September 13, 2018 Nippon Export and Investment Insurance

Results of Environmental Review

- (1) Reference Number 15-045
- (2) Project Name Gas-fired Power Plant
- (3) Project Site Lebap Province, Turkmenistan
- (4) Project OutlineConstruction of Gas-fired Power Plan
- (5) Category Category A
- (6) Reason of Categorization The project falls into the large-scale thermal power sector and is located in a sensitive area under the Environmental Guidelines.
- (7) Environmental Permission/Approval by the Environmental Authority

The Environmental Impact Assessment report was developed in accordance with Turkmenistan laws, and approved conditionally by the State Committee for Environment and Land resources Protection on January 7, 2016.

(8) Anti-Pollution Measures

Appropriate measures will be taken regarding air quality, water quality and noise to meet Turkish and international standards. Other pollution prevention measures will also be taken in an appropriate manner.

(9) Natural Environmental Considerations The project site is not located at any protected area or habitat for rare species designated under the national law or international conventions.

(10) Social Considerations

Measures for social considerations are properly managed. The project does not involve resettlement.

(11) Applicable International Standards World Bank Safeguard Policy

(12) Monitoring

The project proponent plans to monitor air quality, water quality, noise, and so on. The monitoring results are supposed to be reported to relevant authority on a regular basis.

(end)

Questions

Q1. Please provide the address of the project site.

Address of the project site : Turkmenistan, Lebap province, Serdarabat district

Q2. Please provide brief explanation of the project.

Construction of 400 MW gas turbine power plant with 3 units of M701DA gas turbines.

Q3. Will JBIC loan be applied to a new project or an executing project? In case of an executing project, please inform of strong claims by stakeholders such as local residents, as well as improvement guidance or cessation orders for construction work / operations, from environmental authorities.



New Project

Executing Project (without Claim etc.)

□ Executing Project (with Claim etc.) □ Others (Please specify

Q4. In case of this project, is it necessary to execute Environmental and Social Impact Assessment (ESIA) based on the laws or regulations of the country where the project is to be implemented? If necessary, please inform the progress of ESIA.

□ Required (completed) □ Not Required

Required (under execution or under planning) Others (Please specify)

Q5. In case that ESIA is already completed, please inform whether ESIA report is already approved based on the environmental and social impact assessment system of the country where the project is to be implemented or not. If ESIA report is already approved, please provide the date and name of authorities of the approval.

Lange and	approved (without conditions) Inder approval process		Approved (conditional) Others (Please specify)
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Date of Approval : Name of Authorities :

O6. If environmental permit(s) other than ESIA is required, please provide the name of required permit(s). Have you obtained required permit(s)?

Obtained

Not required

Required, but not obtained yet □ Others (Please specify

)

Name(s) of required permit(s) :

07. Will the loan be used for the undertaking that cannot specify the project at this stage (e.g. export or lease of machinery that has no relation with specific project, or Two Step Loan that cannot specify the project at the time of loan agreement)?

(Yes / No)

If you answered "Yes", it is not necessary to reply to the following questions. If you answered "No", please reply to the following questions.

Q8. Are there any environmentally sensitive area shown below in and around project site?

(Yes / No)

If you answered "Yes", please select applicable items by marking, and reply to following questions. If you answered "No", please reply to questions 9 and after.

- (1) National parks, protected areas designated by government (coastal areas, wetlands, habitats of minorities or indigenous populations, heritage sites, etc.)
- Ecologically critical forests areas (including primeval forests and tropical natural forests) (2)
- (3) Ecologically critical natural habitats (including coral reefs, mangrove, tidal flats, etc.)
- (4) Habitats of endangered species of which protection is required under local laws and international agreements.
- (5) Areas that have risks of large scale increase in soil salinity or soil erosion
- (6) Desertification areas
- (7) Areas with special values from archaeological, historical and/or cultural viewpoints
- Habitats of minorities, indigenous populations, nomadic people with traditional lifestyle (8) (including areas used for cultural and/or spiritual purposes), or areas with special social value

09. Does the project involve following characteristics?

(Yes / No)

If you answered "Yes", please describe the scale of applicable characteristics, and reply to the questions 10 and after.

If you answered "No", please reply to questions 11 and after.

- (1) Involuntary resettlement and/or loss of means of livelihood (Number of affected people: (2) Pumping of groundwater (Scale: m³/year) (3) Land reclamation, development and/or clearing (Scale: ha)
- ha)
- □ (4) Deforestation (Scale:

Under the environmental and social impact assessment system of the country where the project is to be 010. implemented, do the applicable characteristics from (1) - (4) above and their scale serve as basis for executing an ESIA for the project?

They do They do not Others (Please specify

O11. Will JBIC share in the project be equal or less than 5% of the total project cost, or the total amount of JBIC loan equal or less than SDR 10 million? (In the case of additional support for a past project, this shall be the accumulated total amount)

(Yes / No)

If you answered "Yes", it is not necessary to reply to the following questions. If you answered "No", please reply to questions 12 and after.

Q12. Does the project belong to either of the sectors that impacts on the environment and the society is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansionary renovation project, acquisition of rights and interests without additional capital

investment)?

(Yes / No)If you answered "Yes", it is not necessary to reply to following questions. If you answered "No", please reply to the questions 13 and after.

Q13. Does the project belong to the following sectors?

(Yes / No)

If you answered "Yes", please specify the sector by marking, and reply to questions 14 and after. If you answered "No", it is not necessary to reply to the following questions.

- \Box (1) Mining
- (2) Oil and natural gas development
- □ (3) Pipelines
- (4) Iron and steel (projects that include large furnaces)
- □ (5) Non-ferrous metals smelting and refining
- (6) Petrochemicals (manufacture of raw materials; including complexes)
- □ (7) Petroleum refining
- (8) Oil, gas and chemical terminals
- (9) Paper and pulp
- (10) Cement plants (including a greenfield quarry)
- □ (11) Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc.
- (12) Thermal power
- □ (13) Nuclear power
- □ (14) Hydropower, dams and reservoirs
- (15) Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale logging or submarine electrical cables
- □ (16) Roads, railways and bridges
- (17) Airports
- (18) Ports and harbors
- (19) Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or their vicinity
- (20) Waste management and disposal
- (21) Agriculture involving large-scale land-clearing or irrigation
- (22) Forestry
- (23) Tourism (construction of hotels, etc.)

Q14. Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.) Further, pleased explain whether an execution of ESIA is required on account of the large scale of the project in the country where the project is implemented.

Construction of 400 MW gas turbine power plant in Serdarabat district of Lebap province in Turkmenistan is component of the regional project of interconnection of grids of Turkmenistan and Afghanistan. 3 units of M701DA gas turbines with plant output of more than 400MW (ISO condition) will be installed. This will allow production of up to 3 billion kWh of electricity a year. Part of it will go for export to Afghanistan, other used locally. Construction of 220/110 kV substation is also included in scope of work. The gross demand for land for the project is estimated at around 15 hectares. Execution of ESIA is required for this type of projects.