# Environmental Examination Report

# (1) Project Name

Gas-fired Combined Cycle Power Plant Project

#### (2) Project Site

Layyah, Emirate of Sharjah, the United Arab Emirates

# (3) Project Outline

The project consists of the construction of power generation plant.

# (4) Category Classification

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#### (5) Reason for Classification

The project belongs to sensitive sector (thermal power sector) and is located in or near sensitive areas under the Environmental Guidelines.

### (6) Environmental Permits and Approvals

The Environmental and Social Impact Assessment (ESIA) on this project was prepared in compliance with the United Arab Emirates laws and regulations and approved in November 2018 with some conditions by Environment and Protected Area Authority.

#### (7) Pollution Mitigation Measures

It is confirmed that air quality and water quality will meet the local and international standards. It is confirmed that waste control, soil contamination, noise and vibration control will be properly managed.

## (8) Natural Environment

It is confirmed that appropriate measures for the protection of the natural environment are being undertaken.

#### (9) Social Environment

The project is located on the site of the existing power plant and it is confirmed that no land acquisition and involuntary resettlement will occur.

#### (10) International Standard

IFC Performance Standards

# (11) Others, Monitoring

Taking the above environmental review into consideration, JBIC will monitor status of obtaining environmentally relevant permits, compliance status with the collateral conditions attached to the ESIA report, completion of Construction Environmental Management Plan, legal compliance and related authorities' comment.

# Questions

| Q1.                                                                                                                                                                                                                                                                                                                                                | Please provide the address of the project site.        |                                           |                |  |                                                                       |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------|----------------|--|-----------------------------------------------------------------------|--|
|                                                                                                                                                                                                                                                                                                                                                    | Address of the project site: Layyah area. Sharjah, UAE |                                           |                |  |                                                                       |  |
| Q2.                                                                                                                                                                                                                                                                                                                                                | 22. Please provide brief explanation of the project.   |                                           |                |  |                                                                       |  |
| Development of a combined-cycle thermal power plant up to approximately 1.1 GW at site conditions at Layyah Power Station in the Emirate of Sharjah.                                                                                                                                                                                               |                                                        |                                           |                |  |                                                                       |  |
| 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.                                           |                                                        |                                           |                |  | s local residents, as well as improvement guidance or                 |  |
|                                                                                                                                                                                                                                                                                                                                                    |                                                        | New Project<br>Executing Project (without | ut 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.                                                                                                |                                                        |                                           |                |  |                                                                       |  |
|                                                                                                                                                                                                                                                                                                                                                    | C)                                                     | Required (completed )<br>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 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.                       |                                                        |                                           |                |  |                                                                       |  |
| Approved (without condition) Under approval process Others (Please specify: ESIA is currently in planning phase and execution shall be launched by the second week of May)                                                                                                                                                                         |                                                        |                                           |                |  |                                                                       |  |
| Date of Approval:  Name of Authorities:                                                                                                                                                                                                                                                                                                            |                                                        |                                           |                |  |                                                                       |  |
| Q6. If environmental and social permit(s) other than ESIA is required, please provide the name of required permit(s). Have you obtained required permit(s)?                                                                                                                                                                                        |                                                        |                                           |                |  |                                                                       |  |
|                                                                                                                                                                                                                                                                                                                                                    |                                                        | Obtained<br>Not required                  |                |  | Required, but not obtained yet<br>Others (Please specify)             |  |
| Name(s) of required permit(s): Contracting License  1. Permit for Start of Construction works 2. Permit/approval — Labor camps 3. Civil Defense General Command/ Sharjah (Hiring a local Engineering firm for Layout/ firefighting approval) 4. Public works & Services Department Waste Management 5. Coast Guard Permit (Off-shore works Permit) |                                                        |                                           |                |  |                                                                       |  |

Q7. 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)?                                                                                                                                                                                                                                                |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|                                                                                                                                                                                                                                                                         | (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 t | nere any environmentally sensitive area(s) shown below in and around project site(s)?                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |
|                                                                                                                                                                                                                                                                         | (Yes  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |
|                                                                                                                                                                                                                                                                         |       | ered "Yes", please select applicable items by marking, and reply to the following questions. ered "No", please reply to the questions 9 and after.                                                                                                                                                                                                                                                                                                                            |  |  |  |  |
|                                                                                                                                                                                                                                                                         |       | <ol> <li>National parks, nationally-designated protected areas (coastal areas, wetlands, areas for ethnic minorities or indigenous people, and cultural heritage, etc. designated by national governments)</li> <li>Forests with important ecological value (including primary forests and natural forests in tropical areas)</li> <li>Habitats with important ecological value (including coral reefs, mangrove, wetland and tidal flats.)</li> </ol>                        |  |  |  |  |
|                                                                                                                                                                                                                                                                         |       | (4) Habitats of rare species requiring protection under domestic legislation, international treaties, etc.                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |
|                                                                                                                                                                                                                                                                         |       | <ul> <li>(5) Areas in danger of large-scale salt accumulation or soil erosion</li> <li>(6) Areas with a remarkable tendency towards descrification</li> <li>(7) Areas with unique archaeological, historical or cultural value</li> <li>(8) Areas inhabited by ethnic minorities, indigenous peoples or nomadic peoples with traditional ways of life(including areas which are used for cultural or spiritual purposes) and other areas with special social value</li> </ul> |  |  |  |  |
| Q9.                                                                                                                                                                                                                                                                     | Does  | the project involve following characteristics?                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |
|                                                                                                                                                                                                                                                                         | (Yes) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |
| 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 the questions 11 and after.                                                                             |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |
|                                                                                                                                                                                                                                                                         | (1)   | involuntary resettlement and/or loss of means of livelihood                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |
|                                                                                                                                                                                                                                                                         | (3)   | (Number of affected people: )  Pumping of groundwater (Scale: currently under estimation )  Land reclamation, development and/or clearing (Scale: ha)  Deforestation (Scale: ha)                                                                                                                                                                                                                                                                                              |  |  |  |  |
| Q10. Under the environmental and social impact assessment system of the country where the project is to be implemented, do the applicable characteristics from (1) – (4) of the questions 9 above and their scale serve as basis for executing an ESIA for the project? |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |
| [,                                                                                                                                                                                                                                                                      |       | ey do They do not uers (Please specify: )                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |
| QH                                                                                                                                                                                                                                                                      | N     | ay the project involve significant social impacts?                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |
| (No)                                                                                                                                                                                                                                                                    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |
|                                                                                                                                                                                                                                                                         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |

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|                                                                                                                                                                                                                                                                                                                                        | wered "Yes", please describe the outline of the impacts, and revered "No", please reply to the questions 12 and after.                           | eply to the qu                 | estions 12 and after.                                      |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------------------------------------|--|--|--|--|--|
|                                                                                                                                                                                                                                                                                                                                        | e likelihood of severe project-related human rights impacts<br>hers                                                                              | (                              | )                                                          |  |  |  |  |  |
| JBIC loan                                                                                                                                                                                                                                                                                                                              | ill JBIC share in the project be equal or less than 5% of the equal or less than SDR 10 million? (In the case of additional alated total amount) | total project<br>I support for | cost, or the total amount of a past project, this shall be |  |  |  |  |  |
| (No                                                                                                                                                                                                                                                                                                                                    | )                                                                                                                                                |                                |                                                            |  |  |  |  |  |
| If you answered "Yes", it is not necessary to reply to the following questions.  If you answered "No", please reply to the questions 13 and after.                                                                                                                                                                                     |                                                                                                                                                  |                                |                                                            |  |  |  |  |  |
| Q13. Does the project belong to either of the sectors that impact on the environment and society is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansionary renovation project, and acquisition of rights and interests without additional capital investment)? |                                                                                                                                                  |                                |                                                            |  |  |  |  |  |
| (No                                                                                                                                                                                                                                                                                                                                    | )                                                                                                                                                |                                |                                                            |  |  |  |  |  |
| If you answered "Yes", it is not necessary to reply to the following questions. If you answered "No", please reply to the questions 14 and after.                                                                                                                                                                                      |                                                                                                                                                  |                                |                                                            |  |  |  |  |  |
| Q14. D                                                                                                                                                                                                                                                                                                                                 | oes the project belong to the following sectors?                                                                                                 |                                |                                                            |  |  |  |  |  |
| (Ye                                                                                                                                                                                                                                                                                                                                    | s)                                                                                                                                               |                                |                                                            |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                        | wered "Yes", please specify the sector by marking, and reply wered "No", it is not necessary to reply to the following quest                     |                                | ons 15 and after.                                          |  |  |  |  |  |
| □(1)<br>□(2)<br>□(3)<br>□(4)<br>□(5)                                                                                                                                                                                                                                                                                                   | Mining Oil and natural gas development Pipelines Iron and steel (projects that include large furnaces) Non-ferrous metals smelting and refining  |                                |                                                            |  |  |  |  |  |
| □(5)<br>□(6)<br>□(7)<br>□(8)                                                                                                                                                                                                                                                                                                           | Petrochemicals (manufacture of raw materials; including co<br>Petroleum refining<br>Oil, gas and chemical terminals                              | omplexes)                      |                                                            |  |  |  |  |  |
| □(9)<br>□(10)<br>□(11)                                                                                                                                                                                                                                                                                                                 | Paper and pulp Cement plants (including a greenfield quarry) Manufacture and transport of toxic or poisonous substances                          | s regulated by                 | y international treaties, etc.                             |  |  |  |  |  |
| ■(12)<br>□(13)<br>□(14)<br>□(15)                                                                                                                                                                                                                                                                                                       | Thermal power Nuclear power Hydropower, dams and reservoirs Power transmission and distribution lines involving large-s                          | scale involun                  | atary resettlement, large-scale                            |  |  |  |  |  |
| □(16)<br>□(17)<br>□(18)                                                                                                                                                                                                                                                                                                                | logging or submarine electrical cables Roads, railways and bridges Airports Ports and harbors                                                    |                                |                                                            |  |  |  |  |  |
| □(19)                                                                                                                                                                                                                                                                                                                                  | Sewage and wastewater treatment having sensitive chara-<br>their vicinity                                                                        | eteristics or                  | located in sensitive areas or                              |  |  |  |  |  |
| □(20)                                                                                                                                                                                                                                                                                                                                  | Waste management and disposal                                                                                                                    |                                |                                                            |  |  |  |  |  |

| <sup>□</sup> (21) | Agriculture involving large-scale land-clearing or irrigation |
|-------------------|---------------------------------------------------------------|
| ∐(22)             | Forestry                                                      |
| $\square$ (23)    | Tourism (construction of hotels, etc.)                        |

Q15. 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.

Area is approximately 14000 m2. CCGT capacity is 1135 MW (ISO)