited financial statements are prepared and published 90 days after the end of each financial year.

54. All projects are under the overall supervision of PGCB head office. Reports are prepared to provide details of physical progress and financial expenditures, by comparing actual results with the project's budgets. These reports are reviewed monthly by PGCB's senior management consisting of the managing director and the executive directors, and all officers of the level of chief engineer and/or general manager.

H. Information System

55. Financial accounting records are currently being maintained on Microsoft Excel and are subject to manual interventions. PGCB does not have a fully integrated computerized management information system (MIS) and accounting system. Significant manual involvement is required for financial reporting. Also, the accounting information flow between the project/operations offices and the head office (Trial Balance, Bank reconciliation) is manually done. Considering the size of PGCB and its future investment plans, it is essential to have a fully integrated financial MIS and accounting system in place to capitalize on the benefits of technology. With the expansion of PGCB, the importance of ERP implementation will increase to integrate the functions of various departments into single application. The implementation of ERP

⁹ The Office of the Comptroller and Auditor General of Bangladesh (CAG) is the supreme audit institution of Bangladesh, responsible for maintaining accounts of the republic and audits all receipts and expenditure of the Government of Bangladesh, including those of bodies and authorities substantially financed by the government. The reports of the CAG are discussed by the Public Accounts Committee, which is a standing committee in the Parliament of Bangladesh. typically audit the projects funded by the Government of Bangladesh. Foreign-Aided Project Audit Directorate, on behalf of the CAG, audit the aided projects and certify their accounts and issue reports to the donor agencies, besides the parliament and audited entities

system is urgently needed for its information system considering current practice and future expansion plan.

I. Budgeting and Funds Flow Mechanism

56. **Annual Budget.** Annual budget for the next year is prepared by April prior to the fiscal year end of 30 June and includes physical and financial targets for all significant activities in sufficient detail to provide a meaningful tool with which to monitor subsequent performance. These are also required by the government for allocation of government capital expenditure and form part of the Annual Development Programme. Actual expenditure is compared with budgeted targets and significant variations are reviewed and corrective actions are taken.

57. Each line department reviews the budget and is approved by the Board after a series of budget meetings. The timeline of the budget preparation process is (i) January: call for budgets; (ii) February: budget submission; (iii) March or April: budget meeting headed by executive director and approval by the Board of Directors.

58. **Budget control.** For project planning and budgets, a development project proposal (DPP) is prepared for every project and approved by the board of the PGCB followed by the Planning Commission. The board of directors of PGCB approve the revenue budget and development budgets. The Planning Commission approves the Annual Development Programme and DPP. Budget control is undertaken on a regular basis in which actual revenue and expenditures are compared to planned amount. Financial reports for budget control are produced to compare actual expenditures with budgeted allocations. Also, there is a regular management review of budget utilization with physical progress. The expenditure with regards to the project are planned and executed in accordance with DPP and any variation requires approval. Variations from the budget within 10% is required prior approval from Ministry of Power, Energy and Mineral Resources and variation beyond 10% is required prior approval from the Planning Commission.

59. **Budget variation.** 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 executive director (finance) and approved by company's board of directors. Budget variance reports are prepared every month and a progress review meeting is held every month. All budget variances should be clarified during this meeting by the relevant divisional head. If significant variances occur between quarterly financial performance and annual financial statements, the management should explain about the variance on their annual report.

J. Risk Description and Rating

60. The FMA reviewed two types of risks (i) inherent risks (risks outside the direct control of the PGCB financial management), and (ii) control risks (risk concerning the internal functioning and control of the PGCB's finance and accounting section). The FMA identified the following key risks and its mitigation measures in Table 1. Based on the assessment, it is concluded that the overall project financial management pre-mitigation risk is substantial.

Table 1. Risk Management Assessment

Risk Type	Risk Rating	Risk Description	Mitigation Measures
A. Inherent Risks			
1. Country specific risks	Substantial	Overall public financial management risk: aggregate budget credibility deteriorated, and external scrutiny and audit still remain in the weak area in the PFM.	Dialogue needed between ADB, Government of Bangladesh and ICAB aimed at (i) capacity building of CAG auditors, (ii) strengthening of statutory/regulatory requirements to ensure that audits look beyond transactions and focus on the systems of the audited entities.
	Moderate	Financing risk: delays in releasing counterpart funds for the project	The disbursements of counterpart fund are subject to approval of DPP. The DPP is reviewed and cleared by the Ministry of Power, Energy and Mineral Resources and Planning Commission, respectively with an ability to provide counterpart funds. Since the project addresses the key need for providing reliable power supply in Bangladesh, the government is expected to make adequate provision for counterpart funds in its budget.
2. Entity specific risks	Substantial	Financial risk: The current wheeling charge is insufficient to recover costs undermining financial sustainability of PGCB.	Regular periodic tariff filing by PGCB to ensure tariffs cover costs based on the BERC's regulation, which is effective from June 2016.
	Substantial	Foreign exchange risk: PGCB will expose to foreign exchange risk. Currently, US dollars continue to appreciate against Bangladesh currency, Taka.	Foreign exchange variation should be recovered through adjustment of wheeling charge based on the current BERC's regulation. Regular periodic tariff filing by PGCB to ensure tariffs cover costs including foreign exchange loss with the support from consultants under the loan Bangladesh Power System Enhancement and Efficiency Improvement Project ^a
Overall Inherent Risk	Substantial		
B. Control Risk			

Risk Type	Risk Rating	Risk Description	Mitigation Measures
1. Executing agency	Low	Compliance risk: PGCB follows structured planning and technical assessment processes. It also has significant experience in implementing externally assisted projects and is familiar with ADB's financial management and disbursement requirements	Not required.
2. Funds flow	Low	Financing risk: the disbursements of counterpart fund are subject to approval of DPP. Access to funds from government follow specified procedures, and requires prior approvals, which creates delays.	PGCB assured that the DPP will be reviewed and cleared before loan negotiation from the Ministries of Power, Energy and Mineral Resources and the Planning Commission, respectively.
3. Staffing	High	Urgent need to strengthen the finance function; the main top positions of finance, executive director finance, general manager finance and deputy general manager project finance are still vacant and the level of staffing in finance department is not adequate to meet its current operation. Considering the future growing development projects, it is urgently needed to improve the finance. The vacancies of top positions of finance may lead to lack of guidance and weak controls on financial transactions.	<p>PGCB has prepared a recruitment plan in finance department based on the new approved structure for the next 10 years; PGCB finance department currently has 29 professional staffs and will have an additional 34 professional staffs. (total staff number 63).</p> <p>The executive director finance, general manager finance and deputy general manager project finance positions should be filled by qualified chartered accountant or cost and management accountant with proper accounting/finance background such as chartered accountant or cost and management accountant (ICMAB and/or ICAB)</p> <p>The project management manpower should include at least one manager accounts (senior level of accounts) for efficient financial management in project level.</p>
4. Accounting Policies and Procedures	Substantial	PGCB has defined accounting policies and procedures in place which are in line with international accounting standards. However, over the last years, the external auditors issued a qualified opinion and highlighted persisting issues with regards	PGCB should resolve audit issues within a certain time frame. A detailed time bound action plan to be developed to address the major audit observations and assign the work to the departments concerned.

Risk Type	Risk Rating	Risk Description	Mitigation Measures
		to fixed asset management, foreign exchange gain/loss recognition and account receivables.	
5. Information System	Substantial	Incomplete information reporting systems: Currently, accounting, financing and fixed asset recording are done manually using Microsoft Excel spreadsheets.	PGCB will consider developing an ERP implementation plan based on current practice in Bangladesh.
6. Internal Audit	Substantial	<p>Improving the internal audit function for transparent financial management.</p> <p>Due to insufficient staffs in the audit department, it is unable to conduct internal audit of all the ongoing projects every year. The Internal Audit Division comprises of only 10 internal auditors and are responsible for audit of 78 offices of PGCB.</p> <p>The deputy general manager (audit), the head of the IA department does not directly report to the chairman nor audit committee and report to the managing director, which can cause interest of conflicts.</p>	<p>Support to develop internal audit capacity in PGCB with the support from consultants under the loan Bangladesh Power System Enhancement and Efficiency Improvement Project^a</p> <p>PGCB has prepared a recruitment plan in internal audit department based on the new approved structure for the next 10 years; PGCB's audit department currently has 10 professional staffs and will have an additional 26 professional staffs. (total staff number 36).</p> <p>The internal audit findings report to the chairman or audit committee in regular basis through managing director.</p>
7. External Audit	Low	PGCB has appointed local chartered accountancy firm for audit. Annual reports are normally issued regularly within timelines.	Not required.
8. Reporting and Monitoring	Low	Comprehensive monthly and quarterly financial management reporting systems are in place with detailed guidelines issued by the finance department of PGCB	Not required.
9. Land acquisition and relocation.	High	Resettlement plan needs to be updated before contract award of each substation including a detailed measurement survey result, and compensation should be given to the affected	As the project is resettlement category A, PGCB will engage an implementing NGO and an external monitor. The implementing NGO will provide support to PMU and undertake capacity building

Risk Type	Risk Rating	Risk Description	Mitigation Measures
		people before starting of civil work.	activities deemed necessary. The implementation of the resettlement plan will be monitored by PGCB and supervised by the external monitoring expert.
Overall Control Risk	Substantial		
Overall Combined Risk	Substantial		

ADB = Asian Development Bank, BERC = Bangladesh Energy Regulatory Commission, CAG = comptroller auditor general, DPP = development project proposal, ERP= enterprise resource planning, IA = internal audit, ICAB = Institute of Chartered Accountants Bangladesh, ICMA= Institute of Cost and Management Accountant of Bangladesh, NGO = nongovernment organization, PFM = public financial management, PGCB= Power Grid Company of Bangladesh Limited.

^a ADB. 2017. *Report and Recommendation of the President to the Board of Directors: Proposed Loans and Administration of Grant to the People's Republic of Bangladesh for the Bangladesh Power System Enhancement and Efficiency Improvement Project*. Manila.

Source: ADB.

V. PROPOSED ACTION PLAN

61. PGCB and ADB have agreed an action plan to address the following issues that the FMA identified. The financial management action plan is provided in Table 2.

Table 2: Risks and Mitigation Plan

Risk Description	Mitigation Actions	Responsibility	Timeframe
Urgent need to strengthen the finance function; the main top positions of finance, executive director finance, general manager finance, and deputy general manager project finance are still vacant and the level of staffing in finance department is not adequate to meet its current operation. Considering the future growing development projects, it is urgently needed to improve the finance. The vacancies of top positions of finance may lead to lack of guidance and weaken controls on financial transactions.	PGCB has prepared a recruitment plan in finance department based on the new approved structure for the next 10 years; PGCB finance department currently has 29 professional staffs and will have an additional 34 professional staffs (total staff number 63).	PGCB	Considering the future growing development projects, the proposed additional staffs of 34 should be recruited by 2023.
	The executive director finance, general manager finance, and deputy general manager project finance positions should be filled by qualified chartered accountant or cost and management accountant with proper accounting/finance background such as chartered accountant or cost and management accountant (ICMAB and/or ICAB)	PGCB	The recruitment of qualified executive director of finance, general manager of finance and deputy general manager of project finance shall have been advertised and the submission of applications shall have been closed by June 2019
	The project management manpower should include at least one Manager accounts (senior level of accounts) for efficient financial management in project level.	PGCB	PGCB should include at least one manager accounts for ADB funded projects before final approval of development project proposal.
Incomplete information reporting systems: currently, accounting, financing and fixed asset recording are done manually using excel spreadsheets.	PGCB will consider developing an ERP implementation plan based on current practice in Bangladesh.	PGCB	Submission of detailed action plan of the deployment of ERP system including timeline and its work scope (financing, accounting, inventory, procurement, and human resource) by December 2019.
Foreign exchange risk; Government of Bangladesh relends the foreign loan for the development projects to PGCB in foreign loan. PGCB is exposed to foreign exchange risk. Considering the current depreciation of Bangladesh currency and future expected	PGCB can recover foreign exchange loss occurring to the foreign loan according to the transmission tariff regulation, which is effective from June 2016.	PGCB	Regular periodic tariff filing by PGCB to ensure tariffs cover costs including foreign exchange loss with the support from consultants under the loan Bangladesh Power System Enhancement and Efficiency Improvement Project ^a

Risk Description	Mitigation Actions	Responsibility	Timeframe
growing external borrowing, PGCB should prepare financial mechanism to reduce the risk.			
<p>Improving the internal audit function for transparent financial management.</p> <p>Due to insufficient staffs in the audit department, it is unable to conduct internal audit of all the ongoing projects every year. The Internal Audit Division comprises of only 10 Internal Auditors and are responsible for audit of 78 offices of PGCB.</p> <p>The deputy general manager (audit), the head of the IA department does not directly report to the chairman nor audit committee and report to the managing director, which can cause interest of conflicts.</p>	<p>Support to develop internal audit capacity in PGCB with the support from consultants under the loan Bangladesh Power System Enhancement and Efficiency Improvement Project^a</p> <p>PGCB has prepared a recruitment plan in internal audit department based on the new approved structure for the next 10 years; PGCB's audit department currently has 10 professional staffs and will have an additional 26 professional staffs. (total staff number 36).</p> <p>The internal audit findings report to the chairman or audit committee in regular basis through managing director</p>	<p>PGCB</p> <p>PGCB</p> <p>PGCB</p>	<p>To be completed by end 2018.</p> <p>Considering the future growing development projects, the proposed additional staffs of 26 should be recruited by 2023.</p> <p>Work to start in June 2018</p>
Incomplete fixed asset management and proper register for fixed assets and inventories not maintained	Proper fixed asset management system should be considered under the ERP implementation plan	PGCB	Submission of detailed action plan of the deployment of ERP system including timeline and its work scope (financing, accounting, inventory, procurement and human resource) by December 2019.
Unresolved external audit observations	A plan to be developed to address the major audit observations and assign the work to the departments concerned.	PGCB	Develop a detailed time bound action plan to address all materials external audit qualifications raised in the 2016-2017 audited financial statement reports by December 2019.

ADB = Asian Development Bank, ERP = enterprise resource planning, IA = internal audit, ICAB=Institute of Chartered Accountants of Bangladesh, ICMAB = Institute of Cost and Management Accountant of Bangladesh, PGCB = Power Grid Company of Bangladesh Limited.

^a ADB. 2017. *Report and Recommendation of the President to the Board of Directors: Proposed Loans and Administration of Grant to the People's Republic of Bangladesh for the Bangladesh Power System Enhancement and Efficiency Improvement Project*. Manila.

Source: Power Grid Company of Bangladesh.

PEFA Scores in 2015 using 2016 framework

PFM Performance Indicator	2015 Rating
Pillar I. Budget reliability	
PI-1. Aggregate expenditure outturn	B
PI-2. Expenditure composition outturn	D+
PI-3. Revenue outturn	C
Pillar II. Transparency of public finances	
PI-4. Budget classification	C
PI-5. Budget documentation	B
PI-6. Central government operations outside financial reports	D
PI-7. Transfers to subnational governments	D+
PI-8. Performance information for service delivery	D+
PI-9. Public access to fiscal information	D
Pillar III. Management of Assets and Liabilities	
PI-10. Fiscal risk reporting	D+
PI-11. Public investment management	C
PI-12. Public asset management	D+
PI-13. Debt management	B
Pillar IV. Policy-based fiscal strategy and budgeting	
PI-14. Macroeconomic and fiscal forecasting	D+
PI-15. Fiscal strategy	B
PI-16. Medium-term Perspective in expenditure Budgeting	C+
PI-17. Budget preparation process	B
PI-18. Legislative scrutiny of budgets	C+
Pillar V. Predictability and Control in Budget Execution	
PI-19. Revenue administration	D+
PI-20. Accounting for revenue	C+
PI-21. Predictability of in-year resource allocation	B+
PI-22. Expenditure arrears	D
PI-23. Payroll controls	C+
PI-24. Procurement management	B
PI-25. Internal controls on non-salary expenditure	C
PI-26. Internal audit	D
Pillar VI. Accounting and Reporting	
PI-27. Financial data integrity	C+
PI-28. In-year budget reports	C+
PI-29. Annual financial reports	D+
Pillar VII. External Scrutiny and Audit	
PI-30. External audit	D+
PI-31. Legislative scrutiny of audit reports	B

PEFA = public expenditure and financial assessment.

Note: A rating of "A" corresponds to international-level practice; "B" to good to medium performance; "C" to medium to poor performance; and "D" indicates process or procedure does not exist at all or it is not functioning effectively. Source: Government of Bangladesh. 2016. *Public Financial Management Performance Report and Public Expenditure and Financial Accountability*. Dhaka.

Comparison of PEFA Scores of 2010 and 2015 Using 2011 Framework

PFM Performance Indicator	2010	2015
A. PFM-OUT-TURNS: (1) Credibility of the Budget		
PI-1. Aggregate expenditure outturn compared to original approved budget	B	C
PI-2. Composition of expenditure outturn compared to original approved budget	D+	D+
PI-3. Aggregate revenue outturn compared to original approved budget	B	D
PI-4. Stock and monitoring of expenditure payment arrears	n.a	n.a
B. KEY CROSS-CUTTING ISSUES: Comprehensiveness and Transparency		
PI-5. Classification of the budget	B	C
PI-6. Comprehensiveness of information included in budget documentation	B	A
PI-7. Extent of unreported government operations	B	n.a
PI-8. Transparency of intergovernmental fiscal relations	D	D+
PI-9. Oversight of aggregate fiscal risk from other public sector entities.	D+	D+
PI-10. Public access to key fiscal information	B	B
C. BUDGET CYCLE		
C (i) Policy-Based Budgeting		
PI-11. PI-11 Orderliness and participation in the annual budget process	B	A
PI-12. Multi-year perspective in fiscal planning, expenditure policy and budgeting	B	B+
C(ii) Predictability and Control in Budget Execution		
PI-13. Transparency of taxpayer obligations and liabilities	C	C
PI-14. Effectiveness of measures for taxpayer registration and tax assessment	C	B
PI-15. Effectiveness in collection of tax payments	D	n.a
PI-16. Predictability in the availability of funds for commitment of expenditures	C+	B+
PI-17. Recording and management of cash balances, debt and guarantees	C+	C+
PI-18. Effectiveness of payroll controls	D+	C+
PI-19. Competition, value for money and controls in procurement	B	B
PI-20. Effectiveness of internal controls for non-salary expenditure	D+	D+
PI-21. Effectiveness of internal audit	D	D
C(iii) Accounting, Recording and Reporting		
PI-22. Timeliness and regularity of accounts reconciliation	B	D
PI-23. Availability of information on resources received by service delivery units	D	A
PI-24. Quality and timeliness of in-year budget reports	C+	C+
PI-25. Quality and timeliness of annual financial statements	D+	D+
C(iv) External Scrutiny and Audit		
PI-26. Scope, nature and follow-up of external audit	D+	D+
PI-27. Legislative scrutiny of the annual budget law	D+	D+
PI-28. Legislative scrutiny of external audit reports	D+	D+

n.a = not available, PEFA = public expenditure and financial assessment, PFM = public financial management.

Note: A rating of "A" corresponds to international-level practice; "B" to good to medium performance; "C" to medium to poor performance; and "D" indicates process or procedure does not exist at all or it is not functioning effectively. Source: Government of Bangladesh. 2016. *Public Financial Management Performance Report and Public Expenditure and Financial Accountability*. Dhaka.

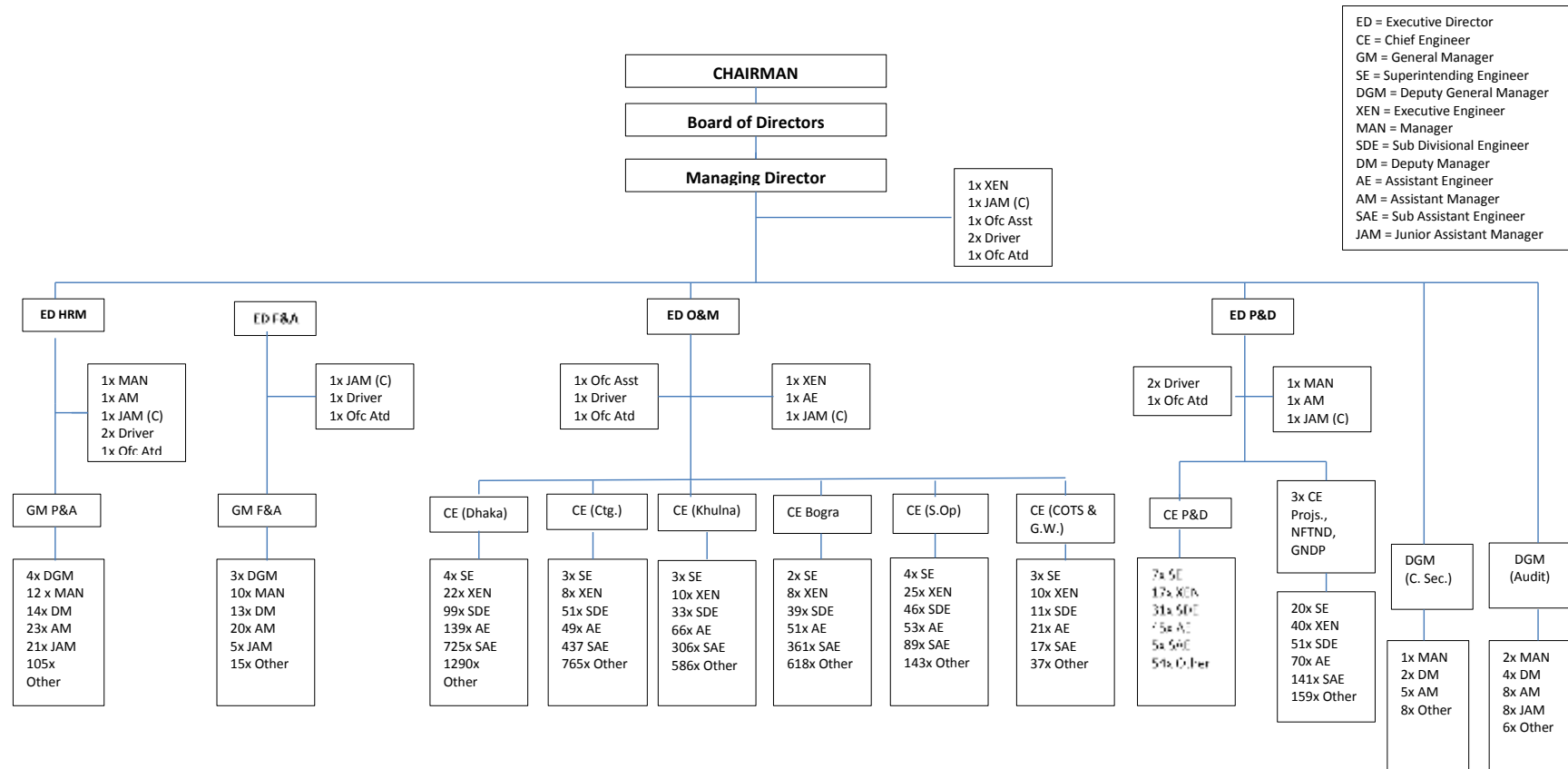
PGCB's Expansion Plan

	Project Name	Cost (\$ million)		Completion Year	Financing
		Local	Foreign		
1	National Power Transmission Network Development Project	134.62	168.7	June 2019	JICA
2	132 kV Grid Network Development Project in Eastern Region	36.00	85.00	June 2018	ADB
3	400/230/132 Grid Network Development project	117.57	311.56	June 2019	IDB and ADB
4	Enhancement of Capacity of Grid Substations and Transmission Line (Phase-I)	43	115	June 2018	World Bank
5	Ashuganj-Bhulta 400 kV Transmission line	30	89	June 2018	Government of Bangladesh and PGCB
6	Capacity Upgradation(500MW) of Existing Bheramara HVDC Station Project	74.65	109.72	June 2018	ADB
7	Aminbazar-Maowa - Mongla 400 kV Transmission line	89	85.22	June 2020	ADB
8	Western Grid Network Development Project	65	77	June 2018	KfW
9	Dhaka-Chittagong Main Power Grid Strengthening Project	232.3	357.1	December 2020	JICA
10	Matarbari Ultra Super Critical Coal-Fired Power Project (II) (PGCB Part: "Matarbari-Madunaghat 400 kV Transmission Line")	39.2	101.6	December 2020	JICA
11	Patuakhali – Gopalganj 400 kV Line and Gopalganj 400 kV Super Grid Sub-Station Project	179	158	December 2019	ADB and GoB
12	Energy Efficiency in Grid Based Power Supply Project	109	199	June 2021	KfW
13	Power Grid Network Strengthening Project under PGCB	503	1221	June 2021	Expected from EXIM Bank, China (G-G) World Bank
14	Bangladesh Power System Reliability and Efficiency Improvement Project	27	33	June 2020	
15	Mongla-Khulna (S) 230 kV Transmission Line Project	9.28	8.64	December 2018	PGCB Own Fund
16	Construction of Patuakhali-Payra 230 kV Transmission Line	5.17	37.66	June 2019	GoB
17	Construction of Bakerganj-Barguna Transmission Line and Barguna 132/33 kV Substation	11	7	December 2019	GoB
18	Bheramara(Bangladesh)-Baharampur(India) Second 400kV Interconnection Line (Bangladesh Part)	11	13	December 2018	GoB
19	Development of Transmission Infrastructure at Mirsarai Economic Zone for Reliable Power Supply	21	20	June 2019	GoB
20	Baropukuria-Bogra-Kaliakoir 400 kV Transmission Line Project (NG-5)	209	211	June 2022	2nd Line of Credit (India)
21	Replacement of Ashuganj Old 132 kV AIS Substation by New 132 kV GIS Substation Project	14	30	December 2020	GoB
22	Infrastructure Development for Power Evacuation facilities of Rooppur Nuclear Power Plant	358	1046	December 2022	Expected from 3rd Credit Loan (India)
23	Enhancement and Strengthening of Power Network in Eastern Region	267	451	December 2021	Expected from World Bank
24	500 MW HVDC Back to Back Station at Comilla North (Bangladesh) for Transfer of Power through Surjamaninagar(Tripura, India) - Comilla North (Bangladesh)	43	130	March 2021	Expected from ADB

	Project Name	Cost (\$ million)		Completion Year	Financing
		Local	Foreign		
25	Southwest Grid Network Expansion Project (Phase-1)	124	304	June 2022	Expected from ADB
26	Expansion and Strengthening of Power System Network Under DPDC Area	98	850	June 2022	Expected from EXIM Bank, China (G-G)
27	Madunaghat - Moheskhali 765kV Transmission line	149	194	June 2023	Proposed for EDCF, Korea
28	Southwest Grid Network Expansion Project (Phase-2)	80	175	June 2023	Expected from ADB
29	Expansion and Strengthening of Power System Network Under Chittagong Area	85	199	June 2022	Expected from AIIB
30	Banshkhali-Madunaghat 400kV Transmission Line Project	29	69	June 2021	Proposed for AIIB/GoB
31	Expansion and Strengthening of Power System Network in DESCO and its Adjacent Area (Phase-1)	174	356	December 2023	Proposed for ADB and KfW
32	Transmission Network Construction Project for Bangabandhu Hi-Tech City and Economic Zones in Cox's Bazar Area	85	118	December 2020	Expected from GoB
33	Construction of Payra-Gopalganj-Aminbazar 2nd 400kV Transmission System	138	443	December 2020	Yet to be funded
34	Bornagar-Parbitipur-Katihar 765 kV Bangladesh-India Grid Interconnection Project (Bangladesh Part)	177	413	December 2025	Proposed for 3rd New Credit Loan (India)
35	Madunaghat-Bhulta 765 kV Transmission Line Project	293	412	December 2024	Yet to be funded

ADB = Asian Development Bank, AIIB = Asian Infrastructure Investment Bank, AIS = air-insulated switchgear, DESCO = Dhaka Electric Supply Company Limited, DPDC = Dhaka Power Distribution Company Limited, GIS = gas-insulated switchgear, GOB = Government of Bangladesh, HVDC = high-voltage, direct current, IDB = Islamic Development Bank, JICA = Japan International Cooperation Agency, kV = kilovolt, PGCB = Power Grid Company of Bangladesh, EDCF = Economic Development Cooperation Fund
Source: PGCB.

Organization Chart of Corporate Office of PGCB (As of January 2018)



Source: PGCB.