# 環境レビュー結果

- (1) 照会番号 19-017
- (2) プロジェクト名洋上風力発電
- (3) 実施場所 台湾 彰化県
- (4) プロジェクト概要 洋上風力発電所の建設
- (5) カテゴリ分類カテゴリ A
- (6) カテゴリ分類の根拠

環境ガイドラインに示される影響を及ぼしやすい特性及び影響を受けやすい地域 を伴うため。

## (7) 環境許認可

同国法規制に基づき環境社会影響評価書が作成されており、2018 年 4 月に所管当局である行政院環境保護署より承認を取得している。また、事業計画の変更に伴う環境社会影響の差異分析報告に対する承認を、2018 年 12 月と 2019 年 10 月にそれぞれ取得している。

## (8) 汚染対策

大気、水質及び土壌汚染の懸念はなく、騒音等について適切な措置が講じられる。 また、廃棄物は適切に処理・処分される計画である。

#### (9) 自然環境面

海底ケーブルの一部が貴重種の海棲哺乳類の生息地を通過するが、影響は工事期間

に限られた一時的なものであり、且つ、工事において適切な緩和策が講じられる。 また、鳥類の飛行および海棲哺乳類への影響について低減策が計画される。

## (10) 社会配慮面

漁業従事者等に対し、適切な影響緩和および支援計画が策定・実施される。

## (11) 適用国際基準

IFC パフォーマンススタンダード

# (12) その他 (モニタリング等)

鳥類の飛行や海棲哺乳類への影響などを含む環境モニタリング計画が作成され、モニタリング結果は四半期毎に同国所管当局へ提出される予定である。

以上

#### **Questions**

Q1. Please provide the address of the project site.

Address of the project site: CFXD projects are located in the waters of Fangyuan Towship, Changhua County, where CF project is 13 – 25 km west from the coast and XD project 11-14 km west from the coast. CFXD projects are connected to the same onshore substation, which is located in Changbin Industrial Park, on cadaster No. 1-2, Lunhai Section, Lukang Township, west area of Lunwei District.

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

The Project is located in the Taiwan Strait approximately 11 to 25km west of Changhua County, Taiwan. The Project received grid allocation in April 2018 as eligible under the Feed-in-Tariff ("FiT") regime for a combined capacity of up to 600MW. The Project site comprises two adjacent offshore sites, Changfang and Xidao, but is being developed as a single wind farm.

Grid capacity will be made available in two stages; the first 100MW for connection in 2021, and a further 500MW for connection in 2023. The Project will therefore be constructed in two phases; up to 100MW scheduled to be commissioned in 2022 ("Phase 1") and up to 500MW scheduled to be commissioned in 2023 ("Phase 2").

The base case transmission concept is without a substation. 66kV cable will be used for both inter-array and export cable of Project. After landing on Fangyuan Township, Changhua County, the cable goes into an onshore substation where the voltage will be transformed into 161 kV and connects further into the grid.

|   | ect or an executing project? In case of an executing project, ach as local residents, as well as improvement guidance or from environmental authorities.                            |
|---|---|
| <ul><li></li></ul>  | Executing Project (with Claim etc.) Others (Please specify )  |
|   | the Environmental and Social Impact Assessment (ESIA) based project is to be implemented? If necessary, please inform the   |
| Required (Completed) Not Required   | Required (Under execution or under planning) Others (Please specify   |
| social elements are addressed via a number of other   | tion. A formal social assessment is not required, however, r consents including the Fishery Consent, the Administrative ment Consent. The project also operates its own Stakeholder |
|   | se inform whether ESIA report is already approved based on<br>the country where the project is to be implemented or not. If<br>date and name of authorities of the approval.        |
| Approved (without condition) Under approval process   | Approved (conditional) Others (Please specify)  |
| Date of Approval: CFXD project: April 12 2018 Name of Authorities: Environmental Protection A | · · · · · · · · · · · · · · · · · · ·   |

Note: The project is currently in a process to amend the EIA in order to pursue design optimizations. These optimizations include updating the layout to reflect an updated wind turbine model, removing the substation,

changing the jacket foundation design, and amending the environmental monitoring timeline to align with the updated construction schedules. The final review committee meeting was held on 16 August, 2019, where the amendment was approved. The final approval letters are expected to be received by October 2019, prior to Financial Close

| Obtained Not required   |   | Required, but not obtaine Others (Please specify  | d yet   |
|---|---|---|---|
| Name(s) of required pern  | nit(s):   |   |   |
| Name of permit  | Purpose of permit   | Date of approval  | Authority   |
| Admin Contract<br>(Selection Proposal)  | Proposal for project to be<br>awarded grid capacity in<br>Taiwan. Scoring criteria<br>included community<br>initiatives and<br>localization of industry   | [CF] Nov. 5, 2018<br>[XD] Nov. 27, 2018   | Ministry of Economic<br>Affairs (MOEA)  |
| Local Government<br>Consent   | Consent to ensure the project meets with local expectations in terms social responsibility  | [CFXD] Sep. 12, 2018  | Changhua County<br>Government   |
| Coastal Management<br>Plan  | Consent to ensure development activities do not cause significant impact to the coastal area.   | [CFXD] Dec. 27, 2018  | Ministry of the Interior  |
| Fishery Consent   | Approval of project<br>impact on fishery<br>industry from governing<br>authority (Condition of<br>consent is project must<br>reach a compensation<br>agreement with the local<br>fishery association prior<br>to offshore construction) | [CFXD Fishery Consent] Jun. 28, 2018  Fishery compensation negotiations are in progress | Fishery Agency, Council of Agriculture  |
| No  f you answered "Yes", it is f you answered "No", pleas  | no relation with specific pro<br>not necessary to reply to the<br>e reply to the following ques   |   | cannot specify the project a  |
| Yes f you answered "Yes", plea  | ,   | marking, and reply to the fo  |   |
| minorities or indi  (2) Forests with impo  (3) Habitats with impo  (4) Habitats of rare s  (5) Areas in danger of  (6) Areas with a rem | genous peoples and cultural<br>ortant ecological value (inclu-<br>portant ecological value (inc   | esertification  | national governments)<br>tural forests in tropical area<br>wetland and tidal flats) |

life (including areas which are used for cultural or spiritual purposes) and other areas with special social value

| Q9.   | Does the project involve following characteristics?   |   |  |  |  |
|---|---|---|--|--|--|
|   | Yes   |   |  |  |  |
| after.  | 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.               |   |  |  |  |
|   | <ol> <li>Involuntary resettlement and/or loss of means of livelihood assessment)</li> <li>Pumping of groundwater</li> <li>Land reclamation, development and/or clearing</li> <li>Deforestation</li> </ol> | (Number of affected<br>)<br>(Scale:<br>(Scale:<br>(Scale: | households is under<br>m3 /year)<br>ha)<br>ha) |  |  |
| Note: The project is assessing short and long term impacts to the areas available for commercial fishing. Fishermen are compensated based on an estimated loss of catch, which is calculated by a government-endorsed academic. The project is also offering a Fishery Transformation package, which includes guard vessel contracts, training, advisory services, and long term jobs in the operations phase. The project operates a Fishery Stakeholder Management Plan |   |   |  |  |  |
| <b>Q10.</b> 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 and their scale serve as basis for executing an ESIA for the project?  |   |   |  |  |  |
|   | They do  They do not Others (Please specify   | )   |  |  |  |
| Q11.  | May the project involve significant social impacts?   |   |  |  |  |
|   | No  |   |  |  |  |
| If you answered "Yes", please describe the outline of the impacts, and reply to the questions 12 and after. If you answered "No", please reply to the questions 12 and after.   |   |   |  |  |  |
|   | The likelihood of severe project-related human rights impacts Others (  | (   | )  |  |  |
| Q12. Will the value insured by NEXI in the export, loan or investment project be equal or less than 5% of the total project cost, or equal or less than SDR 10 million? (In the case of additional support for a past project, this shall be the accumulated total amount)  |   |   |  |  |  |
|   | No  |   |  |  |  |
|   | answered "Yes", it is not necessary to reply to the following questions answered "No", please reply to the questions 13 and after.  | stions.   |  |  |  |
| imma  | Does the project belong to either of the sectors that impact of<br>terial or is not anticipated under normal conditions (e.g. mai<br>asionary renovation project, and acquisition of rights and interests | ntenance of the exis                                      | sting facilities, non-                         |  |  |
|   | 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. Does the project belong to the following sectors?

Yes

If you answered "Yes", please specify the sector by marking, and reply to the questions 15 and after. If you answered "No", it is not necessary to reply to the following questions.

|          | (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) | Manufacturing and transport of toxic or poisonous substances regulated by international treaties, etc.  |
|          | (12) | Thermal power   |
|          | (13) | Nuclear power   |
|          | (14) | Hydro power, dams and reservoirs  |
| $\times$ | (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 hotel, 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 EISA is required on account of the large scale of the project in the country where the project is implemented.

| Project                             | CF                  | XD                 |
|-------------------------------------|---------------------|--------------------|
| Wind farm area                      | $82.4 \text{ km}^2$ | $7.7 \text{ km}^2$ |
| Installation area                   | $43.4 \text{ km}^2$ | $6.5 \text{ km}^2$ |
| Number of WTG                       | 57                  | 5                  |
| Installed capacity in MW            | Up to 552           | Up to 48           |
| Onshore electrical cable corridor   | 66kV & 161kV, 1 km  | 66kV & 161kV, 1 km |
| Submarine electrical cable corridor | 66kV, 20km          | 66kV, 20km         |

According to Item 5, Article 29 of Standards for Determining Specific Items and Scope of Environmental Impact Assessments for Development Activities (開發行為應實施環境影響評估細目及範圍認定標準), an Environmental Impact Analysis (EIA) is required for development of offshore wind farm, despite the scale of the project. The CFXD project obtained its EIA approvals in 2018 and is progressing the developments of its projects.