

2013年2月7日

日本貿易保険

環境レビュー結果

- (1) 照会番号
11-016
- (2) プロジェクト名
火力発電所の増設
- (3) 実施場所
モロッコ ドゥカラ・アブダ州
- (4) プロジェクト概要
石炭火力発電所の増設
- (5) カテゴリ分類
カテゴリ A
- (6) カテゴリ分類の根拠
本プロジェクトは、環境ガイドラインに示される大規模な火力発電セクターに該当するため。
- (7) 環境許認可
モロッコ王国環境関係制度に基づき環境影響評価報告書が作成され、2010年8月にモロッコ王国エネルギー・鉱山・水利・環境省より環境許認可を取得済である。
- (8) 汚染対策
大気質、水質、騒音の計画値は現地基準及び国際基準を満足する計画である。その他の汚染対策も適切に講じられる。
- (9) 自然環境面
本プロジェクトサイトは既存の発電所の隣接地に位置している。周辺に塩性湿地等が存在するが、プロジェクトサイトとは十分な距離があり、プロジェクト実施に伴う影響は予見されない。
- (10) 社会配慮面

本プロジェクトは非自発的住民移転等を伴わない。

(11) その他（モニタリング等）

事業者により大気質、水質、騒音等に関するモニタリングが実施される計画である。

以 上

Questions

Q1. Please provide the address of the project site.

Address of the project site :

Jorf Lasfar Energy Company 5 & 6 S.A.
BP 99, Sidi Bouzid
El Jadida 24000 – MOROCCO

Q2. Please provide brief explanation of the project.

Construction, operation, and maintenance of two coal-fired units with gross electrical power generation capacity of approximately 350 MW each (Units 5 & 6) on a site adjacent to the existing Jorf Lasfar power plant in Morocco.

Q3. Will JBIC loan be applied to a new project or an executing project? In case of executing project, please inform the presence of strong claims by local residents.

- | | |
|--|---|
| <input checked="" type="checkbox"/> New Project | <input type="checkbox"/> Executing Project (with Claim) |
| <input type="checkbox"/> Executing Project (without Claim) | <input type="checkbox"/> Others (Please specify) |

Q4. In case of this project, is it necessary to execute Environmental Impact Assessment (EIA) based on the laws or regulations? If necessary, please inform the progress of EIA.

- | | |
|--|---|
| <input checked="" type="checkbox"/> Required (Completed) | <input type="checkbox"/> Required (Under execution or under planning) |
| <input type="checkbox"/> Not Required | <input type="checkbox"/> Others (Please specify) |

Q5. In case that EIA is already completed, please inform whether EIA report is already approved based on the environmental assessment system or not. If EIA report is already approved, please provide the date and name of authorities of the approval.

- | | |
|--|---|
| <input checked="" type="checkbox"/> Approved (without condition) | <input type="checkbox"/> Approved (conditional) |
| <input type="checkbox"/> Under approval process | Others (Please specify) |

Date of Approval : July 23rd, 2010

Name of Authorities : Secrétariat de l'Etat auprès du Ministre de l'Energie, des Mines, de l'Eau et de l'Environnement, chargé de l'Eau et de l'Environnement – Département de l'Environnement (Secretary of State to the Ministry of Energy, Mines, Water and Environment in Charge of Water and Environment – Department of Environment)

Q6. If environmental permit(s) other than EIA is required, please provide the name of required permit(s). Have you obtained required permit(s)?

- | | |
|--|---|
| <input type="checkbox"/> Obtained | <input type="checkbox"/> Required, but not obtained yet |
| <input checked="" type="checkbox"/> Not required | <input type="checkbox"/> Others (Please specify) |

Name(s) of required permit(s) : _____

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

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.)
- ☐ (2) Primeval forests, tropical natural forests
- ☐ (3) Ecologically important habitats (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
- ☐ (8) Habitats of minorities, indigenous populations, nomadic people with traditional life style, or areas with special social value

Q9. Does the project involve following elements?

No

If you answered "Yes", please describe the scale of applicable elements, and reply to the questions 10 and after.
If you answered "No", please reply to questions 11 and after.

- ☐ (1) Involuntary resettlement (Number of resettlers:)
- ☐ (2) Pumping of groundwater (Scale: ton/year)
- ☐ (3) Land reclamation and/or development (Scale: ha)
- ☐ (4) Deforestation (Scale: ha)

Q10. Please reply to this question only in case that the project involves some of the above (1) to (4) elements.
In the country where the project is planned, are there any regulations on a scale of the elements asked in question 9? If the country has such regulation, please answer whether the project satisfies the regulation or not.

- ☐ Regulation is applicable (☐ satisfied ☐ not satisfied) ☐ No regulation
- ☐ Others (Please specify)

Please reply to questions 11 and after.

Q11. 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?

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 impact on the environment is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansionary renovation project, acquisition of rights or interest without additional plant investment)?

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

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.

- ☐ (1) Hydro power plant, Dam or water reservoir
- X (2) Thermal power plant
- ☐ (3) Mines
- ☐ (4) Development of oil and gas
- ☐ (5) Pipeline
- ☐ (6) Steel industry (with large scale furnace)
- ☐ (7) No-ferrous metal refining
- ☐ (8) Petrochemical (including manufacturing of raw materials and petrochemical complex)
- ☐ (9) Terminal of oil, gas and chemicals
- ☐ (10) Petroleum refining
- ☐ (11) Paper and pulp
- ☐ (12) Manufacturing and/or transportation of hazardous substances (specified by international agreement)
- ☐ (13) Road, railway or bridge
- ☐ (14) Airport
- ☐ (15) Port
- ☐ (16) Waste material processing or treatment
- ☐ (17) Treatment of sewage and/or waste water that includes hazardous substances or executed at environmentally sensitive area
- ☐ (18) Power transmission and/or distribution lines (including large scale involuntary resettlement, large scale deforestation or submarine cable)
- ☐ (19) Tourism (Construction of hotel, etc.)
- ☐ (20) Forestry or tree planting
- ☐ (21) Agriculture (large scale project and/or project including irrigation)

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, please explain whether an execution of EIA is required on account of the large scale of the project in the country where the project is implemented.

- The project consists of the construction, operation, and maintenance of Units 5 & 6 on a site adjacent to the existing Jorf Lasfar power plant, located along Morocco's Atlantic coastline (approximately 120 km south of Casablanca).
- Jorf Lasfar Units 5 & 6 will consist of two coal-fired units with gross generation capacity of approximately of 350 MW each.
- Units 5&6 will share certain common facilities with the existing four units of the Jorf Lasfar power plant..
- The estimated annual net electrical output to be produced by each of Units 5 & 6 is approximately 2350 GWh per unit.

- The execution of an EIA is required under Moroccan law. The EIA for the Jorf Lasfar Units 5 & 6 project was approved on July 23rd, 2010 by Morocco's Secretary of State to the Ministry of Energy, Mines, Water and Environment in Charge of Water and Environment – Department of Environment.