

## FINANCIAL MANAGEMENT ASSESSMENT

### I. INTRODUCTION

1. This financial management assessment (FMA) of Open Joint Stock Holding Company Barki Tojik, the project executing agency for the Wholesale Metering and Transmission Reinforcement Project (the project), was based on the report prepared by the project preparatory technical assistance (TA) consultant who has reviewed and updated previous FMAs in order to avoid duplicating diagnostic work.<sup>1</sup> The FMA for this project was prepared in accordance with ADB's "Financial Management and Analysis of Projects" (2005) and "Financial Due Diligence – a Methodology Note" (January 2009). The update for the project will also focus on work done earlier, however it focuses on Barki Tojik's efforts to overcome previously identified issues to demonstrate any improvements.

2. In addition, the Barki Tojik's financial statements for the fiscal year (FY) 2013 were reviewed and included in the update. These statements (i.e. Statement of Financial Position as per 01.01.2014 (Balance Sheet); Statement of Cash Flows for fiscal year 2013; and Profit and loss for fiscal year 2013) were unaudited and provisional when this FMA was prepared. This update also incorporates Barki Tojik's latest financial projections for FY 2014.

3. The project preparatory TA consultant used the FMA questionnaire to Barki Tojik for updating FMA. It addressed the progress of system improvements for corporate governance, accounting, financial reporting, auditing, internal controls, and fund flow pertaining to the project. The questionnaire is attached as Annex.

### II. UPDATE OF FINANCIAL MANAGEMENT ASSESSMENT OF BARKI TOJIK

#### A. Key Developments since the Previous FMA in 2013

4. Based on comments and suggestions outlined in the FMA conducted in 2013, Barki Tojik has reported some improvements and changes.

5. The efforts to improve the overall financial management capacity are ongoing, and since 2011 Barki Tojik's transition to international financial reporting standards (IFRS) for its accounting standard is continuing. Barki Tojik recognizes the importance of implementing IFRS and the need to improve its overall financial management capacity.

6. There has been progress with the valuation of inventory since 2012. In accordance with the Energy Company Restructuring Plan<sup>2</sup>, the assessment of Barki Tojik's fixed assets and inventories (commodity stocks) are carried out by LLC 'BDO Consulting' in cooperation with 'Premier Consulting'. The activities are ongoing.

7. There has also been progress with the valuation of account receivables and payables. In July 2014, the Grant Thornton Consortium, Armenia jointly with LLC Grant Thornton, Tajikistan, has initiated the valuation of Barki Tojik's receivables and payables. The process should be finalized by the end of 2014.

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<sup>1</sup> ADB. 2013. *Report and Recommendation of the President to the Board of Directors: Proposed Grant to the Republic of Tajikistan for the Golovnaya 240 Megawatt Hydropower Plant Rehabilitation Project*. Manila.

<sup>2</sup> An individual restructuring plan for "Barki Tojik" had been approved through Government Resolution No. 431 of 30 August 2011 and was being implemented. (Source: <https://docsonline.wto.org>)

8. In 2012 the electricity supply to Afghanistan was 593.8 million kWh including 470.5 million kWh to Kunduz. In 2013 it increased to 937.1 million kWh including 791.1 million to Kunduz. It is expected that in 2014 the supply to Afghanistan will increase to about 1 billion kWh.

9. The investment plan for the development of the electricity sector is currently in progress. The Government of Tajikistan has attracted a grant/loan from the European Bank for Reconstruction and Development (\$ 75.7million) for 2014 a portion of which will be on-lent to Barki Tojik.

## **B. Accounting Standards in Tajikistan**

10. Tajikistan has adopted the IFRS as the national accounting standards for public entities. According to the President's Decree # 702 of 25 March 2011, a new Law of Accounting was issued requiring public entities to follow international accounting and reporting standards. This Law replaced the previous version of the Law of Accounting issued on 14 May 1999 (#750). The accounting and financial reporting requirements are defined by Decree 428 of 04 November 2002 "International Financial Reporting Standards" and Decree 231 of 02 May 2010 "Additional arrangements for implementation of IFRS in RT", issued by the Government of the Republic of Tajikistan. All public entities in the RT are required to implement IFRS as set out in these two statutory documents.

11. The Ministry of Finance (MoF) issued Instruction #68 dated 27 May 2004 "Methodical recommendations for transfer of accounting to IFRS". This instruction provided a standard Chart of Accounts and a standard set of Financial Statements that are implied to be in accordance with IFRS and that all public entities are obliged to follow.

12. In addition, the MoF issued two further instructions on 27 May 2011: (i) Instruction #41 "Chart of Accounts and Instruction of use of the Chart of Accounts", and (ii) Instruction #42 "Instruction about order of completion of financial statements prepared in accordance with National and International Financial Reporting Standards". Although the instructions refer to national and international reporting standards, they only provide one format for financial statements and one Chart of Accounts. Therefore, national accounting and reporting standards reflect IFRS.

## **C. Auditing Standards in Tajikistan**

13. Auditing in Tajikistan is regulated by the Audit Law which has been renewed in July 2013. It defines among other audit activities, licensing and certification procedures, and entities subject to annual audits. MoF is the authority to provide auditors with certification and license.

14. With respect to internal audit, on 21 July 2010, the Parliament of the Republic of Tajikistan enacted two laws governing auditing and audit related requirements for all entities in the public sector: "Law on Financial Management & Internal Control" (Presidential Decree #626) and the "Law on Internal Audit" (Presidential Decree #631). Under these laws, public entities are required to establish internal audit functions and, in principle, both laws say that public sector entities should follow the International Standards on Auditing (ISA).

15. The previous FMA and the report by the World Bank both recognized significant deficiencies in Barki Tojik's financial management.<sup>3</sup> They express concern that the auditors were unable to express an opinion, in particular in regard to the trade and other receivables and payables carried in the consolidated statement, the valuation of inventory and property, plant and equipment.

16. Significant cash deficit, slow and late payments for electricity supply by independent power producers (IPPs) and difficulties to service debt are additional major issues Barki Tojik is facing and has to resolve quickly.

#### **D. Institutional Arrangements**

17. Barki Tojik is a 100% state-owned company responsible for power generation, transmission, and distribution in Tajikistan. It was established in its present state by resolution of the Government of Tajikistan on October 31, 2008. Previously, it had been a department within the Ministry of Energy. The company is incorporated as an Open Joint Stock Holding Company. As a holding company, it has about 30 subsidiary reporting units.

18. Barki Tojik itself is separated into five Divisions, each headed by a Deputy Chairman who reports to the Chairman of the company. Although each Division comprises many diverse reporting units, their general areas of responsibility include: (i) generation and transmission, (ii) distribution (in two Divisions) and (iii) various administrative and support functions (in two Divisions).

19. Thus, Barki Tojik's organization structure offers neither clear business focus nor a clear separation of roles and responsibilities. As well, the structure must be changed to incorporate the Government's order to establish three separate business units for the generation, transmission and distribution functions. Despite a number of recommendations for Barki Tojik to introduce a more effective organisational structure, including Government Decree, its structure has changed very little since 2007 till 2011. In 2011 the Presidential decree endorsed the individual restructuring plan for Barki Tojik prepared based on ADB recommendations. In May 2012 the Supervisory Board (chaired by the First Deputy Prime Minister) established to supervise restructuring. The first Supervisory Board meeting, held on 11 June 2013, approved new organizational structure of Barki Tojik, thus giving the basis for moving forward with significant organizational improvements.<sup>4</sup>

20. In July 2014, a new Chairman was appointed which resulted in a period of uncertainty and unclear areas of responsibilities.

21. Barki Tojik's staffing of accounting and finance functions is currently under review. Recommended accounting staff, titles, responsibilities, job descriptions, etc., are dependent on approval of an organisation structure that will become more clearly defined over the next few months. Barki Tojik's present job classification system needs improving through the preparation of more appropriate and complete job descriptions. There are limited staff with financial backgrounds — academically or with practical experience. The accounting and reporting functions need to be properly realigned in keeping with modern requirements and staffed with appropriately trained and experienced persons.

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<sup>3</sup> World Bank. 2013. *Tajikistan: Financial Assessment of Barki Tojik*, Washington D.C.

<sup>4</sup> This is supported by MOEI consultant for Sector Operational Performance Improvement Program under G0213-TAJ.

22. Within Barki Tojik's current organizational structure, the Accounting Department reports directly to the Chairman. The auditor's management letter of 2007 recommended that the Barki Tojik's financial function be reorganised and that financial functions, including the Accounting Department, be consolidated under the control of the Deputy Chairman of Economics and Finance. The need for Accounting Department to report to the Deputy Chairman for Economic and Finance was also highlighted in previous ADB technical assistance.<sup>5</sup> This structure would create a better relationship between accounting and reporting, planning and budgeting, and analysis functions. Also, it would decrease the distortion of financial data provided in the different reports and increase the speed of data flows between departments.

23. Another recommendation is the removal of the treasury function from the Accounting Department and the creation of a new Treasury Department with its own staff, management and responsibilities. At present, the treasury function is performed by the Accounting Department under the direct supervision of the Chief Accountant. Given the importance of this function, notably cash management and control, it has been recommended that it directly reports to the Deputy Chairman for Economic and Finance, who, in turn, reports to Barki Tojik's Chairman. These structural issues pertaining to financial management has been taken into consideration under the initiatives to restructuring

24. The project will be administered by the project management unit (PMU), a specialized unit established for project management of international financing institution (IFI) funded projects. PMU has successfully been involved in implementing several projects over the past few years, including, among others, projects funded by ADB, World Bank, EximBank, Islamic Development Bank, Kuwait Fund, KfW, OFID and the Swiss Government. Still, training to PMU staff on ADB procedures may be appropriate, as well as the enhancement of accounting expertise within the PMU.

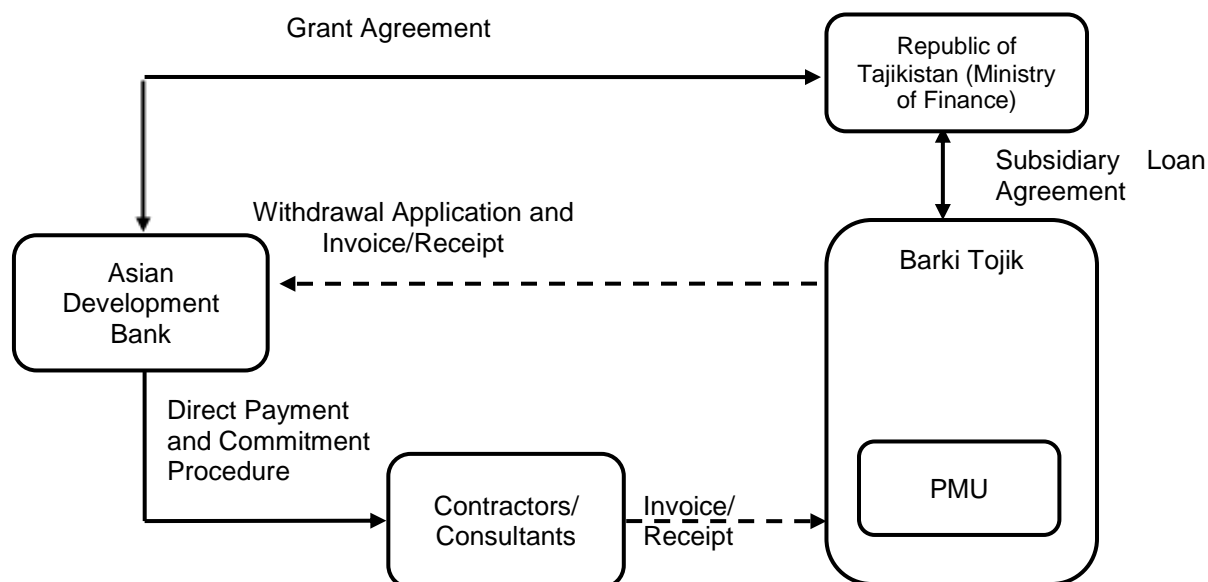
#### **E. Funds Flow Arrangement**

25. All payments for the contract and consulting services will be in accordance with the direct payment and letter of commitment procedures in accordance with ADB's Disbursement Handbook (2012 or as amended from time to time). Payment for resettlement and compensation will be based on reimbursement procedure. No imprest account or the use of statement of expenditure procedure is envisaged. The proposed flow mechanisms under the direct payment procedure are illustrated below in Figure 1.

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<sup>5</sup> ADB. 2006. *TA4908-TAJ: Strengthening Corporate management of Barki Tojik*. Manila.

**Figure 1: Funds Flow Arrangement**



26. The sub loan for the project will be reported as part of long-term debt on the balance sheet of Barki Tojik's financial accounts. The physical assets will be included as a part of fixed assets on Barki Tojik's balance sheet, with these assets initially entering as work-in-progress prior to finalization of construction works, when they will be reclassified as fixed assets.

## F. Accounting Policies and Procedures

27. Since 2001, Barki Tojik has engaged an external professional auditor to audit its IFRS corporate financial statements. However, the auditor has issued a denial of opinion for each of the past six years due primarily to the inability of obtaining sufficient audit evidence to support the expression of an opinion on Barki Tojik's corporate IFRS financial statements. Thus, it appears that the capacity of Barki Tojik is somewhat limited in producing and analyzing information in compliance with IFRS. No formal training program exists within Barki Tojik. The central training centre established under a previous ADB project was closed several years ago. The accounting and financial staff have received preliminary in house training in IFRS. Training in accounting policy and the appropriate use of a new chart of accounts is essentially based on the issuance of the Accounting Policy document, other directives by head office and responses to questions. Several subsidiary accountants have reported that they receive very little support from the head office facility.

28. During the past several years, Barki Tojik has made a number of efforts in implementing IFRS principles, the latest and most promising were those taken during the past 3 years. The Chief Accountant has advised that once the planned training program is completed at the subsidiaries, IFRS will have been fully implemented across Barki Tojik by 31 December 2014.

29. Barki Tojik uses both National and International Accounting Standards. Generally, the accrual basis of accounting is followed. In the past, external auditors have noted that not all of Barki Tojik's subsidiary reporting units followed the accrual method in terms of accruing of expenses.

30. The new Chart of Accounts and Accounting Policy issued in 2011 sets out policies and procedures to guide activities and to ensure staff accountability. However, considerable training of subsidiary accounting staff is required to ensure appropriate compliance and implementation. Difficulties include: lack of policies and procedures concerning the write-off of uncollectible accounts receivable, accurate calculation and recognition of technical and commercial losses in the transmission and distribution of power, provision for bad and doubtful debts, write-off of obsolete fixed assets, calculation of asset impairment provisions and, valuation of property, plant and equipment.

31. Generally, procedures do exist to ensure that only authorized persons can alter or establish a new accounting principle, policy or procedure to be used by Barki Tojik, but improvements need to be made in governance procedures. Barki Tojik's Charter and Regulation Regarding Internal Control and Regulation Regarding Internal Audit provide policies and procedures that clearly define conflict of interest and related party transactions and also provide safeguards to protect Barki Tojik from such possibilities. However, it is doubtful that a review of Barki Tojik's activities and functions performed by senior and middle management takes place. The above Regulations have been distributed to the various reporting units but no (or little) instructions/interpretations have been provided. It is doubtful that such Regulations have been distributed to Barki Tojik's central senior management.

#### **G. Internal Audit**

32. In 2011 and 2012, Barki Tojik developed a new internal audit policy as well as "*Regulations on Internal Control*" and "*Regulations on Internal Auditing*", setting out appropriate policies and procedures. Although these were positive actions, they are insufficient in themselves in addressing the concerns expressed, for example, by the external auditors relating to internal control deficiencies and the availability of auditable documentation.

33. Barki Tojik's Charter includes a provision for the creation of an Audit Committee with responsibility for control over the financial and economic activities of Barki Tojik. Barki Tojik's reporting units are required to implement changes recommended by the audit staff within a designated time and to report such actions taken. Although an Audit Committee has not been created, an Internal Audit Department, reporting to Barki Tojik's Chairman, was established in late 2008. However, in 2010, it became a unit within the central accounting department, reporting to the Chief Accountant, as well as the Chairman. This meant a loss of independence for the internal auditors, as one of their roles is oversight of the financial activities of Barki Tojik and its reporting systems. This development, coupled with the reduction in staff numbers from 10 to 5, significantly reduced the capacity of the internal audit.

34. The following internal audit objectives are either not currently being pursued or are being paid minimal attention: (i) effectiveness of the IFRS implementation or training of accountants; (ii) documentation, review and assessment of a companywide internal control system; (iii) reviews and assessment of Barki Tojik's overall operational and financial performance; (iv) identification and review of corporate objectives and their implementation; (v) assessing risks and improving overall risk management policy and strategies; and (vi) liaising with external auditors to ensure auditors' concerns are understood and addressed.

35. Currently, the internal audit unit includes an acting head and four staff, each of who have a university degree (economics), and between 27 and 37 years of relevant "business" practical

experience, as well as an average of 2-3 years auditing experience. However, none of the staff have taken or are enrolled in accredited auditing courses.

## **H. External Audit**

36. Since 2001, Barki Tojik has engaged an external professional auditor to audit its IFRS corporate financial statements. This audit normally also includes project statements and reports. As stated in each of the auditor's reports, the basis of work performed was that audit procedures were conducted in compliance with the International Standards on Auditing (ISA). Annual audits of Barki Tojik are also routinely rendered by governmental taxing and regulatory agencies.

37. Delays in the issuance of the independent external auditor's reports are the norm, as audit opinion (or denial thereof) and the financial statements are usually not available until at least 6 months following the financial year end. Following completion of audit work and release of corporate financial statements and audit opinion (or denial thereof), the auditor routinely issues its management letter to Barki Tojik's senior management setting out deficiencies and weaknesses detected during the course of the audit work together with recommendations for Barki Tojik's consideration and resolution.

38. Specific reasons given for denial of opinion in the audit of 2012 results were: (i) insufficient evidence that the value of inventories received from other State entities through barter operations were estimated at their fair market value as required by IFRS; (ii) plant, property and equipment were not valued in accordance with International Valuation Standards, as required by IFRS; (iii) accounts receivable and payable could not be verified; and (iv) revenues could not be verified, mainly because automated billing systems were not installed in certain Barki Tojik subsidiaries. These are almost the same reasons provided for a denial of opinion for the 2011 results. Financial Statements of the FY 2013 are also still provisional.

39. However, a comparison of the Management Letters between 2011 and 2012 shows that while Barki Tojik's responses to identified weaknesses in 2011 were largely defensive and refuted the auditor's findings, the 2012 responses were conciliatory, with promises to improve reporting performance. Also, in working with Barki Tojik, the current auditor, Deloitte, fully expects the first two issues, dealing with inventory and fixed assets, to be resolved for 2013 with the appointment of consultants to clean/ revalue the inventory and undertake a proper valuation of fixed assets. Resolution of the issues related to accounts payable/ receivable and revenue accounting may take longer. Work is underway to introduce automated metering, billing, accounting and payment systems in the two major centres of the country, Dushanbe and Khujand. This project will also contribute to resolving the issues related to accounts payable/receivable and revenue accounting through the introduction of wholesale metering. Thus, progress is being made and is likely to continue.

## **I. Reporting and Monitoring**

40. Barki Tojik prepares semi-annual and annual consolidated financial statements in accordance with National accounting standards and, during the past few years, in accordance with IFRS, generally with assistance of external consultants. However, their timeliness and usefulness for management decision making is questionable. There is little evidence that such statements are used in decision making. Appropriate, timely and relevant management reports do not exist. The centralized Planning Department prepares piecemeal financial reports, which compare budgeted and actual financial data, but often, such analyses are delayed due to lack of timely actual information. Comparing budgeted figures with the actual performance is made

difficult as cost structures used in planning are different from those used for accounting. Furthermore, information required from the Accounting Department is often 2-3 months old and does not represent the current situation.

41. The PMU has used the Russian “1C” accounting system, which reflects only financial data (physical data is not generated). Based on weaknesses throughout Barki Tojik, it is highly probable that physical data will not synchronize with financial data. The accuracy of financial data is suspicious, as differences often exist in financial data received from different sources. Currently, financial reports are generally prepared using electronic spread sheets, as the “1C” accounting system has limited ability to generate reports required by Barki Tojik. For projects, reporting requirements are set out by the particular lender concerned, as Barki Tojik has no effective management reporting system.

## **J. Information Systems**

42. The “1C” computerised accounting system was installed in all of Barki Tojik’s 30 reporting units by the end of 2012, but training in its use is still on-going. The 1C system enables the Accounting Department to: (i) respond to operational and project-related queries related to specific accounts; (ii) record transactions in the reporting period; and (iii) generate financial reports for both external and internal users. However, Barki Tojik does not have an integrated computerized management information system.

43. With respect safeguarding the confidentiality, integrity and availability of the data, in 2011 Barki Tojik issued a Regulation on Internal Control and distributed a copy to each of the 30 reporting units. However, management and account staff of many of these reporting units have said that they have yet to read and understand its contents.

44. As part of the ongoing Sector Operational Performance Improvement project, it is planned to: (i) critically re-examine the current programme for the implementation of the new accounting system and establish quality control procedures for monitoring the effectiveness of the implementation and training work being carried out by contractors; (ii) reorganise Barki Tojik’s central IT Department and establish clear policies and procedures for its responsibility to provide assistance in the implementation of new systems and the monitoring of externally provided services; and (iii) establish an effective user-support unit at the central Accounting Department to provide assistance to the subsidiaries in the application of new procedures and policies and the use of accounting software.

## **K. Sector Reform**

45. Several of the issues identified above are currently being addressed by ADB’s “Regional Power Transmission Project – Sector Operational Performance Improvement” (SOPI) program, which is centered on implementing a sector operational performance improvement program. It is designed to address institutional and technical impediments constraining the effective operation of Barki Tojik. The project has identified deficiencies in specific areas, including governance, commercial and financial performance, control and audit, management systems, organizational structure, technical operations, and management capacity. An Action Plan to rectify these deficiencies has been drafted.

46. The Government has adopted a three phased restructuring process:

- Under Phase 1, Barki Tojik will be reorganised from a vertically integrated monolithic organisation into three horizontally-integrated business units under a single control



structure and operated in accordance with good commercial and financial management principles. The links between the business units would be controlled via transfer pricing. This phase may be referred to as the “commercialisation” phase. During this phase, tariff, legal and regulatory reforms will be pursued to facilitate private sector participation in the second phase.

- Under Phase 2, which may be referred to as the “competition” phase, Barki Tojik will be divided into a number of operationally and legally independent enterprises, with existing generation and transmission lines remaining in the ownership of the government as monopolies. The links between these operationally and legally independent enterprises will be controlled via supply contracts and a regulatory system. In this phase, distribution business units will be separated as legal entities and independent generation companies will be allowed access to the state-owned transmission network.
- Under Phase 3, the Government will evaluate the results of the first two phases and consider the privatisation of state-owned generation facilities. This phase may be referred to as the “divestment” phase.

47. SOPI program focuses on Phase 1 only. In carrying out the proposed restructuring, it is intended to focus the attention of Barki Tojik management on improving the organisational, financial and operational performance of the sector before unbundling or privatisation. This includes the establishment of three business units (generation, transmission and distribution), the introduction of commercial practices and systems, and the separation of accounting for the business units. In parallel, legislative changes will be introduced and a regulatory body established to create an enabling environment for private sector participation.

48. Recent key developments in structural reforms include the following:

- Based on the proposed restructuring plan, a Government Decree (No. 431), dated 30 August 2011, was issued “On approval of individual restructuring plan of OJSHC “Barki Tojik” for the period of 2011-2018”, instructing all relevant government ministries, departments and authorities to support the implementation of the restructuring plan. This decree also sets out a programme of work up to 2015 which, when implemented, will result in the electricity sector being restructured during Phase 2 into three joint stock companies (generation, transmission and distribution), System Operators for transmission and distribution, and a regulator established as a “central executive body”. It also commits the government to develop an action plan for Phase 3 of the restructuring, which involves privatisation over the period 2015 – 2018.
- In order to support the implementation of Government resolution (no. 431), Barki Tojik has established five Working Groups (WGs), each focused on a separate aspect of the restructuring program: (i) organisational structure, (ii) economy and policy (finance), (iii) technical, (iv) social and legal aspects, and (v) revenue collections. These five WGs report, via Barki Tojik’s Chairman, to an Inter-Ministerial Working Group (IMWG) which was established by the Ministers of Energy and Industry to oversee progress of the restructuring.
- The IMWG reports and makes recommendations to a Supervisory Board, which is chaired by the First Deputy Prime Minister and comprises: (i) Ministers of Energy and Industry, Economic Development and Trade, Finance and Justice, (ii) Chairman of the State Committee on Investments and State Property, (iii) Head of the Anti-Monopoly Service and (iv) Chairman of Barki Tojik. This Board was established with overall

responsibility for “the implementation and control over the restructuring process” by Government Order No 281 dated 31<sup>st</sup> May 2012. The first Supervisory Board meeting was held on 11 June 2013. The Board has approved: (i) the Assessment Report; (ii) the intervention plan of SOPI consultants; and (iii) new structure of Barki Tojik. The Board also instructed Barki Tojik to establish three departments (generation, transmission and distribution) and appoint the heads in consultation with the Ministry of Energy and Industry. Following the Board’s guidance, Barki Tojik chairman has issued resolution on appointment of the three departments on 28 August 2013. The next step is to finalize Detailed Action Plan, the Implementation Schedule and Restructuring Progress Indicators by November 2013.

### III. REVIEW HISTORICAL FINANCIAL STATEMENTS AND PREPARATION OF FINANCIAL PROJECTIONS OF BARKI TOJIK

#### A. Historical Financial Statements

49. Accounting and financial performance data of Barki Tojik was evaluated for the period from 2007 to 2013. Data from the Annual Financial Statements 2012 and 2013 were included to previous examined FMAs. The transition to fully comply with IFRS is still ongoing.

50. Barki Tojik is a fully vertically integrated electrical utility whose operations include the provision of heat. Revenue from heat supply is insignificant and therefore, the financial data reflect the full costs of electricity supply of the distribution, transmission and generation business.

51. A summary of key components of the Income Statement for the years 2007 to 2013 is provided in Table 1.

	2007	2008	2009	2010	Deloitte			2013
					2010	2011	2012	
Total revenue	337	512	858	1,320	1,027	993	1,099	1,227
Operating expenses	314	515	874	883	781	973	519	599
<b>EBITDA</b>	<b>23</b>	<b>-3</b>	<b>-16</b>	<b>437</b>	<b>246</b>	<b>19</b>	<b>580</b>	<b>628</b>
Depreciation and amortization	23	27	31	24	64	95	75	127
<b>EBIT</b>	<b>0</b>	<b>-30</b>	<b>-46</b>	<b>412</b>	<b>182</b>	<b>-76</b>	505	501
Net finance and other costs	11	21	541	19	56	-131	-806	-1,111
<b>Profit before tax</b>	<b>-11</b>	<b>-51</b>	<b>-587</b>	<b>394</b>	<b>126</b>	<b>55</b>	<b>-301</b>	<b>-610</b>
Income tax	32	-10	0	-3	-65	-2	-31	-14
<b>Profit for the year</b>	<b>-43</b>	<b>-41</b>	<b>-587</b>	<b>396</b>	<b>191</b>	<b>57</b>	<b>-332</b>	<b>-624</b>

Source: Barki Tojik Annual Financial Statements.

52. The revenue of Barki Tojik has been very volatile over the period from 2007 to 2013. It can be seen that Barki Tojik has not been operated profitable in most years during that period. The loss almost doubled from TJS 332 million in 2012 to TJS 624 million 2013. This is mainly the result of tremendously increasing financial burden (interest payments). The positive result in 2010 was due to an ‘extraordinary’ gain due to a revaluation of assets, which was not included as profit in the restatements by Deloitte, however, it is in accordance with IFRS standards.

53. In the last two years of the evaluation period, Barki Tojik were able to reduce its operating expenses from TJS 973 million in 2011 to TJS 519 million in 2012 and to TJS 599 million in 2013.

54. Overall growth in electricity sales for the period 2007 to 2013 has been negative due to poor hydrology in 2008 and electricity shortages due to regional interconnection problems in 2011 which are ongoing. As a result electricity sales in the last three years have been stagnant at a level of approximately 13,500 GWh. The development of sale of electricity is shown in **Table 2: 2007 to 2013 Electricity Sales Volume in GWh**Table 2.

**Table 2: 2007 to 2013 Electricity Sales Volume in GWh**

	2007	2008	2009	2010	2011	2012	2013
Annual sales	13,967	12,515	13,140	14,025	13,617	13,627	13,356
Annual increase		-10.4%	5.0%	6.7%	-2.9%	0.07%	-1.99%

Source: Barki Tojik.

55. The development of the average tariff is outlined in Table 3. The current tariff applies to Barki Tojik's generation, transmission and distribution operations. The relatively large tariff increases in the earlier years of the evaluation period have been equalized during the later periods. The last three years increases in the average tariff were negative which in return has a significant influence on the overall financial performance of Barki Tojik and its inadequate profit level.

56. Under the Government Resolution No. 376 dated 03. June 2014, new tariff rates from 01. July 2014 were introduced. By this decree electricity prices in Tajikistan rose 15 percent. Starting from this date, electricity prices of one kWh of electricity are 12.60 dirams for residential customers, 30.60 dirams for industrial and non-industrial enterprises, 12.20 dirams for federally funded institutions, public utilities and sports complexes, 8.20 dirams for electrical transport, and 2.20 dirams for reclamation vertical wells and water pumping stations. The price of one kWh of electricity for the Tajik Aluminum Plant (TALCO) is 7.20 dirams for the period from May 1 to September 30 and 11.80 dirams for the period from October 1 to April 30. The price of one kWh of electricity for water supply pumps, pumping irrigation and maintenance-and-production bases of the Agency of Land Reclamation and Irrigation under the Government of Tajikistan is 2.20 dirams for the period from April 1 to September 30 and 8.20 dirams for the period from October 1 to March 31.

57. Barki Tojik has no control over setting the tariff, therefore there is not direct link between tariff rates and Barki Tojik's financial results. The tariffs are finally set by the President on a cost basis.

58. In addition, since 2011, the Energy Holding Company shows losses because the energy system exit from the Central Asia united power grid and a parallel independent operation is unfeasible.

**Table 3: 2007 to 2013 Development of average tariff**

	2007	2008	2009	2010	2010 restat ed	2011	2012	2013
Revenue from tariffs (TJS millions)	316	501	757	977	1,011	957	820	928
Annual sales (GWh)	13,967	12,515	13,140	14,025	14,025	13,617	13,627	13,356
Average tariff (TJS per kWh)	0.0226	0.0400	0.0576	0.0697	0.0721	0.0705	0.0602	0.0694
Increase in average tariff		77.1%	44.0%	20.9%	25.1%	-2.2%	-14.6%	-15.4%

Source: Barki Tojik annual financial statements.

59. Key performance indicators are summarized in Table 4. Barki Tojik has acknowledged a problem with the debt obligation payments which is due to the lack of electricity exports. Barki Tojik has a substantial amount of accounts receivable and accounts payable. The number of days in both categories has increased in 2012 and 2013 significantly to an undesirable level. Compared with 2011 the number of days has 3-fold in 2013 to 969 days receivable and 1,651 days payable. One of the reasons for this unsustainable increase is the inefficient revenue collection process which should improve with the installation of wholesale meters and billing system.

**Table 4: 2007 to 2013 Key Performance Indicators**

	2007	2008	2009	2010	2010 restated	2011	2012	2013
Days' receivables	303	271	219	227	231	226	421	969
Days' payables	295	317	291	505	527	501	989	1,652
Debt as a % of total capitalization	40.3%	55.9%	86.2%	64.3%	57.2%	60.1%	130.7%	329.2%
Return on equity	-4.2%	-3.9%	-180.5%	30.0%	11.1%	3.1%	-0.86%	-1.63%
Return on net fixed assets	-1.0%	-0.8%	-11.2%	3.9%	1.2%	0.3%	-6.9%	-12.4%
Current ratio	2.54	2.63	2.34	0.90	0.73	0.64	0.50	0.48

Source: Barki Tojik Annual Financial Statements.

60. To summarize the financial position of Barki Tojik, the most recent financial records of the FY 2013 provided by Barki Tojik in July 2014 were reviewed. These are the Profit and Loss Account, the Balance Sheet and the Cash Flow Statement. They are attached to this document as Annex 1. The statements show an extraordinary high loss and even negative numbers for the retained earnings

## B. Preparation of Appropriate Financial Performance Ratios for Barki Tojik

61. The long-term liabilities have slightly decreased over the last period from TSJ 1,078 million to TSJ 1,048 million. Table 5 provides an overview of the period 2007 to 2013.

**Table 5: Long-term Liabilities 2007 to 2013 in TSJ**

	2007	2008	2009	2010	2010 Deloitte	2011	2012	2013
Long-term Liabilities	558,596,000	1,146,198,000	1,965,033,000	217,300,000	542,909,000	964,770,000	1,078,580,536	1,048,405,433
+/- previous year		587,602,000	818,835,000	-1,747,733,000	325,609,000	421,861,000	113,810,536	-30,175,103

Source: Asian Development Bank and technical assistance consultants.

### C. Barki Tojik's Projections

62. Barki Tojik has provided projections for 2012, 2013 and 2014 which are displayed in Table 6. They show clearly that Barki Tojik's financial position deteriorates in terms of total energy supply and hence profits. As outlined in the previous FMA for the Golovnaya projects, significant tariff increases are needed to counteract this trend.

**Table 6: Barki Tojik's projections for 2012, 2013 and 2014**

				2012	2013	2014
<b>1</b>	<b>Electricity generation</b>		<b>mn.kW.h</b>	<b>14,800.00</b>	<b>14,645.00</b>	<b>14,300.00</b>
1.1.	Own consumption		mn.kW.h	45.00	32.00	45.80
1.2.	Busbur output		mn.kW.h	14,755.00	14,613.00	14,254.24
1.4.	Purchase		mn.kW.h	2,700.00	2,508.10	3,000.00
1.5.	Transmission		mn.kW.h	720.00	670.00	880.00
1.6.	Net output		mn.kW.h	16,735.00	16,451.00	16,374.24
1.7.	Process losses		mn.kW.h	2,178.00	2,365.00	2,388.00
1.8.	Business needs		mn.kW.h	7.00	30.00	3.90
<b>1.9.</b>	<b>Net electricity supply</b>		<b>mn.kW.h</b>	<b>14,550.00</b>	<b>14,056.00</b>	<b>13,982.30</b>
<b>2</b>	<b>Heat generation</b>		<b>th. Gkkal</b>	<b>259.00</b>	<b>124.00</b>	<b>230.00</b>
<b>3</b>	<b>Procurement of goods</b>		<b>mn.somoni</b>	<b>1,176.00</b>	<b>1,197.43</b>	<b>1,311.40</b>
<b>4</b>	<b>Costs for generation, transmission and distribu</b>		<b>mn.somoni</b>	<b>1,111.00</b>	<b>1,138.50</b>	<b>1,353.90</b>
4.1.	Repair stock		mn.somoni	80.80	86.80	93.82
4.2.	Fuel		mn.somoni	127.80	165.30	115.60
4.3.	Wage and salaries fund		mn.somoni	199.30	240.90	225.43
4.4.	Social Protectio Fund		mn.somoni	49.70	60.20	56.40
4.5.	Depreciation		mn.somoni	110.00	147.20	159.20
4.6.	Tax for water (royalty)		mn.somoni	35.52	35.10	33.80
4.7.	Road Fund		mn.somoni	21.80	22.30	86.50
4.8.	Other taxes (2014)		mn.somoni			68.10
4.9.	Costs of goods sold (2014)		mn.somoni			
4.10.	Purchased electricity (2014)		mn.somoni	367.60	230.50	210.60
4.11.	Bank credit percentage (2014)		mn.somoni			145.20
4.12.	Road fund (2014)		mn.somoni			26.50
4.13.	Doubtful receivables (2014)		mn.somoni			129.00
4.14.	Labour leave reserves (2014)		mn.somoni			19.40
4.15.	Other costs (2014)		mn.somoni			70.90
<b>5</b>	<b>Profit</b>		<b>mn.somoni</b>	<b>65.00</b>	<b>58.93</b>	<b>-42.55</b>
<b>6</b>	<b>Profit tax</b>		<b>mn.somoni</b>	<b>9.75</b>	<b>8.84</b>	
<b>7</b>	<b>Net profit</b>		<b>mn.somoni</b>	<b>55.25</b>	<b>50.09</b>	
<b>8</b>	<b>Distribution of profits</b>		<b>mn.somoni</b>	<b>55.25</b>	<b>50.09</b>	
	Production development fund 45%		mn.somoni	24.90	22.50	
	Material incentive fund 20%		mn.somoni	11.10	10.00	
	Social development fund 15%		mn.somoni	8.30	7.50	
	Surplus fund 20%		mn.somoni	11.10	10.00	

Source: Asian Development Bank and Technical Assistance Consultants.

#### **D. Financial Projections up to 2020**

63. Based on previous FMA's the projections were updated with current data. The integrity of the model has been maintained however, where possible, estimated figures for 2012 and 2013 have been updated with actual data.

64. Updated assumptions:

- A tariff increase of 15% which occurred in 2014 has been included. Additional tariff increases in the years thereafter have been considered.
- The ADB sub-loan for this project has been included and the interest rate set to 5%.
- 50% of the EBRD grant to the Government of Tajikistan have also been considered as a loan from the Government to Barki Tajik (around \$38 million loan, repayment tenor 25 years, interest rate 5%, grace period 5 years)
- Energy billed has been updated with actual data.

65. The financial projections are shown in Table 6: Balance Sheet, Table 7: Income Statement and Table 8: Cash Flow.

66. The core issue in the last two years is the declining energy sales which led to a deterioration of Barki Tojik's financial position. Significant improvement in energy sales as well as tariff increases over an extended period of time is necessary to reduce the negative profit and to improve the financial performance of Barki Tojik.

67. Improvement in the collection rate and shorter payment terms will contribute positively to the overall situation, but will have minor effects in the financial statements.

**Table 6: Barki Tojik's Consolidated Balance Statement -  
Update based on MOEI Consultant SOPI under G0213-TAJ**

<b>Barki Tojik Consolidated Balance Sheet (TJS millions)</b>									
Year ending Dec 31 =====>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
<b><u>Assets</u></b>									
Fixed assets									
Gross plant in service	3,922	4,536	5,250	6,056	6,852	8,211	9,452	10,509	11,167
Accumulated depreciation	1,685	1,821	1,979	2,160	2,366	2,612	2,896	3,211	3,546
Net plant in service	2,237	2,715	3,271	3,895	4,486	5,599	6,556	7,298	7,621
Work in progress	3,438	3,475	3,482	3,491	3,489	3,552	3,532	3,514	3,472
Total fixed assets	5,675	6,190	6,753	7,387	7,975	9,151	10,088	10,812	11,093
Long term investments	95	95	95	95	95	95	95	95	95
Current assets									
Receivables: Power Sales	426	562	707	872	1,057	1,259	1,464	1,658	1,852
Inventory	679	785	909	1,048	1,186	1,421	1,636	1,819	1,933
Cash	22	114	126	142	157	167	211	224	277
Other current assets	114	132	153	176	199	239	275	305	325
Total current assets	1,241	1,593	1,895	2,239	2,599	3,086	3,586	4,007	4,386
Total assets	<u>7,011</u>	<u>7,877</u>	<u>8,743</u>	<u>9,721</u>	<u>10,670</u>	<u>12,332</u>	<u>13,769</u>	<u>14,914</u>	<u>15,574</u>
<b><u>Liabilities</u></b>									
Equity									
Paid in capital	422	422	422	422	422	422	422	422	422
Reserves	26	26	26	26	26	26	26	26	26
Retained earnings	1,579	1,431	1,095	797	590	1,182	1,720	2,366	3,105
Total equity	2,027	1,879	1,543	1,245	1,038	1,630	2,168	2,814	3,553
Long term debt	1,339	1,811	2,403	3,099	3,798	5,065	6,161	7,090	7,610
Deferred income	1,991	1,991	1,991	1,991	1,991	1,991	1,991	1,991	1,991
Current liabilities									
Accounts payable	946	936	749	706	561	397	210	167	118
Other current liabilities	708	721	834	962	1,089	1,304	1,502	1,670	1,774
Required short term loan	0	539	1,223	1,717	2,193	1,945	1,738	1,182	527
Total current liabilities	1,654	2,196	2,806	3,385	3,843	3,646	3,449	3,019	2,419
Total liabilities	<u>7,011</u>	<u>7,877</u>	<u>8,743</u>	<u>9,721</u>	<u>10,670</u>	<u>12,332</u>	<u>13,769</u>	<u>14,914</u>	<u>15,574</u>

Source: Barki Tojik Annual Financial Statements.

**Table 7: Barki Tojik's Consolidated Income Statement -  
Update based on MOEI Consultant SOPI under G0213-TAJ**

<b>Barki Tojik Consolidated Income Statement (TJS millions)</b>									
Year ending Dec 31 =====>	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b><u>Inflation index:</u></b>	1.0000	1.0000	1.0000	1.0700	1.1449	1.2250	1.3108	1.4026	1.5007
Rate			0.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
<b><u>Revenue:</u></b>									
% increase in average retail tariff		0.0%	15.0%	20.0%	20.0%	20.0%	7.0%	7.0%	7.0%
Average retail tariff (TJS/ kWh)	0.0953	0.0953	0.1096	0.1315	0.1578	0.1893	0.2026	0.2167	0.2319
Net energy sales (GWh)	14,550	14,590	14,778	15,235	15,602	15,781	16,914	17,008	18,559
Retail sales revenue	1,400	1,390	1,619	2,003	2,461	2,987	3,426	3,686	4,304
Export sales revenue	111	195	209	304	326	1,050	1,159	1,248	1,344
Other operating income	6	6	7	9	11	13	15	16	18
<b>Total revenue</b>	<b>1,517</b>	<b>1,591</b>	<b>1,835</b>	<b>2,316</b>	<b>2,798</b>	<b>4,050</b>	<b>4,600</b>	<b>4,950</b>	<b>5,666</b>
<b><u>Operating Expenses:</u></b>									
Purchased power									
Existing purchases	320	320	342	366	392	419	449	480	514
New purchases	0	0	0	0	0	0	0	0	0
Fuel									
Existing CHP	82	82	88	94	100	107	115	123	132
New coal plants	0	29	94	201	287	308	742	794	1,323
Employees	288	285	302	320	340	360	382	404	429
Repairs & maintenance	0	0	0	0	0	0	0	0	0
Admin & general	270	267	283	300	318	337	358	379	402
Depreciation	157	136	157	182	206	246	284	315	335
Bad debt expense	93	45	49	55	62	67	69	65	65
Other Expenses	444	440	466	494	524	555	588	624	661
<b>Total operating expenses</b>	<b>1,654</b>	<b>1,605</b>	<b>1,782</b>	<b>2,013</b>	<b>2,228</b>	<b>2,400</b>	<b>2,986</b>	<b>3,185</b>	<b>3,860</b>
<b>Net operating profit</b>	<b>(137)</b>	<b>(14)</b>	<b>53</b>	<b>303</b>	<b>569</b>	<b>1,650</b>	<b>1,614</b>	<b>1,766</b>	<b>1,806</b>
Non-operating income	210	0	0	0	0	0	0	0	0
Non-operating expenses	(73)	0	0	0	0	0	0	0	0
<b>Earnings before interest and income tax</b>	<b>0</b>	<b>(14)</b>	<b>53</b>	<b>303</b>	<b>569</b>	<b>1,650</b>	<b>1,614</b>	<b>1,766</b>	<b>1,806</b>
Less interest & financing charges	100	134	388	601	777	953	980	1,006	937
<b>Profit before income tax</b>	<b>(100)</b>	<b>(148)</b>	<b>(336)</b>	<b>(298)</b>	<b>(208)</b>	<b>697</b>	<b>634</b>	<b>760</b>	<b>869</b>
Less income tax	0	0	0	0	0	105	95	114	130
<b>Profit/ Loss</b>	<b>(100)</b>	<b>(148)</b>	<b>(336)</b>	<b>(298)</b>	<b>(208)</b>	<b>592</b>	<b>539</b>	<b>646</b>	<b>739</b>
<b><u>Statement of retained earnings:</u></b>									
Profit/ Loss	(100)	(148)	(336)	(298)	(208)	592	539	646	739
Less dividends			0	0	0	0	0	0	0
Amounts available for transfer to capital accounts	(100)	(148)	(336)	(298)	(208)	592	539	646	739
- to reserve accounts									
- to retained earnings	(100)	(148)	(336)	(298)	(208)	592	539	646	739

Source: Barki Tojik Annual Financial Statements.



**Table 8: Barki Tojik's Consolidated Cash Flow -  
Update based on MOEI Consultant SOPI under G0213-TAJ**

<b>Barki Tojik Consolidated Cash Flow (Sources and Uses of Funds) Statement (TJS millions)</b>									
Year ending Dec 31 =====>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
<b><u>Sources of funds:</u></b>									
Net income		(148)	(336)	(298)	(208)	592	539	646	739
Depreciation		136	157	182	206	246	284	315	335
Bad debt expense		45	49	55	62	67	69	65	65
Deferred interest		0	0	0	0	0	0	0	0
Capitalized interest		0	0	0	0	0	0	0	0
FX losses on loans		0	85	120	158	194	259	315	362
Total funds from operations		33	(45)	59	218	1,100	1,149	1,340	1,501
Debt funding		618	685	774	754	1,351	1,160	987	585
<b>Total sources excluding cash</b>		<u>652</u>	<u>640</u>	<u>833</u>	<u>972</u>	<u>2,451</u>	<u>2,309</u>	<u>2,328</u>	<u>2,085</u>
<b><u>Uses of funds:</u></b>									
Capital investments		651	721	815	794	1,422	1,221	1,039	615
Increase in long term investments		0	0	0	0	0	0	0	0
Increase in working capital (excl cash)		302	412	299	425	492	514	347	336
Dividends		0	0	0	0	0	0	0	0
Long term debt repayment		146	178	198	214	278	323	372	427
Short term loan repayment		0	539	1,223	1,717	2,193	1,945	1,738	1,182
<b>Total Uses of Funds</b>		<u>1,099</u>	<u>1,851</u>	<u>2,534</u>	<u>3,151</u>	<u>4,385</u>	<u>4,003</u>	<u>3,496</u>	<u>2,560</u>
<b><u>Cash Position:</u></b>									
Opening balance		22	114	126	142	157	167	211	224
Net surplus (deficit)		(447)	(1,210)	(1,701)	(2,178)	(1,935)	(1,694)	(1,168)	(475)
Net cash position		22	(425)	(1,097)	(1,575)	(2,036)	(1,527)	(958)	(250)
Required cash position	22	114	126	142	157	167	211	224	277
- as a % of cash operating expenses		8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Required short-term loan		539	1,223	1,717	2,193	1,945	1,738	1,182	527
Closing balance	22	114	126	142	157	167	211	224	277
Interest charges									
on short term loan	24.0%	129	293	412	526	467	417	284	127

Source: Barki Tojik Annual Financial Statements.

**Table 9: Annual Tariff Increases and Financial Performance Indicators**

<b>Barki Tojik Consolidated</b>									
<b>Annual Tariff Increases and Financial Performance Indicators</b>									
Year ending Dec 31 =====>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
<b>Annual average retail tariff increase</b>			<b>15.0%</b>	<b>20.0%</b>	<b>20.0%</b>	<b>20.0%</b>	<b>7.0%</b>	<b>7.0%</b>	<b>7.0%</b>
Self-financing ratio		-65.8%	-165.7%	-198.5%	-261.6%	-110.6%	-109.6%	-69.6%	-1.8%
Debt service coverage ratio		0.57	0.25	0.29	0.34	0.63	0.69	0.84	1.19
Debt ratio (%)		49.1%	60.9%	71.3%	78.5%	75.7%	74.0%	71.6%	68.2%
Operating ratio (%)		100.9%	97.1%	86.9%	79.7%	59.3%	64.9%	64.3%	68.1%
Current ratio		0.67	0.63	0.62	0.63	0.78	0.94	1.16	1.51
Return on net fixed assets		-1.4%	-0.2%	5.9%	10.8%	27.8%	22.6%	21.7%	20.6%
<b>Average retail tariff per kWh</b>									
- in TJS	<b>0.09527</b>	<b>0.09527</b>	<b>0.10956</b>	<b>0.13147</b>	<b>0.15776</b>	<b>0.18932</b>	<b>0.20257</b>	<b>0.21675</b>	<b>0.23192</b>
- in USD	<b>0.02006</b>	<b>0.01956</b>	<b>0.02149</b>	<b>0.02456</b>	<b>0.02803</b>	<b>0.03201</b>	<b>0.03258</b>	<b>0.03317</b>	<b>0.03377</b>
<b><u>Other critical assumptions:</u></b>									
Power system losses (% of input)	14.4%	14.4%	14.4%	13.4%	12.4%	11.4%	10.4%	9.9%	9.4%
Collection efficiency (% of Billings)		87.0%	88.0%	89.0%	90.0%	91.0%	92.0%	93.0%	94.0%
Inflation rate (%)			7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Index	1.0000	1.0000	1.0700	1.1449	1.2250	1.3108	1.4026	1.5007	1.6058
US inflation rate (%)			2.2%	1.9%	1.8%	1.8%	1.8%	1.8%	1.8%
Index	1.0000	1.0000	1.0220	1.0414	1.0602	1.0792	1.0987	1.1184	1.1386
FX rate forecast (TJS/ USD)	4.750	4.870	5.099	5.354	5.627	5.915	6.217	6.535	6.868

Source: Barki Tojik Annual Financial Statements.

#### IV. SUMMARY AND CONCLUSIONS

##### A. Summary

68. Barki Tojik's financial management capacity requires improvement. External auditing for fiscal years (FY) 2011 and 2012 based on international standards on auditing (ISA) both indicate major issues including i) valuation of inventory, ii) revaluation of assets, iii) records on account receivables and payables, and iv) data conciliation of revenues. However, substantial efforts are being made to strengthen the financial management capacity. Barki Tojik, funded by the World Bank, is in the process of recruiting international consultants to i) reevaluate assets in accordance with the International Financial Reporting Standards (IFRS), and ii) assess the issues related to the account receivables and payables. Automated accounting and billing system are being introduced starting from major cities such as Dushanbe and Khujand. It is expected that there will be positive changes in Barki Tojik's accounting procedures, financial reporting and management reporting systems. This project will also contribute to resolving the issues related to accounts payable/receivable and revenue accounting through the introduction of wholesale metering.

69. Barki Tojik's accounting policies, procedures and financial reporting follows IFRS, which is required under the Law of Accounting and state's decrees.<sup>6</sup> Each of the 30 subordinate entities under the holding company prepares its financial report which is consolidated at the holding company level. Barki Tojik has an internal audit unit established at the head office but with limited independency. External independent auditors are engaged to undertake auditing based on ISA for the holding company in compliant with the statutory requirements.<sup>7</sup>

70. The recent financial performance of Barki Tojik has been weak and unstable, generating losses for FY2007-2009, profits for FY2010-2011, and losses again in FY2012 and in FY 2013. The weak and unstable performance may be attributed to a low level of end-user tariffs (an average tariff at 2.2 cents/kWh), provisions required to accommodate increasing doubtful account receivables, and deteriorated performance of ageing assets. Continued efforts are necessary to steadily increase the tariff level, improve tariff collection efficiency with the adoption of computerized accounting and reporting systems, and modernize and rehabilitate productive assets through investments. It is expected that Bark Tojik's financial performance improves with the supports provided by international financial institutions including ADB and WB.

## B. Financial Management Risk Analysis

71. The financial management risks of the project, together with their mitigating measures are highlighted in Table 9 below.

**Table 9: Financial Management Risks**

<b>Risk</b>	<b>Assessment without Mitigation</b>	<b>Management Plan or Mitigation Measures</b>	<b>Assessment with Mitigation</b>
1. Funds flow arrangements	High	Direct payment method and Letter of Commitment will be used for the contracts financed by ADB. Reimbursement method will be used for the cost of resettlements. No imprest account. Barki Tojik has a satisfactory record with previous ADB projects.	Moderate
2. Staffing	High	The SOPI consultants (G0213-TAJ) will address staffing deficiencies through extensive training as defined in their terms of reference. Reorganization will consider appropriate allocation of senior staff members to ensure knowledge is retained.	Moderate
3. Accounting policies, procedures, and systems	High	The SOPI consultants (G0213-TAJ), together with WB assistance for financial capacity development, will work to complete the implementation of IFRS together with a computerised accounting system.  External audit based on ISA to be maintained.  An accounting system will need to be established and maintained for the project, with ADB procedures to be followed to minimize financial	Moderate

<sup>6</sup> Government's Decree 428 of 4 November 2002 for "International Financial Reporting Standards"; Government's Decree 231 of 2 May 2010 for "Additional arrangements for implementing International Financial Reporting Standards in Republic of Tajikistan"; and President's Decree 702 of 25 March 2011 for the "Law of Accounting".

<sup>7</sup> President's Decree 626 for the "Law on Financial Management and Internal Control"; and President's Decree 631 for the "Law on Internal Audit".

Risk	Assessment without Mitigation	Management Plan or Mitigation Measures	Assessment with Mitigation
		risk.	
4. Internal audit	High	The SOPI consultants (G0213-TAJ), together with WB assistance for financial capacity development, will work to improve Barki Tojik's internal audit function.	Moderate
5. External audit	Moderate	Widespread implementation of IFRS under the sector operational improvement project (G0213-TAJ), together with WB assistance for financial capacity development, should end the extended period of opinion denial by external auditors.	Low
6. Reporting and monitoring	Substantial	Ongoing corporate restructuring under ADB G0213-TAJ, will improve management reporting practices and result in better decision-making. New accounting system and following ADB procedures at the PMU, assisted by project implementation consultants, should result in the timely preparation of meaningful reports.	Moderate

EA = Executing Agency; FY = fiscal year.

### C. Recommended Financial Covenants

72. As seen in the preceding analyses, Barki Tojik's financial position will likely improve with sustained increase in tariff but continue to underperform for the immediate future. Therefore, it is appropriate to look at 2020 as the target year in which to achieve adequate performance levels.

73. The most current grant agreement between ADB and the Republic of Tajikistan contains the following key financial covenants:

- Barki Tojik's accounts receivables are maintained at a level that does not exceed the equivalent of the aggregate amount of three months of billing;
- Barki Tojik maintains its: (i) DSCR at not less than 1.2; (ii) SFR at not less than 20%; and (iii) operating ratio at less than 90%;
- Barki Tojik does not incur any debt except to the extent that its free cash flows for the 12 months prior to the date of such occurrence is at least 1.3 times the estimated maximum debt service requirement of Barki Tojik for any succeeding year on all debt of Barki Tojik, including the debt to be incurred; and
- The specific financial terms used in this paragraph shall be construed in accordance with IFRS.

74. Barki Tojik's days' receivables for electricity and heat sales during 2011 was 147 days, or about five months' billing, which is substantially above the three month level specified in the above covenant. Under the assumption that Barki Tojik's collection efficiency will increase from its current level of 87% to 92% by 2018 and that 25% of the uncollected amount is provisioned as bad debt, the financial forecast projects days' receivables to fall to 85 days, so it seems reasonable to retain the three months' billing target as a covenant, but beginning 2018.

75. At the projected tariff increases, the stipulated DSCR and SFR in the grant agreement will not be achieved until 2020. Therefore, it would be more realistic to set 2020 as the target year for achieving such targets. The specific targets of 1.2 DSCR and 20% SFR are relatively low compared with the more generally accepted minimum levels of 1.4 and 30% respectively. However, given the rather large forecast year-to-year changes in these indicators between 2013

and 2019, as well as the fact that 2019 is rather far into the future, it is almost immaterial whether the target DSCR is set at 1.20 or 1.40 – or whether the SFR is at 20% or 30%.

76. Regarding the 90% operating ratio, the financial forecast shows that this ratio will be easily achieved if the DSCR and SFR targets are realized. Also, given the seven-year horizon for the DSCR and SFR to reach acceptable levels and the large DSCR range until 2020 the 1.2 “future year” requirement for the DSCR seems to be an almost irrelevant detail.

77. However, the Government of Tajikistan should continue to commit to relatively large tariff increases in order for Barki Tojik to achieve adequate financial performance. With this in mind, a covenant related to tariff increases could be added, which could specify that at least a 20% annual tariff increase will be put into effect in each year over at least the 2015 to 2017 period. It is important to note however, the current tariff change mechanism in Tajikistan, involves the approval process involving parties such as the Anti-Monopoly Committee, the Ministry of Energy and the Cabinet of Ministers.

78. Given all of the above, the recommended financial covenants are:

- By 2018, Barki Tojik’s accounts receivable should reach a level that does not exceed the equivalent of the aggregate amount of three months of billing;
- By 2020, Barki Tojik commits to achieving: (i) a DSCR of not less than 1.2; and (ii) a SFR of not less than 20%.
- If possible, the Government of Tajikistan should commit to allowing at least 20% annual electricity tariff increases over the 2015 to 2017 period.

## Annex 1

## Barki Tojik's Profit and Loss for 2013

<b>Profit and loss for 2013</b>		beginning of	end of
		reporting	reporting
<b>Income</b>		period	period
Net income from sales		1,099,376,709	1,227,977,160
Cost of sales		519,044,687	599,634,553
<b>Gross profit</b>		<b>580,332,023</b>	<b>628,342,607</b>
<b>Operating expenses</b>			
Realizable costs		479,645,032	613,769,119
General and administrative expenses		161,145,516	350,844,208
<b>Total operating expenses (040+050)</b>		<b>640,790,548</b>	<b>964,613,327</b>
<b>Other operating income / (expense)</b>		<b>5,272,000</b>	<b>7,982,747</b>
<b>OPERATING INCOME / LOSS</b>		<b>-55,186,526</b>	<b>-328,287,973</b>
<b>Non-operating income / expense</b>			
Income (expense) Interest		-139,504,178	-239,048,982
Income (loss) from foreign exchange differences		12,907,403	-16,153,100
Income (loss) from currency exchange			-266,191
Income (loss) from embossed long-term assets		-2,354,191	-1,815,190
Impairment losses			-133,998
Other operating expenses (income)		-116,712,807	-24,686,441
<b>Total non-operating income / (expense)</b>		<b>-245,663,773</b>	<b>-282,103,901</b>
<b>Profit before taxation (080±170±180)</b>		<b>-300,850,298</b>	<b>-610,391,874</b>
Income tax		30,719,445	14,593,816
<b>Total net income (loss) for the period (210±220)</b>		<b>-331,569,743</b>	<b>-624,985,690</b>

Source: Asian Development Bank and technical assistance consultants.

## Barki Tojik's Statement of Financial Position as per 01.01.2014

<b>Balance Sheet as per 01.01.2014</b>		beginning of	end of
		reporting	reporting
		period	period
<b>ASSETS</b>			
<b>Fixed Assets</b>			
Accumulated depreciation (11100)		1,646,953,257	1,814,659,201
Net Capital Expenditures		4,811,585,428	5,050,251,288
<b>Current Assets</b>			
Cash on hand (10100)		674,433	812,108
Cash at bank (10200)		8,737,647	2,188,427
Account receivable (10400)		255,043,708	447,270,811
Other receivables (10500)		82,181,913	214,949,072
Inventories (10700)		818,883,388	1,150,853,238
Expenses paid in advance (10800)		34,575,345	55,866,081
<b>Total CURRENT ASSETS</b>		<b>1,200,096,434</b>	<b>1,871,939,736</b>
<b>Non-current Assets</b>			
The carrying value of intangible assets (11000-11100)		237,103	212,523
Biological assets (11400)		30,369	18,118
Long-term investments (11600± 11661,11662)		182,512,346	182,512,346
Deferred tax assets (11700)		69,597,043	69,597,043
Long-term receivables (11800)		49,011,214	1,302,818
<b>Total NON-CURRENT ASSETS</b>		<b>5,112,973,503</b>	<b>5,303,894,136</b>
<b>TOTAL ASSETS</b>		<b>6,313,069,937</b>	<b>7,175,833,873</b>
<b>LIABILITIES</b>			
<b>Current Liabilities</b>			
Trade payables (22000)		776,192,964	1,261,664,259
Short-term debt (22100)		691,912,331	1,225,440,520
Short-term accrued liabilities (22200)		720,697,384	1,040,610,847
Taxes payable (22300)		211,581,288	386,618,105
Provisions for liabilities and charges (22400)		11,232,395	11,889,148
Other current liabilities (22500)		2,985,026	3,682,205
<b>Total CURRENT LIABILITIES</b>		<b>2,414,601,389</b>	<b>3,929,905,085</b>
<b>Non-current Liabilities</b>			
Long-term liabilities (22600±22661,22662)		1,078,580,536	1,048,405,433
Deferred income (22700)		1,803,099,066	1,823,831,050
<b>Total Non-CURRENT LIABILITIES</b>		<b>2,881,679,602</b>	<b>2,872,236,483</b>
<b>TOTAL LIABILITIES</b>		<b>5,296,280,991</b>	<b>6,802,141,568</b>
<b>Shareholders' equity</b>			
Declared (authorized) capital (33000)		383,836,212	383,836,212
Additional paid-in capital (33100)		-9,127	-9,455
Retained earnings (33200)		608,659,999	-34,436,314
Capital reserve (33300)		24,301,862	24,301,862
<b>TOTAL SHAREHOLDERS' EQUITY</b>		<b>1,016,788,946</b>	<b>373,692,304</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>		<b>6,313,069,937</b>	<b>7,175,833,873</b>

Source: Asian Development Bank and technical assistance consultants.

## Barki Tojik's Statement of Cash Flows for 2013

Cash Flow Statement	Fiscal year 2013
<b>I. Operating activity</b>	
<b>Cash flows from operating activity</b>	
Income from sales	928,044,517
Other receipts from operating activity	21,927,339
<b>Total gross income from operating activity</b>	<b>949,971,856</b>
<b>Cash outflows in terms of operating activity</b>	
Cost of sales	493,294,905
Salaries and social security tax payments	206,168,240
Payment for Services	67,742,157
Interest payment	144,778,705
Tax paying of income	41,103,092
Payment of other taxes	188,797,862
Other operating payments	54,388,409
<b>Total disposal part of the operations</b>	<b>1,196,273,370</b>
<b>Cash flows from operating activity</b>	<b>-246,301,514</b>
<b>2. Investing activity</b>	
Acquisition of fixed assets and real estate (outflow)	-1,531,922
<b>3. Financial activity</b>	
Investments (deposits) founders (owners)	554,313,613
Loans, Borrowings	314,376,445
<b>Cash Flow financing activity</b>	<b>239,937,168</b>
Realized gains and losses on exchange	1,484,723
<b>Net change in cash</b>	<b>-6,411,545</b>
Funds at the beginning of the reporting period	9,412,079
Funds at the end of the reporting period	3,000,535

Source: Asian Development Bank and technical assistance consultants.



## Annex 2

## TA 8547 TAJ Wholesale Metering and Transmission Reinforcement

## Questions regarding Financial and economic assessment

## Вопросы по оценке финансово-экономической деятельности (ОФЭД)

FMA –	Вопросник	Barki Tojik/PMU reply – Ответы Барки Точик/ЦУП
Please complete the FMA questionnaire for this project. It is based on a previous projects and needs updating with the most current data.	Пожалуйста заполните вопросник. Он основан на подготовленных ранее проектах и должен быть обновлен в соответствии с текущей ситуацией.	
<p>Please provide the most current documents of the following:</p> <ul style="list-style-type: none"> <li>• Barki Tojik Annual Financial Statements from 2012 to 2014 (and annual Financial Statement from Deloitte, if applicable)</li> <li>• Balance sheets 2012 – 2014</li> <li>• Income Statement 2012 – 2014</li> <li>• Cash flow Statement 2012 – 2014</li> <li>• Is there any documentation from the auditors?</li> <li>• Are there any financial projections for 2012, 2013, and 2014 and beyond?</li> </ul>	<p>Пожалуйста предоставьте последнюю информацию по следующим вопросам:</p> <ul style="list-style-type: none"> <li>• Годовая бухгалтерская отчетность Барки Точик с 2012 по 2014 года, включая, если есть, финансовый отчет компании Deloitte)</li> <li>• Балансовые ведомости за 2012 – 2014</li> <li>• Отчет о доходах за 2012 – 2014</li> <li>• Отчет о движении денежных средств за 2012 – 2014</li> <li>• Документация от аудиторов, если есть.</li> <li>• Существуют ли финансовые прогнозы на 2012, 2013, 2014 года и далее?</li> </ul>	<p>Financial Statements for 2012 and 2013 are enclosed.</p> <p>Financial and Economic Plan for 2012-2014 is enclosed.</p>
The previous assessments have shown that there is room to improve in several areas and focus of our FMA should be what changes Barki Tojik has made over the last 12 to 18 months and what Barki Tojik intends to do in the future to mainstream the financial processes to achieve better outcomes.	Проведенные ранее оценки показали возможность улучшения в различных вопросах, поэтому целью данной ОФЭД являются изменения, достигнутые БТ за прошедшие 12-18 месяцев и меры, которые БТ намеревается предпринять в будущем в качестве основных	

	финансовых процессов для получения наилучших результатов.	
<p>Please provide information about improvements / changes:</p> <ul style="list-style-type: none"> <li>• How has the overall financial management capacity improved since 2011?</li> <li>• Has there been any progress with valuation of inventory after 2012?</li> <li>• Has there been any progress with receivables and payables?</li> <li>• Has Barki Tojik still difficulties to service its debt</li> <li>• Is there a current demand forecast and/or forecast energy balance? Is there an investment plan to support the future demand development?</li> <li>• How high are the imports in 2012, 2013, and forecast?</li> <li>• Are there any (summer) exports from excess hydropower to Afghanistan due to the new substation in Kunduz? What is the forecast?</li> </ul>	<p>Пожалуйста, предоставьте информацию по улучшениям/изменениям в следующих областях:</p> <ul style="list-style-type: none"> <li>• Насколько улучшилось общее управление финансовой деятельностью с 2011 года?</li> <li>• Есть ли прогресс с инвентаризацией после 2012 года?</li> <li>• Есть ли прогресс с получением и выплатами?</li> <li>• Есть ли у Барки Точик сложности с выплатой долговых обязательств?</li> <li>• Существует ли прогноз потребления и/или прогноз баланса электроэнергии? Есть ли план инвестиций для поддержки будущего развития потребления?</li> <li>• Объемы импорта в 2012, 2013 годах и прогнозы?</li> <li>• Существует ли любой (летний) экспорт излишков электроэнергии в</li> </ul>	<p>Since 2011 the activities on the Company transition to IFRS are on-going.</p> <p>In accordance with the Energy Company Restructuring Plan, the assessment of OJSHC Barqi Tojik fixed assets and inventories (commodity stocks) is carried out by the LLC 'BDO Consulting' in cooperation with 'Premier Consulting'. It is planned, that the activities would be completed by August 2014.</p> <p>From 7 July 2014, The Grant Thornton Consortium, Armenia jointly with LLC Grant Thornton, Tajikistan had initiated the 'Barqi Tojik' receivables and payables valuation. The activities would be completed by the end of December 2014.</p> <p>Due to lack of the export of the electricity excess within the summer period there are problems with the deBarki Tojik obligation payments. The Electrical Energy Balance Forecasting until 2018 is enclosed. The investment projects plan for the electricity sector development is under development.</p> <p>In 2012: 2366,4 mln. kilowatt hour (kWh) In 2013: 2732,2 mln. kWh</p>

	Афганистан из-за строительства новой подстанции в г. Кундуз? Прогнозы?	Electricity supply to Afghanistan in 2012 is 593,8 mln. kWh, including Kunduz – 470,5 mln. kWh. In 2013 it was 937,1 mln. kWh, including Kunduz – 791,1 mln. kWh. It is expected, that in the future the supply to Afghanistan would be up to 1 billion kWh.
<b>1. Please provide information about current tariffs:</b>	<b>2. Пожалуйста предоставьте детали о текущих тарифах:</b>	
<ul style="list-style-type: none"> <li>• Details about current tariffs and structure</li> <li>• When was the last tariff increase?</li> <li>• When do you expect the next tariff increase?</li> <li>• Is there any information how the tariff will develop long-term, over the next years (forecasting)</li> </ul>	<ul style="list-style-type: none"> <li>• Детали о текущих тарифах и положениях</li> <li>• Когда тарифы были изменены в последний раз?</li> <li>• Когда намечено следующее повышение тарифов?</li> <li>• Информация относительно долгосрочного развития тарифов, прогноз на последующие года.</li> </ul>	<p>According to the Resolution No. 47 as of 26 June 2014 of the Antimonopoly Service under the President of the Republic of Tajikistan the Price List No. 09-01-2014 is applied.</p> <p>The new rates (tariff) are introduced from 1 July 2014 by the Government Resolution No.376 as of 3 June 2014.</p> <p>The tariff change is beyond the Barqi Tojik competence.</p>
<b>2. Please provide information about connection rate:</b>	<b>3. Предоставьте информацию по коэффициентам возвратности средств:</b>	
<ul style="list-style-type: none"> <li>• How high is the current collection rate, collection rate of the past 5 years</li> <li>• How is the collection rate calculated?</li> <li>• Calculation of bad debt of Barqi Tojik</li> <li>• What is the revenue collection process?</li> <li>• Description of the billing</li> </ul>	<ul style="list-style-type: none"> <li>• Насколько высок коэффициент возврата средств на настоящий момент, за прошедшие 5 лет?</li> <li>• Как рассчитывается коэффициент возвратности средств?</li> <li>• Расчет невозвратных задолженностей.</li> </ul>	<p>Given Tajik energy system exit from the Central Asia united power grid and parallel operation impossibility, since 2011 the Energy Holding Company incurs losses.</p> <p>Operating activities net cash</p>

<p>process</p> <ul style="list-style-type: none"> <li>• Timeframe for Barki Tojik's accounts payable? How many days, goal of 50 days by 2020 achievable?</li> <li>• Barki Tojik's days' receivables for electricity and heat sales in 2012, 2013 and 2014</li> <li>• How long do the customers need to pay (by groups – eg households, industry, public)</li> <li>• Is there any forecasting about improvement of collection rate over the next 5 year?</li> <li>• How will the project improve the collection rate (installing of wholesale meters)</li> </ul>	<ul style="list-style-type: none"> <li>• В чем заключается процесс сбора доходов?</li> <li>• Описание биллинговых процессов.</li> <li>• Сроки выплаты задолженностей Барки Точик? Сколько дней из намеченных до 2020 года пятидесяти будут достигнуты?</li> <li>• Ежедневные сборы Барки Точик по продажам электро- и теплоэнергии в 2012, 2013 и 2014 годах.</li> <li>• В течение какого времени абоненты должны оплатить счет (по группам – а именно домохозяйства, промышленность, муниципальные абоненты и т.д.)</li> <li>• Существуют ли прогнозы по улучшению сборов на следующие 5 лет?</li> <li>• Как данный проект поможет улучшить сборы (установка оптовых счетчиков)</li> </ul>	<p>proceeds/accrued loans interests for the period + principal amount of loans to be paid for the period.</p> <p>The collection percentage is as follows: In 2012: 87.1 %; In 2013: 83.9%</p> <p>The payment period is from 3 up to 7 days from the invoice issue moment (billing).</p> <p>To improve the collection there is considered an installation of the Automated Metering System (AMR) and SCADA, in addition at the present time FinClient Program is operating in Dushanbe and Sughd Oblast that will be connected to the Billing System in the near future.</p>
<p><b>4. Questions in regard to the economic analysis.</b></p> <ul style="list-style-type: none"> <li>• What is the current and expected inflation rate?</li> <li>• Is there a weighted average billed tariff?</li> <li>• What are the (weighted average) cost of supply/generation?</li> </ul>	<p><b>3. Вопросы по экономическому анализу.</b></p> <ul style="list-style-type: none"> <li>• Текущий и ожидаемый рост инфляции?</li> <li>• Существует ли средний оцененный тариф?</li> <li>• Стоимость (оцененная) поставок/генерации?</li> </ul>	<p>Current and expected inflation rate is 7.5%. Weighted average billed rate is 9.56 dirams. In 2013 the net cost/HPPs generation was 1.16 dirams.</p>