

環境チェックレポート

(1) プロジェクト名

発電・造水プロジェクト

(2) 実施場所

バーレーン王国マナマ近郊

(3) プロジェクト概要

既存発電・造水プラントの買収、新規造水プラントの建設、操業を行うもの。

(4) カテゴリ分類

カテゴリ「B」

(5) 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掲げる環境影響を及ぼしやすいセクター・特性及び影響を受けやすい地域に該当せず、環境への望ましくない影響は重大ではないと判断されるため。

(6) 環境許認可

本プロジェクトについては EIA（環境影響評価報告書）がバーレーン海洋生物・環境・野生動物保護委員会に提出され、Environmental Permit が同委員会より発行されている。

(7) 汚染対策

大気質、水質の計画値は現地基準を満たしている旨、確認されている。

(8) 自然環境面

本件サイトは同国で指定している保護区には立地しておらず、また周辺に特に環境上留意すべき地域はない。また、本サイト内に希少種等は存在しないことが確認されている。

(9) 社会配慮面

本サイトは既開発の工業地域内にあり、住民移転は発生しない。

(10) その他・モニタリング

本件では、大気質、水質につきモニタリングを行う予定。

以 上

Questions

Q1. Please provide the address of the project site.

Address of the project site: Al Hidd Power and Desalination Plant, Al Hidd, Bahrain

Q2. Please provide brief explanation of the project.

The proposed project is the taking over of an existing thermal power generation and seawater desalination plant, with capacities of 965 megawatt electric (MWe) and 30 million imperial gallons per day) MIGD, and the addition of further desalination capacity of 60 MIGD. The existing desalination plant uses multi-stage flash (MSF) technology but the proposed new plant uses multi-effect distillation technology (MED).

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 type="checkbox"/> New Project | <input type="checkbox"/> Executing Project (with Claim) |
| <input checked="" 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 type="checkbox"/> Approved (without condition) | <input checked="" type="checkbox"/> Approved (conditional) |
| <input type="checkbox"/> Under approval process | <input type="checkbox"/> Others (Please specify) |

Date of Approval : 13 December 2005

Name of Authorities : Public Commission for the Protection of Marine Resources, Environment and Wildlife, Kingdom of Bahrain

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?

(Yes / 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)?

(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.

- (1) Hydro power plant, Dam or water reservoir
- (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.

Approximate area 60 hectares for all three Phases.

Plant areas: present plant approximately 15 hectares power plant, 10 hectares water plant; proposed water plant approximately 20 hectares.

Capacities: existing plant 965 MWe power, 30 MIGD water; proposed extension 60 MIGD (no power).

Environmental Permit already issued for present plant of 965MWe power, 90MIGD water.