

環境チェックレポート

(1) プロジェクト名

複合火力発電・淡水化プロジェクト

(2) 実施場所

アラブ首長国連邦フジャイラ首長国

(3) プロジェクト概要

新規天然ガス焚き複合火力発電・淡水化プラントの建設・操業を行うもの

(4) カテゴリ分類

カテゴリ「A」

(5) カテゴリ分類の根拠

本事業は、環境ガイドラインに掲げる大規模な火力発電セクターに該当するため。

(6) 環境許認可

同首長国制度に基づき、EIA(環境アセスメント報告書)が作成され、フジャイラ首長国環境当局であるフジャイラ市環境保護開発局より承認されている。

(7) 汚染対策

大気質の計画値は、PM10 以外全て現地基準及び世界銀行基準を満たす計画であり、PM10 についてもフジャイラ地域の乾燥した気候による天然由来の浮遊粒子状物質が多いことが主因であり、本プロジェクトに起因するものではないとしてフジャイラ市環境保護開発局も容認している。また、水質、騒音の計画値は、現地基準及び世界銀行基準を下回る計画

となっている。

(8) 自然環境面

本件サイトは国立公園及び保護区等の自然環境上重要な地域に位置しない。

(9) 社会配慮面

住民移転が対象住民との合意形成の下進められており、移転後の住民生活は基本的に従来通りとなるよう十分な対策がとられる予定。

(10) その他・モニタリング

大気質及び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

The F2 IWPP will be located approximately 437007 N and 2800130 E on the East Coast of Fujairah, at Qidfa, 20 km north of the city of Fujairah in the Emirate of Fujairah, 5 km south of Khor Fakkan and approximately 280 km north east of the city of Abu Dhabi in the UAE.

**Q2.** Please provide brief explanation of the project.

F2 IWPP will be owned and operated by Fujairah Asia Power company, a project company to be owned ultimately by Abu Dhabi Water and Electricity Authority (ADWEA), Marubeni Corporation of Japan and International Power of the UK. The plant will be constructed by Alstom Power of Switzerland.

The plant will be designed to produce 2000 MW of electricity and 130 MIGD of desalinated water. The electrical capacity of the Facility will be based on gas and steam turbine technology (combined cycle), with corresponding turbine units and heat recovery steam generators (HRSG). The Plant will mainly consist of two sections; the power generation plant and desalination plant, as follows:

- Power production            5 x 250 MW gas turbines with associated heat recover steam generators (HRSG) and 3 x 250 MW steam turbines.
- Water production            12 x Multi-Effect Desalination (MED) units with 100 MIGD capacity with a further 30 MIGD from Reverse Osmosis (RO) units, and their associated ancillaries.

**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.

- Required (Completed)                       Required (Under execution)  
 Not Required     Others                      (Please specify )

The EIA is presently under execution by Mott MacDonald on behalf of Marubeni and International Power.

**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.

- Approved (without condition)                       Approved (conditional)  
 Under approval process     Others (Please specify Not complete yet )

Date of Approval : \_\_\_\_\_

Name of Authorities : \_\_\_\_\_

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

- Obtained     Required, but not obtained yet  
 Not required     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)?

(Yes / No)    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) 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) Yes

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: approx. 150 )
- (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?

(Yes / No) 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) 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) 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
- (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 area of the project site will be around 50 hectares. The output will be 2,000 MW of power and 130 Million Imperial Gallons per Day (MIGD) of water.