

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

| Risk Description | Risk Assessment | Mitigation Measures or Risk Management Plan |
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| <p>Financial management Accounting policies, procedures, and systems</p> <p>Internal and external audit</p> | Medium | <p>EPSO and HVEN have extensive experience in implementing development partner-financed infrastructure projects and have undergone capacity building programs associated with those projects for project account management, financial reporting, and internal control.</p> <p>Loan and project agreements require financial statements and project accounts to be audited in accordance with international standards of auditing by an auditor acceptable to ADB.</p> |
| <p>Procurement Unexpected delays for procurement due to governmental approvals</p> | Medium | Procurement is at an advanced stage so delay risks are minimized. |
| <p>Corruption Political interference affects the selection of consultants and contractors</p> | Low | Consultant recruitment will follow ADB Guidelines on the Use of Consultants (2013, as amended from time to time), and procurement will follow ADB Procurement Guidelines (2013, as amended from time to time). ADB oversight will be programmed into the recruitment of consultants and specifically for the consultant selection committee. |
| <p>Sector development The government is unable to address the targets of the sector development plan</p> | Medium | <p>Jointly with other development partners, ADB will continue policy dialogue with the government to ensure strong commitment to energy sector development.</p> <p>The government has adopted the Armenia Development Strategy 2025, which addresses physical and nonphysical investments. The government has committed to keep ADB informed of policy reforms including tariff methodologies and implementation progress of its investment plan.</p> |
| <p>Technical sustainability The government is unable to complete planned generation rehabilitation projects and cross-border interconnection facilities</p> | Low | The government has entered into agreements with neighboring countries to expand power trade, bulk interconnection transmission facilities are designed, and adequate financing resources are secured. Investments for the hydropower rehabilitation projects have been planned. |
| <p>Financial sustainability Cash flow from EPSO and HVEN operation is insufficient to cover capital expenditure and debt obligations</p> | High | The present cost-plus tariff methodology sufficiently addresses immediate term needs and existing conditions in Armenia. According to the tariff-setting methodology stipulated by the regulator for the energy sector, the tariff comprises allowable costs and return based on set standards agreed with the regulator, as |

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| | | well all government-approved investment projects. |
| Project implementation EPSO and HVEN have limited project management capacity | Medium | Both agencies have certain experience in managing projects in cooperation with international financial institutions. However, both agencies remain resource-constrained and the ability to manage multiple large projects is uncertain without the support of external international expertise. International consultants will conduct project design, and bid preparation and evaluation. Project supervision consultants will be recruited to assist both agencies in implementing and managing the project. |
| Cost overrun Unexpected increase in prices of commodities and raw materials | Low | Adequate contingency amounts are provided. The government will supplement any shortfall. |
| Construction delay Unexpected delays in construction due to inexperience of the turnkey (EPC) contractors | Medium | ADB has recruited experienced consultants under the project preparation technical assistance to support EPSO and HVEN to procure competitive and experienced EPC contractors. Experienced supervision consultants will be on-site to assist and monitor the EPC contractors. |
| Environmental protection Construction activities fail to meet the national environmental safeguards and ADB's Safeguard Policy Statement (2009) | Low | The project will generate only minor environmental impacts, which can be reduced to acceptable levels through implementation of practical mitigation measures normally associated with internationally recognized good engineering practice. Such mitigation measures are specified in the EMP, relevant sections of which will be included in the bidding document. Both agencies will be responsible for managing EMP implementation with support from the project supervision consultants. Routine progress reports of EMP implementation will be submitted to ADB in accordance with the project progress-reporting schedule. |
| Overall | Low | |

ADB = Asian Development Bank, EMP = environmental management plan, EPC = engineering, procurement, and construction, EPSO = electro power systems operator, HVEN = high voltage electrical networks,
Source: Asian Development Bank.