

ÜGYVÉDI IRODA

MANDATORY ELEMENTS OF A FEASIBILITY STUDY TO ESTABLISH A PVPP IN HUNGARY

The below summary is based on the applicable Hungarian, EU and international laws. However, the statements and summaries are not intended to be an exhaustive explanation of the relevant Hungarian, EU and international legal provisions.

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Mandatory elements of a feasibility study on a proposed PVPP, if applicable¹

- a) Summary of the study
- b) Presentation of the surrounding area
 - description of the chosen land and the characteristics thereof (settlement environment, transport links, infrastructure, topography, hydrology, meteorology), reasons of selection,
 - existing vital environment and facilities on the land concerned by PVPP construction
- c) Justification of the chosen technology, results of tests (advantages, disadvantages),
- d) Proposed technical equipment, architectural solutions,
 - circuit diagram of energy transformation (block scheme etc.)
 - data and description of principal equipment,
 - scheme and description of auxiliary / household operation system
 - o primary energy source supply
 - o cooling water system
 - o electric household operation
 - o control engineering
 - o water treatment system
 - o communications, telemechanics, fire protection
 - transport, management and placement of power plant waste and byproducts
 - designation of main and auxiliary buildings
 - internal roads, railways and other linear elements,
 - preparation of the construction site, breakdowns, redemptions, relocations
 - general construction and mechanical organization
- e) Connection of the new facility to the environment
 - external roads, railways and other linear elements,
 - primary energy source supply, general supply, water supply, management and diversion of wastewater,

¹ A feasibility study shall be attached to all applications submitted to (i) establish or (ii) extend a power plant or (iii) to increase the nominal capacity thereof.

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- purchase and supply of main adjuvants,
- connection of the old and new parts of the power plant (if any),
- other facilities out of the fences of the power plant,
- if there is a mine to be used besides the power plant, the following characteristics of the mine shall be presented:
 - o technological system,
 - o dewatering and water protection system,
 - o results of geotechnical tests,
 - o electricity supply,
 - o linear and opencast facilities of the mine,
 - o damage caused by the mine,
 - o methodology of the termination of mining and landscaping
- f) Data of environmental and heritage protection impact assessment
 - systematic summary of data arising from the technology of the facility, necessary for the detailed environmental and heritage protection impact study
- g) Operational strategy and basic energetic data
 - proposed lifetime of the power plant;
 - data of power plant capacity;
 - reliability of the power plant, concept of maintenance;
 - amount of deliverable electricity and heat, separately the amount of electricity that can be provided in forced schedule and freely;
 - proposed controllability of the power plant, operational characteristics (e.g. time needed for start and shutdown, regulation range, speed of ramping period);
- h) Energy efficiency
 - presentation of the calculation,
- i) Feasibility schedule
 - the schedule shall include the licensing process, the preparation, the construction and the main phases of the installation and the required time period thereof, divided into main units,
- i) Investment and operational costs
 - as it is needed to establish a business plan
- k) Concept of the procurement of equipment
 - presentation of equipment;
 - methodology of the selection of equipment suppliers;
 - domestic supplier possibilities;
- 1) Organization of the investment and operation
 - organizational order of the governance of the investment;
 - staff needs of operation;
 - fulfilment of qualification requirements;
- m) Quality assurance
 - concept;
 - a preliminary presentation shall be made on the qualification process of the bodies cooperating in the preparation, execution, operation and maintenance



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- n) Findings and conclusions
 - short summary of the content of the study in the order of chapters;
 - listing the fields special attention should be paid on in further preparatory phases

The feasibility study is required by the DSO, upon its own code.

The feasibility is assessed after submission, based on the following:

- in case of a feasibility study or a connection plan until 132 kV of voltage, within 30 business days after submission;
- in case of a connection plan on 132 kV of voltage level, before the prior assessment of the TSO, within 45 business days, max. 15 of which is reserved for the TSO.

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