

“Louzes PV” power plant (total power capacity 1,05 MW) located in Nafpaktia's Municipality, Regional Unit of Aetolia-Acarmania, Greece

Non-Technical Summary

Introduction

“Louzes PV” is a 1,05 MW photovoltaic power plant, developed by Terna Energy, and is to be placed and constructed in the area of Nafpaktia, of the Regional Unit of Aetolia-Acarmania Region of Central Greece and under the Decentralized Administration of West Greece.

The “Louzes” PV plant is under operation since 2013 (Operation Permit p.n. 45/1734/09.01.2013/ Decentralized Administration of West Greece)

The project refers to the development, construction, and operation of a photovoltaic power plant with installed capacity of 1,05 MW total, consisting of total 3962 photovoltaic panels of 265 W power, along with the accompanying works.

The purpose of the proposed projects is to use the high solar energy potential of the area for the generation of electricity and then to sell the produced energy to the electricity operator.

The project is not located within any designated area of the European Ecological Network Natura 2000 or any other protected area.

The project has been environmentally licensed with the Decision approving Environmental Terms (p.n. 194738/3703/Φ 2579/02-11-2011/ Regional Administration of West Greece) and the Decision for its Amendment (p.n. 3630/137249/Φ.2579/05-06-2012 Regional Administration of West Greece). The approval procedure of the EIAs also followed all the public publishing – consultation procedures according to the legal framework and all the required positive opinions were received from the co-competent authorities.

Environmental permitting categorization

With reference to Environmental Permitting Categorization, the project falls under Group 10, item 2: Renewable energy sources/PV plants, category B: $1 < P \leq 10$ MW in accordance with the current legal framework (Joint Ministerial Decision of Ministry of the Environment p.n.:17185/1069/OGG 841 B/24-02-2022).

Proposed Project

The photovoltaic plant proposed main technical characteristics and their accompanying works are the following:

- Installation of 3962 photovoltaic panels. 550/MB BIFICIAL 1500V). The nominal power of each PV panel is 265 W power, with a total installed power output of **1.05 MW**
- Installation of 72 inverters of the same type are used for the project.
- A LV-MV Substation (0,4 kV/20kV) with a total power of 1000kVA
- A metal fence has been constructed along the perimeter of the plant.
- Installation of Lighting Protection - Earthing
- The PV plant is connected **with the Step-up Transmission Substation** (20/150kV) located in LEYKA in the area of Nafpaktia. The Substation serves the wind farms in the wider project area, including the wind farm "LOUZES".

Project compatibility with spatial and urban planning commitments

The project and its accompanying works fulfill the criteria, as identified in the Special Framework for Spatial Planning and Sustainable Development for Renewable Energy Sources (OGG 2464B/03.12.2008, Articles 3 and 17).

Environmental impact assessment

During the construction of the project the impacts on landscape and aesthetic environment as well as other impacts on the soil, waters, acoustic and atmospheric environment, considered short-term, of local extent and partial reversible, as construction sites have been removed and the sites have been restored upon completion of the construction phase .

The project's total land take is approximately 21,33 stremma. The project is not likely to have impacts on soil relief and morphology during operation.

The project is likely to have minor impact negligible impact during operation.

With reference to **vegetation**, the project is likely to have minor impacts in the project area. There are no sensitive flora species. Impacts are partially reversible upon implementation of proposed mitigation measures and long-term. Furthermore, to the extent possible, the disturbed areas during construction have been rehabilitated to its initial status with reference to vegetation.

With reference to **fauna and avifauna**, in the location of the photovoltaic panels, likely impacts (noise or light disturbances) during the construction and operation phases are considered insignificant.

The project is not expected to have any significant likely impacts on existing **land uses**, as its permanent land take is considered small scale; therefore, impacts are estimated as minor, and fully reversible at the end of projects life.

The project is not expected to have any significant likely impacts on the area's **built environment**, as it is situated far from existing settlements and man-made activities.

The project is not situated within designated archaeological sites and therefore no impacts are expected on the area's **historical and cultural environment** during construction or operation. However, prior to construction, the relevant archaeological bodies have been contacted so as to ensure monitoring of works.

The project is expected to have positive impacts on the area's **social and economic environment**, as it will create job opportunities during construction and operation.

The Project is not expected to have any impacts on **human health** as construction and operation measures are in place to ensure workers and public safety. The underground medium voltage transmission line only induces magnetic fields, which are minimized and are practically zero within a few meters distance. In any case, the underground medium voltage transmission line which is connected with the Step-up Transmission Substation 150/20KV (LEFKA) had been constructed as per the provisions of relevant legislation, so as to ensure public safety and protection of human health.

The Project is not expected to have any impacts on the area's public **infrastructures** upon implementation of proposed mitigation measures.

During construction activities; impacts on the internal road networks were minor, reversible and short-term. There are no impacts on public infrastructures during operation.

Positive impacts on the atmospheric environment are expected during project operation as the production of Energy from solar power has significant benefits on the environment, due to the avoidance of burning fossil fuels which produce greenhouse gases.

During the operation phase, the impacts on the acoustic environment are expected to be minor. Noise emissions from the PV operation are in accordance to the limits set by relevant legislation and technical specifications.

Environmental monitoring programme

The monitoring programme investigates the Project's likely impacts on the environment during both construction and operation phases. In order to ensure environmental protection during project construction and operation, the proposed monitoring programme, focuses on the most critical parameters, as identified from the environmental impacts assessment procedure defining also the required frequency of monitoring.