



# Report and Recommendation of the President to the Board of Directors

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Project Number: 42401-014  
May 2016

## Proposed Multitranche Financing Facility Azerishiq Open Joint-Stock Company Power Distribution Enhancement Investment Program (Guaranteed by the Republic of Azerbaijan)

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Asian Development Bank



## CURRENCY EQUIVALENTS

(as of 14 April 2016)

Currency unit – Azerbaijan manat (AZN)

AZN1.00 = \$0.6439

\$1.00 = AZN1.5530

## ABBREVIATIONS

ADB	–	Asian Development Bank
FAM	–	facility administration manual
GW	–	gigawatt
IEE	–	initial environmental examination
kV	–	kilovolt
kWh	–	kilowatt-hour
MFF	–	multitranches financing facility
MW	–	megawatt
PMU	–	project management unit
TA	–	technical assistance

## NOTE

In this report, "\$" refers to US dollars.

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INVESTMENT PROGRAM<sup>a</sup> AT A GLANCE

1. Basic Data		Project Number: 42401-014		
Project Name	Power Distribution Enhancement Investment Program	Department /Division	CWRD/CWEN	
Country	Azerbaijan	Executing Agency	Azerishiq OJSC	
Borrower	Azerishiq OJSC			
2. Sector	Subsector(s)	ADB Financing (\$ million)		
✓ Energy	Electricity transmission and distribution		375.00	
	Energy efficiency and conservation		375.00	
		Total	750.00	
3. Strategic Agenda	Subcomponents	Climate Change Information		
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Mitigation (\$ million)	500.00	
Environmentally sustainable growth (ESG)	Global and regional transboundary environmental concerns	CO <sub>2</sub> reduction (tons per annum)	1,100,000	
		Climate Change impact on the Project	Low	
4. Drivers of Change	Components	Gender Equity and Mainstreaming		
Governance and capacity development (GCD)	Institutional development Public financial governance	Some gender elements (SGE)	✓	
5. Poverty Targeting		Location Impact		
Project directly targets poverty	No	Rural	Medium	
		Urban	Medium	
		Nation-wide	High	
6. Risk Categorization:	Complex			
7. Safeguards Categorization [Tranche 1]	Environment: B Involuntary Resettlement: C Indigenous Peoples: C			
8. Financing				
Modality and Sources	Indicative Tranches (\$million)			Amount (\$million)
	I	II	III	
ADB				750.00
Sovereign MFF-Tranche (Loan): Ordinary capital resources	250.00	250.00	250.00	750.00
Cofinancing				0.00
None				
Counterpart				250.00
Government	75.00	85.00	90.00	250.00
Total	325.00	335.00	340.00	1,000.00
9. Effective Development Cooperation				
Use of country procurement systems	No			
Use of country public financial management systems	No			

## INVESTMENT PROGRAM<sup>a</sup> AT A GLANCE

### 10. Country Operations Business Plan

**CPS**

<http://www.adb.org/sites/default/files/institutional-document/81989/cps-aze-2014-2018-0.pdf>

**COBP**

<http://www.adb.org/documents/azerbaijan-country-operations-business-plan-2016-2018>

### 11. Investment Program Summary

The Power Distribution Enhancement Investment Program (the Investment Program) aims to support the government's efforts in providing reliable and efficient power supply to meet its growing energy needs for inclusive development, especially in secondary cities and rural areas. Through rehabilitation and augmentation of the power distribution network throughout the country, the investment program will improve power supply reliability and efficiency, and support the improvement of operational and financial performance of the state-owned power distribution company, Azerishiq Open Joint-Stock Company (OJSC).

**Impact:** increased availability of reliable electricity supply to all domestic consumers.

**Outcome:** improved efficiency and reliability of the power distribution networks.

**Outputs:** (i) Customer services lines rehabilitated and smart meters installed and operational, (ii) Distribution network including distribution lines and substations rehabilitated, augmented, and functional, and (iii) Institutional capacity improved and corporate reform achieved

**Implementation Arrangements:** Azerishiq OJSC will be the executing agency.

**Project Readiness:** The MFF program has been prepared under PPTA 8891.

### 12. Milestones

Modality	Estimated Approval	Estimated Completion <sup>b</sup>
Multitranchise financing facility	14 June 2016	31 December 2022
Tranche I	21 June 2016	30 June 2019
Tranche II	29 November 2017	30 June 2022
Tranche III	30 March 2018	31 December 2022

### 13. Project Data Sheet (PDS)

**PDS<sup>c</sup>**

<http://www.adb.org/projects/42401-014/main>

<sup>a</sup> Multitranchise Financing Facility (MFF).

<sup>b</sup> For MFF, this refers to the end of the availability period; for tranches, this refers to the tranche closing date.

<sup>c</sup> Safeguard documents can be viewed by clicking the Document's hyperlink in the Project Data Sheet (PDS) page.

## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed multitranche financing facility (MFF) to Azerishiq Open Joint-Stock Company (OJSC), guaranteed by the Republic of Azerbaijan, for the Power Distribution Enhancement Investment Program.<sup>1</sup>

2. The investment program aims to support the government's efforts in providing reliable and efficient power supply to meet its growing energy needs for inclusive development, especially in secondary cities and rural areas. Through rehabilitation and augmentation of the power distribution network throughout the country, the investment program will improve power supply reliability and efficiency, and support the improvement of operational and financial performance of the state-owned power distribution company.<sup>2</sup>

## II. THE PROJECT

### A. Rationale

3. **Sector overview.** The energy sector plays a leading role in Azerbaijan's socioeconomic growth. The total electricity production in 2014 reached 22.7 billion kilowatt-hours (kWh), of which 94% was generated from thermal power and 6% from hydropower. The current total installed generation capacity is 6.2 gigawatts (GW) including gas-fired thermal power plant capacity of 5.1 GW (82.3%) and hydropower plant capacity of 1.1 GW (17.7%). In 2014, the available total generation capacity was 5.9 GW while the peak demand was 4.1 GW. At present, electricity production is sufficient to cover domestic demand, with the surplus being exported to neighboring countries, taking advantage of regional synergies.<sup>3</sup> Though the economic growth is currently experiencing slowdown, the recovery is projected to strengthen in 2018 and beyond. Domestic electricity sales are expected to grow due to economy recovery and improved power supply reliability.

4. The key challenges facing the energy sector are (i) improving operational and financial efficiency, (ii) restoring and maintaining high levels of services throughout the country, and (iii) establishing a sustainable cost-recovery financing mechanism. Despite significant investments made in generation and transmission facilities since 2005, supply of reliable electricity to customers is limited as a result of bottlenecks in the distribution network, where relatively little investment has been made because of budget constraints.<sup>4</sup> In 2014, the technical and commercial distribution losses were 18.8%<sup>5</sup> and revenue collection was 70.0%.<sup>6</sup> Although there is almost 100% access to energy, the existing distribution networks outside of Baku and its suburban areas, particularly in secondary cities and rural areas, are in poor condition and cannot provide reliable, high-quality services to customers, which affects the living conditions of households and discourages new economic activities. The majority of power distribution facilities have been in operation for 30 years or more. The equipment has reached the end of its

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<sup>1</sup> The design and monitoring framework is in Appendix 1.

<sup>2</sup> ADB. 2015. *Technical Assistance to Azerbaijan for Preparing the MFF Power Distribution Enhancement Investment Program*. Manila.

<sup>3</sup> In 2014, power export accounted for 2% of the total production.

<sup>4</sup> Currently, all investment in distribution networks relies on the state budget with no private sector investments participated in the distribution subsector due to slow progress on sector reform.

<sup>5</sup> Refers to the aggregate level for the distribution network outside of Baku and its suburban area, including technical loss of 11.13% and commercial loss of 7.73%. In Baku and its suburban area, the technical loss is 8.97% and commercial loss is 0.74%. Commercial losses include electricity theft and inaccurate metering.

<sup>6</sup> The revenue not collected amounts to about \$200 million.

service life and has become undependable, with more frequent outages and increasing losses. The unreliable power supply and inefficient utilization of resources undermine industrial competitiveness and constrain economic growth. The government aims to decrease urban–rural income disparity and diversify from hydrocarbon-export industries by increased economic activity, which requires reliable electricity. Rehabilitation and expansion of the distribution network is now considered the priority for future energy sector investments.

5. The government owns and manages the energy sector in Azerbaijan, and is committed to sector reform with the aim of improving system efficiency, supply reliability, and transparency. As the first reform step, all power distribution assets and functions were entirely separated from the state-owned company—Azerenerji OJSC<sup>7</sup>—and transferred to another state-owned company—Azerishiq OJSC<sup>8</sup> (formerly Bakielektrikshebeke OJSC, i.e., Baku Electric Company). Through unbundling, the government will improve the sector operation efficiency and transparency by separating cost centers into different networks, supporting commercialization, and holding each company accountable for its performance. Further unbundling of the generation and transmission assets is under consideration by the government. Through the implementation of the Power Distribution Enhancement Investment Program, the efficiency and transparency of the distribution network is expected to substantially improve, which will support further sector reform especially unbundling. The Asian Development Bank (ADB) is supporting the government's reform efforts through a technical assistance for encouraging private sector participation in the power sector.<sup>9</sup> A road map for private sector participation in Azerbaijan's energy sector has been drafted and is expected to be finalized in 2016.

6. The distribution system in Baku, the capital city, has received significant investment from the state budget, creating a modern and technically efficient system. Concurrent with the technical improvements, Azerishiq OJSC instigated a rigorous loss reduction and collection improvement program in Baku, installing modern metering, operating a modern tamper-proof billing system, and ensuring all customers paid on time. As a result of this program, distribution losses have been reduced to levels similar to those in many European countries. Azerishiq OJSC intends to replicate the successful experience in Baku in the rest of the country by 2020.

7. At present, the energy sector is facing a funding shortage with tariffs that do not cover capital costs. The retail electricity tariff for 2014 was AZN0.06/kWh (including value-added tax). The tariff is adequate to operate the existing network but insufficient to rehabilitate and augment the network. Financial and tariff reform will be required to meet Azerishiq OJSC's future investment requirements.

8. **Sector road map.** The government has made a strong commitment to provide adequate and reliable electricity supply to all consumers by 2020, as reflected in the country's medium-term development framework *Azerbaijan 2020: Look into the Future*.<sup>10</sup> The inclusive growth

<sup>7</sup> Before February 2015, OJSC Azerenerji was a vertically integrated and 100% state-owned enterprise in charge of electricity generation, transmission, and distribution except for distribution in Baku and Nakhchivan. Azerenerji has established separate business units to manage the transmission and generation assets accordingly, and improvement in its governance and operation efficiency is ongoing.

<sup>8</sup> Azerishiq OJSC is a 100% state-owned enterprise responsible for electricity distribution, supply, and other customer services (connection, metering, and billing) in Azerbaijan, except the functions in Nakhchivan Autonomous Republic, which is directly administered by the state energy agency of Nakhchivan Autonomous Republic. The national distribution networks administrated by Azerishiq comprise seven regional networks, i.e., Aran, Baku, Canub, Garb, Markazi Aran, Shimal, and Shimal Garb.

<sup>9</sup> ADB. 2014. *Technical Assistance for Preparing an Enabling Environment for Private Sector Participation in Azerbaijan's Energy Sector*. Manila.

<sup>10</sup> Government of Azerbaijan. 2012. *Azerbaijan 2020: Look into the Future*. Baku.



agenda consists of high social welfare, sustainable economic growth, broad opportunities and decent jobs for all, reduced regional inequalities, and access of remote villages to public utilities. A Presidential order was issued on 10 February 2015, which sets the energy sector restructuring targets and actions to be taken.<sup>11</sup> The order requires Azerishiq OJSC to take all necessary actions to modernize the distribution network and provide consumers in Azerbaijan with reliable, safe, and efficient power supply.

9. The government recognizes that the establishment of a full-cost recovery tariff is one of the factors that will ensure efficient use of the energy resources. The government undertakes to achieving full cost recovery for Azerishiq OJSC by 2022, by pursuing financial and tariff reform and gradually adjusting the tariff level and structure, taking into account cost reduction, efficiency improvement, and targeted financial support from the government to protect vulnerable customers groups. ADB will support the government to develop and implement an energy sector financial recovery plan.<sup>12</sup>

10. **Strategic context.** The proposed investment program is closely aligned with ADB's Midterm Review of Strategy 2020 and ADB's country partnership strategy, 2014–2018 for Azerbaijan.<sup>13</sup> ADB is committed to supporting improved energy efficiency and operation so as to provide adequate and reliable energy supply throughout the country. This can then stimulate new, non-oil economic activities, promote inclusive growth, and reduce urban–rural disparities. The investment program contributes to achieving ADB's Energy Policy objectives of promoting energy efficiency, access to energy for all, and capacity building and governance.<sup>14</sup>

11. Major lessons from previous ADB interventions in the energy sector are incorporated in the program design, which include the need for (i) continuous dialogue with the government on tariff issues to promote energy sector reform, (ii) capacity building for power utilities, and (iii) good governance and commercialization. ADB provided Azerenerji OJSC with a loan of \$160 million to finance power transmission improvement.<sup>15</sup> The ongoing interventions include technical assistance for preparing a pilot renewable energy project (biomass cogeneration)<sup>16</sup> and policy and advisory technical assistance (footnote 9). The proposed investment program complements ongoing assistance in facilitating low-carbon development and climate resilience through improved energy efficiency.

12. **Policy framework.** The overall vision of the government's energy sector strategy is to utilize domestic energy resources efficiently, protect the country's energy security, and ensure the delivery of reliable and adequate energy services throughout the country. The energy sector policy framework<sup>17</sup> features (i) promoting efficient use of energy resources and increasing sector operation efficiency, (ii) establishing a sound regulatory environment to promote competition, (iii)

<sup>11</sup> Government of Azerbaijan. 2015. *Presidential Order No. 1045*. Baku.

<sup>12</sup> Policy and advisory technical assistance (TA) for preparing and implementing an energy sector financial recovery plan is under processing and is expected to be approved in June 2016.

<sup>13</sup> ADB. 2004. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific*. Manila;

ADB. 2015. *Country Partnership Strategy: Azerbaijan, 2014–2018*. Manila.

<sup>14</sup> ADB. 2009. *Energy Policy*. Manila.

<sup>15</sup> ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to Azerbaijan for the Power Transmission Enhancement Project*. Manila.

<sup>16</sup> ADB. 2013. *Technical Assistance for Renewable Energy Development (Biomass Cogeneration) Project*. Manila.

<sup>17</sup> Decree 3043 of the President of the Republic of Azerbaijan. 2008. *State Program on Poverty Reduction and Sustainable Development in the Republic of Azerbaijan for 2008–2015*. Baku. The State Program for Development of Fuel and Energy Sector in Azerbaijan for 2016–2025 is under preparation. The government has confirmed that the sector policy contained within the existing state program for 2005–2015, and the key priority areas identified therein, will be incorporated in the state program for the next planning period and continue to be implemented.

improving the sector structure to attract more investments, (iv) promoting sustainable development to ensure environmental protection, (v) strengthening financial discipline in the sector and ensuring full payment for energy consumption, and (vi) increasing the share of renewable energy in power generation.

13. To achieve the vision of long-term development, the following main goals have been identified: (i) ensuring that power needs are fully met, (ii) facilitating gradual revision of tariffs to achieve full cost recovery, (iii) improving the efficiency of operations and promoting financial and operational transparency, (iv) promoting energy efficiency and alternative energy technologies, and (v) encouraging private sector participation.

14. **Investment program.** An energy sector master plan has been prepared with a technical assistance from ADB<sup>18</sup> and other development partners. The master plan sets out an investment strategy for the power generation, transmission, and distribution subsectors<sup>19</sup> and forms the basis of the Azerishiq Investment Plan (2015–2025). The plan envisages the total investment for distribution network improvement in 2015–2025 at about \$4.6 billion.<sup>20</sup> The ADB-supported investment program of \$1.0 billion represents approximately 22% of the overall requirement and selects priority investment components. The investment program will be undertaken in sequence and cover all distribution networks in seven regions: Aran, Baku, Canub, Garb, Markazi Aran, Shimal, and Shimal Garb. The immediate priority for investment in the distribution network is to rehabilitate the distribution networks that currently experience frequent system outages and supply interruptions to customers.

15. **Multitranche financing facility.** The MFF will allow ADB to establish a stronger long-term partnership with the government meeting its development goals, support energy sector reform, improve energy policies, and strengthen governance and capacities. Rehabilitation and enhancement of the distribution network will require substantial capital, which cannot be taken on by the government at once. The MFF enables ADB to finance the investment programs sequentially matching Azerishiq's implementation capacity. The MFF modality supports high project readiness and timely implementation, such as support for project design, advance procurement, and safeguard due diligence being conducted upfront.

16. The proposed investment program has the following key benefits: (i) support to the government in achieving its strategic development targets, (ii) introduction of modern technology and improvements in energy efficiency, (iii) support to Azerishiq OJSC to improve corporate governance and transparency, (iv) knowledge and skills transfer via the training of power utility staff to international standards in the implementation of the latest technology, and (v) improving electricity supply service quality and enhancing productivity of small- and medium-sized enterprises. The investment program will benefit 1.45 million customers, of which 60% are residential customers.

## B. Impact and Outcome

17. The investment program's impact will be increased availability of reliable electricity supply to all domestic consumers. The outcome will be improved efficiency and reliability of the power distribution networks.

<sup>18</sup> ADB. 2014. *Update of the Energy Sector Master Plan of Azerbaijan, 2013–2025: Final Report*. Manila.

<sup>19</sup> The master plan is a reference document for the government used in formulating its investment framework for the energy sector.

<sup>20</sup> The distribution network in Azerbaijan includes 35 kilovolt (kV), 10 kV, and 6 kV systems, and part of associated 110 kV lines and substations.

## C. Outputs

18. The investment program has three components, which are expected to be implemented through three tranches with each tranche covering all seven regional distribution networks. The Tranche 1 and subsequent tranches will have similar components but only with regard to different districts under each regional network, which are selected based on the priority and implementation capacity of Azerishiq OJSC.

- (i) **Rehabilitation of distribution networks.** This involves rehabilitation and augmentation of aging medium- and low-voltage distribution networks including 6–110 kilovolt (kV) substations and distribution lines.
- (ii) **Rehabilitation of customer service lines and installation of smart meters.**<sup>21</sup> This includes replacement of 0.4 kV customer service lines including installation of smart meters. The existing 0.4 kV bare overhead conductors will be completely replaced with new self-supporting aerial bundled cables, and the existing poles will be replaced. The new cables will prevent energy theft.
- (iii) **Support for institutional strengthening.** This includes (a) capacity building and training for financial management, accounting and auditing, project management, procurement, monitoring and evaluation, and social and environmental safeguards; (b) a public information campaign for energy efficiency improvement and tariff reform; and (c) improvement of operation and maintenance facilities in the Azerishiq OJSC regional distribution networks.

## D. Investment and Financing Plans

19. The investment program is estimated to cost \$1.0 billion (Table 1). Azerishiq OJSC has requested ADB to provide an MFF of up to \$750 million from ADB's ordinary capital resources to help finance part of the investment program. The MFF is expected to comprise three tranches, subject to Azerishiq OJSC's submission of related periodic financing requests, execution of the related legal agreements for each tranche, and fulfillment of terms and conditions and undertakings set forth in the framework financing agreement. The first tranche loan will be financed from ordinary capital resources and guaranteed by Azerbaijan. The loan will have a 25-year term, including a grace period of 5 years, with custom-tailored repayment; an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year; and such other terms and conditions set forth in the draft loan and guarantee agreements.

**Table 1: Investment Program**  
(\$ million)

Item	MFF <sup>a</sup>	Tranche 1
<b>A. Base Cost<sup>b</sup></b>		
1. Rehabilitation of distribution networks	650.0	210.4
2. Rehabilitation of customer service lines and meters	215.0	73.0
3. Consulting services	15.0	5.0
4. Institutional strengthening	20.0	7.4
<b>Subtotal (A)</b>	<b>900.0</b>	<b>295.8</b>
<b>B. Contingencies<sup>c</sup></b>	<b>65.0</b>	<b>19.2</b>
<b>C. Financing Charges During Implementation<sup>d</sup></b>	<b>35.0</b>	<b>10.0</b>
<b>Total (A+B+C)</b>	<b>1,000.0</b>	<b>325.0</b>

ADB = Asian Development Bank, MFF = multitranchise financing facility, OCR = ordinary capital resources.

<sup>a</sup> Includes taxes and duties of \$69.9 million to be financed from government resources through budget allocation.

<sup>21</sup> The specific model will be further evaluated and selected during the implementation stage.

<sup>b</sup> In mid-2015 prices.

<sup>c</sup> Physical contingencies computed at 4.7% of the base cost. Price contingencies computed at 1.5% on foreign exchange costs and 5.1% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>d</sup> Includes interest and commitment charges. Interest during construction for the ADB's ordinary capital resources loan has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5%. Commitment charges for ADB's ordinary capital resources loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB estimates.

20. The financing plan is in Table 2.

**Table 2: Financing Plan**  
(\$ million)

Source	Tranche 1	Tranche 2	Tranche 3	MFF	Share of Total (%)
Asian Development Bank					
Ordinary capital resources	250.0	250.0	250.0	750.0	75.0
Government	75.0	85.0	90.0	250.0	25.0
<b>Total</b>	<b>325.0</b>	<b>335.0</b>	<b>340.0</b>	<b>1,000.0</b>	<b>100.0</b>

MFF = multitranche financing facility.

Source: Asian Development Bank estimates.

## E. Implementation Arrangements

21. The implementation arrangements are summarized in Table 3 and described in detail in the agreed facility administration manual (FAM).<sup>22</sup>

**Table 3: Implementation Arrangements**

Aspects	Arrangements		
Implementation period	1 July 2016–31 December 2022 (for the MFF) 1 July 2016–31 December 2018 (for Tranche 1)		
Estimated completion date	31 December 2022 (for the MFF) 30 June 2019 (for Tranche 1)		
Management			
(i) Oversight body	The Office of the Deputy Prime Minister will be the focal point for overall coordination of intergovernment agencies.		
(ii) Executing agency	Azerishiq OJSC		
(iii) Implementation unit	Project management unit established within Azerishiq OJSC with a minimum of eight full-time staff		
Procurement	International and national competitive bidding	Multiple contracts	\$890 million (for the MFF) \$317 million (for Tranche 1)
Consulting services (Tranche 1)	QCBS (90:10) and CQS	Three contracts	\$5 million
Advance contracting and retroactive Financing <sup>a</sup>	Advance contracting applies to all tranches. Retroactive financing will be considered for all tranches subject to ADB's policies and procedures. For each tranche, ADB management may permit retroactive financing of eligible expenditures incurred for goods, works, and consulting services no earlier than 12 months before the loan signing date and not exceeding 20% of the loan amount.		

<sup>22</sup> Facility Administration Manual (accessible from the list of linked documents in Appendix 2).

Aspects	Arrangements
Disbursement	The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.

ADB = Asian Development Bank, CQS = consultant's qualifications selection, MFF = multitranches financing facility, OJSC = Open Joint-Stock Company, QCBS = quality- and cost-based selection.

<sup>a</sup> The government and Azerishiq have been advised that approval of advance contracting will not commit ADB to subsequently approve financing for the project.

Source: ADB estimates.

22. Azerishiq OJSC will serve as the executing agency and be responsible for the overall investment program. The Office of the Deputy Prime Minister will be the focal point for overall coordination of intergovernment agencies. Azerishiq OJSC has established a project management unit (PMU) for the implementation of the entire MFF.

23. For procurement of the turnkey contracts for 35 kV/10 kV substations and complete transformer substations, national competitive bidding method will be used by applying full international competitive bidding procedures and using ADB's standard bidding document but permitting (i) submission of bids in Azeri language and (ii) bid comparison based on the total cost at destination including all taxes and duties. This approach takes into account the nature of turnkey contracts, the present condition of local industry, the wide geographic spread of works across seven regional networks, and sufficient availability of domestic contractors based on Azerishiq's previous successful experience and market survey. It aims to encourage the development of domestic contracting and manufacturing industries while ensuring open competition to international and national bidders. ADB will closely review the bidding process of these contracts and require further adjustments as necessary to ensure open competition.

### III. DUE DILIGENCE

#### A. Technical

24. The distribution investments are prioritized and optimized to meet the projected demand, and reflect appropriate design and planning standards. The latest technology will be applied in project design, installation, and operation.<sup>23</sup> Detailed subproject descriptions and technical due diligence are provided in a technical due diligence report.<sup>24</sup>

#### B. Economic and Financial

25. Economic and financial analyses will be carried out for each tranche under the investment program. For the first tranche, the project investments yield an economic internal rate of return of 13.4%, exceeding the economic opportunity cost of 12.0%. The economic benefits are based on reduction of outages and distribution losses in the comparison of with- and without- project cases. The economic internal rate of return exceeds the minimum rate for all the sensitivities, and thus the project is considered economically viable. To improve the sector's financial sustainability, the government undertakes to implement a cost-recovery tariff by 2022. Incorporating the estimation of the cost-recovery tariff, the project yields a financial internal rate of return of -2.5%. To the extent that Azerishiq OJSC is not able to fully recover its

<sup>23</sup> State-of-the-art equipment—such as transformers and digital control, protection, and telecommunication facilities; and smart meters and billing system—will be introduced to improve system operation efficiency and reliability.

<sup>24</sup> Technical Due Diligence Report (accessible from the list of supplementary linked documents in Appendix 2).

costs through future tariff revenues and comply with the financial covenants of the loan, the government has also agreed to provide budgetary support. The program's targeted outcomes on reduced distribution losses and improved revenue collection, in combination with the tariff reform, will increase Azerishiq OJSC's cash flow and improve its overall financial sustainability. The program will result in an 8% reduction in distribution losses and a 25% increase in revenue collection by 2022. Based on the 2015 tariff level of AZN0.06/kWh (\$0.057/kWh), a 1% reduction in distribution losses will lead to a revenue increase of \$10.8 million, and a 1% increase in collection rate will lead to a revenue increase of \$8.0 million. A TA project to develop a tariff methodology and a public information program for energy efficiency improvement and tariff increase will be conducted during project implementation to support the government's efforts in implementing tariff reform.

### **C. Governance**

26. The governance risks for Azerishiq OJSC, including its financial management and procurement capacities, were assessed. Overall, the financial management risk is assessed to be substantial.<sup>25</sup> Azerishiq OJSC's financial management arrangements, coupled with the proposed mitigation measures described in the FAM, are considered adequate to manage the finances of the project facilities. The procurement risks are substantial and the mitigation measures are described in the procurement capacity assessment.<sup>26</sup> Currently, the PMU handles procurement with support from international and national procurement experts engaged by ADB. The PMU staff have received procurement capacity training from ADB.

27. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and Azerishiq OJSC. The specific policy requirements and supplementary measures are described in the FAM.

### **D. Poverty and Social**

28. The investment program will result in positive impacts on improved reliability of electricity supply at the household level. This, in turn, will lead to decreased household spending on solid and liquid fuels for heating, cooking, and lighting, and the associated indoor air quality issues. Households will also be able to use more labor-saving electrical appliances without risk of damage due to power voltage fluctuations. The program is also expected to contribute to improved income-generating opportunities by providing reliable electricity to small industries and agricultural businesses. The adverse impacts of distribution network upgrading and rehabilitation will be minimized as much as possible and it will be ensured that they will not cause physical or economic displacement to the community, including women. The specific gender development measures under the investment program include (i) at least 20% of female staff from Azerishiq will be trained in key aspects of distribution network management; (ii) newly recruited customer care jobs under the program will include at least 80% female staff members; (iii) at least 50% female representation will be ensured in the consultation process during the project implementation period. The investment program is classified as having *some gender elements*.

<sup>25</sup> By 31 May 2016, Azerishiq is expected to submit its first audited entity financial statements as of 31 December 2015, after its take over of the distribution business from Azerenerji outside the Baku area.

<sup>26</sup> Procurement Capacity Assessment (accessible from the list of the linked documents in Appendix 2).

## E. Safeguards

29. **Environment.** An environmental assessment and review framework was prepared for the MFF program, in accordance with ADB's Safeguard Policy Statement (2009), and it provides the environmental management procedures to be adopted for future tranches. Tranche 1 project is classified environment category B as impacts are mostly concentrated during the construction phase and can be addressed through proper focused mitigation measures. An initial environmental examination (IEE) has been conducted for the project. The IEE provides environmental management plans for each type of project activity and covers all the likely impacts. The IEE concluded that the project is not likely to cause any significant adverse environmental impacts. Public consultations were conducted in January 2015 as part of the IEE process; the IEE and environmental assessment and review framework were disclosed on the ADB website.

30. **Involuntary resettlement.** The resettlement due diligence carried out for the tranche 1 project suggests there are no involuntary resettlement impacts, therefore the tranche is categorized C for involuntary resettlement impacts in accordance with the Safeguard Policy Statement. However, a land acquisition and resettlement framework has been prepared to guide the preparation of subsequent tranches and the implementation of tranche 1.

31. **Indigenous people.** Tranche 1 is categorized C for indigenous peoples. There are no indigenous people in the project vicinity as defined by the Safeguard Policy Statement.

## F. Risks and Mitigating Measures

32. Major risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.<sup>27</sup> The integrated benefits and impacts of the investment program are expected to outweigh the cost of the risk mitigating measures.

**Table 4: Summary of Risks and Mitigating Measures**

<b>Risks</b>	<b>Mitigating Measures</b>
<b>Procurement</b> Weak procurement capacity of Azerishiq OJSC staff to follow ADB's procurement procedure  Fragmentation of contracts into small lots in the procurement plan and both local firms' and executing agency's capacity to implement so many contracts is a challenge.	The procurement activities, including bidding document preparation, bid evaluation, contract negotiation, and award, will be adequately supported by international procurement and technical experts.  The agreed master bidding documents for NCB will be strictly followed; the bidding process and the result will be closely monitored; adjustment of packaging, if needed, will be considered in a timely manner; ADB prior or post reviews will specifically assess if any complaints received by foreign firms. As applicable, PMU may be required to amend or modify master bidding documents.
<b>Project implementation</b> Limited project management capacity and lack of experience with contract management	Experienced project supervision consultants will be engaged to assist the PMU in project implementation and management.

<sup>27</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

<b>Financial management</b> Delays in integration of accounting policies, procedures, and systems in Azerishiq's regional distribution offices and their systems, which were transferred from Azerenerji OJSC in 2015.  Weak internal and external audit	Extensive training will be provided to staff of regional offices, and their accounting systems; hardware, and software will be upgraded.  Internal audit will be strengthened through recruitment of new staff or redeployment of suitably skilled existing staff, training, establishment of an audit committee of the board, improvement of Azerishiq OJSC's internal audit manual, and establishment of a quarterly internal audit reporting and review cycle.
<b>Financial sustainability</b> Inadequate tariff to recover the full costs of supply.	Currently, the government provides budgetary support to ensure that adequate funds are provided. The government will develop a tariff methodology, which will be supported by ADB technical assistance, and achieve full cost recovery by 2022.

ADB = Asian Development Bank, NCB = national competitive bidding, OJSC = Open Joint-Stock Company, PMU = project management unit.  
Source: ADB.

#### IV. ASSURANCES AND CONDITIONS

33. The government and Azerishiq OJSC have assured ADB that implementation of the projects under the MFF shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the FAM and loan documents.

34. The government and Azerishiq OJSC have given ADB certain undertakings for the MFF, which are set forth in the framework financing agreement. Specific covenants agreed by the government and Azerishiq OJSC with respect to individual tranches under the MFF are set forth in the loan agreement and guarantee agreement for the respective tranches.

#### V. RECOMMENDATION

35. I am satisfied that the proposed multitranche financing facility would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the multitranche financing facility to Azerishiq Open Joint-Stock Company, guaranteed by the Republic of Azerbaijan, for the Power Distribution Enhancement Investment Program in an aggregate principal amount not exceeding \$750,000,000, which comprises the provision of loans from ADB's ordinary capital resources, with interest and other terms to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, and is subject to such other terms and conditions as are substantially in accordance with those set forth in the framework financing agreement presented to the Board.

Takehiko Nakao  
President

13 May 2016



## DESIGN AND MONITORING FRAMEWORK FOR THE INVESTMENT PROGRAM

<b>Impacts the Project is Aligned With:</b> Increased availability of reliable electricity supply to all domestic consumers (Azerbaijan 2020: Look Into the Future, the Government of Azerbaijan, 2012) <sup>a</sup>			
<b>Project Results Chain</b>	<b>Performance Indicators with Targets and Baselines</b>	<b>Data Sources and Reporting</b>	<b>Risks</b>
<b>Outcome</b> Improved efficiency and reliability of the power distribution networks	By 2022 a. Average annual unserved energy due to outages reduced to less than 1% of energy sales (baseline: 7% in 2014) b. Nationwide distribution network losses reduced to 8% (baseline: 16% in 2014) c. Revenue collection in the national distribution companies increased to 95% (baseline: 70% in 2014)	a–c. Azerishiq OJSC annual report, audited financial statements, and project accounts	Other energy sector investment projects funded by the government and other agencies are not completed as planned.
<b>Outputs</b> 1. Distribution network including distribution lines and substations rehabilitated, augmented, and functional	By 2022 1a. Rehabilitation of 110 kV substations (15 units), 35 kV substations (52 units), 6–10 kV transformer stations (4,004 units) 1b. Rehabilitation of 110 kV distribution lines (150 km), 35 kV distribution lines (400 km), 6–10 kV distribution lines (2,600 km)	1a–b. Commissioning certificate by Azerishiq OJSC	Procurement delay by Azerishiq OJSC due to lack of adequate experience with ADB's procurement guidelines and procedures  Unexpected delays in construction due to inexperience of the turnkey (engineering, procurement, and construction) contractors
2. Customer services lines rehabilitated and smart meters installed and operational	By 2022 2a. Replacement of 0.4 kV customer service lines (10,154 km) 2b. Installation of about 300,000 new smart meters	2a. Azerishiq OJSC quarterly project progress report 2b. Commissioning certificates for new electricity meters	Insufficient tariff increase causing Azerishiq OJSC's financial position to further deteriorate
3. Institutional capacity improved and corporate reform achieved	By 2022 3a. At least 250 staff (at least 20% of whom are women) from Azerishiq OJSC are trained in key aspects of distribution network management 3b. Azerishiq OJSC corporate business plan and performance targets developed by 2016 and updated yearly thereafter	3a–b. Azerishiq OJSC quarterly project progress report	

<p><b>Key Activities with Milestones</b></p> <p><b>Output 1: Distribution network including distribution lines and substations rehabilitated, augmented, and functional</b></p> <p>1.1 Procure turnkey contracts (April 2016–June 2021)</p> <p>1.2 Mobilize project management and supervision consultant (July 2016)</p> <p>1.3 Implement and complete turnkey contracts (June 2016–December 2022)</p> <p><b>Output 2: Customer services lines rehabilitated and smart meters installed and operational</b></p> <p>2.1 Procure equipment (January 2017–March 2022)</p> <p>2.2 Install equipment (June 2017–December 2022)</p> <p>2.3 Rehabilitate and improve electricity bill collection facilities (September 2017–December 2022)</p> <p><b>Output 3: Institutional capacity improved and corporate reform achieved</b></p> <p>3.1 Conduct needs assessment for specific skills and knowledge areas by consultants (September 2016)</p> <p>3.2 Conduct public information campaign for energy efficiency improvement and tariff reform (September 2016–December 2018)</p> <p>3.3 Develop and update Azerishiq OJSC corporate business plan and performance targets (December 2016–June 2022)</p> <p>3.4 Deliver and evaluate training courses for 250 staff (20% female) in procurement, project management, safeguards, and financial management (December 2016–December 2022)</p> <p>3.5 Construct new administration centers in regional networks and improve operation and maintenance facilities (June 2017–December 2022)</p> <p><b>Project Management Activities</b></p> <p>Recruit project management, supervision, and design consultant (June 2016)</p> <p>Prepare tranche 2 and tranche 3 projects (September 2016–September 2018)</p>
<p><b>Inputs</b></p> <p>ADB (OCR): \$750,000,000</p> <p>Government: \$250,000,000</p>
<p><b>Assumptions for Partner Financing</b></p> <p>Not applicable.</p>

ADB = Asian Development Bank, DMF = design and monitoring framework, km = kilometer, kV = kilovolt, OCR = ordinary capital resources, OJSC = Open Joint-Stock Company.

<sup>a</sup> Government of Azerbaijan. 2012. *Azerbaijan 2020: Look Into the Future*. Baku.

[http://www.president.az/files/future\\_en.pdf](http://www.president.az/files/future_en.pdf)

Source: Asian Development Bank estimates.

**LIST OF LINKED DOCUMENTS**

<http://www.adb.org/Documents/RRPs/?id=42401-014-3>

1. Framework Financing Agreement
2. Periodic Financing Request for Tranche 1
3. Sector Assessment (Summary): Energy
4. Facility Administration Manual
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Financial Analysis
8. Economic Analysis
9. Country Economic Indicators
10. Summary Poverty Reduction and Social Strategy
11. Initial Environmental Examination
12. Environmental Assessment and Review Framework
13. Resettlement Framework
14. Risk Assessment and Risk Management Plan

**Supplementary Documents**

15. Technical Due Diligence Report
16. Financial Management Assessment
17. Procurement Capacity Assessment
18. Comparison of Multitranches Financing Facility and Project Loan
19. Power Sector Reform and Financial Sustainability