
	<b>DESIGN &amp; APPLICATION ENGINEERS S.A.</b> ILEKTRAS 2 & KIMIS AVENUE, 15122 MAROUSSI TEL +30 (210)6412233, 2810122 FAX +30 (210)6454825 e-mail: civeng@mhxme.gr web: www.mhxme.com	Détails			
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**Thisvi 421.6 MW Combined Cycle Power Plant**

<b>Temps d'étude</b>	<b>Budget (€)</b>	<b>Employeur</b>
2007-2010	120.00	J/V AKTOR SA-EDISON Spa
	<b>Propriétaire</b>	<b>Position</b>
	ELPEDISON POWER	Thisvi, Viotia

Combined Cycle Power Plant, located at Thisvi, Viotia with maximum capacity 421.6MW running on natural gas, which also includes a 400KV substation and a high voltage transmission power-line. The plant is equipped with all auxiliary systems necessary for the proper and safe operation of the station and its sub-systems.

Owner of the unit is the company ELPEDISON S.A. (EDISON, ELPE, ELLAKTOR), the second company in installed power in Greece.

The plot area is 101.120 m<sup>2</sup>, while the superstructures and substructures cover approximately 24.000m<sup>2</sup>.

The turbines (GT/ST/GEN) are supplied by ANSALDO, the HRSG from NOOTER ERIKSEN, the air cooled condenser by GEA and the transformers by TAMINI. The commercial operation of the plant started in August 2010 and from 9/12/2010 the unit is operating at full power.

The detailed construction design was carried out initially on behalf of EDISON Spa and then on behalf of the construction joint venture (EDISON, AKTOR) and refers to all Civil Engineering works of the plant (buildings, foundations, equipment bases and supports, piperacks, underground installations and networks, roads and paving, landscaping etc. 850 drawings and calculations were issued, while all necessary building permits were issued. Our company was also responsible under law for the technical supervision of all civil engineering activities.



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2/17

*Power Plant Aerial View*





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3/17

*Panoramic View*





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4/17

### *General View of Power Units*





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DATE

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Pg

5/17

*General View*





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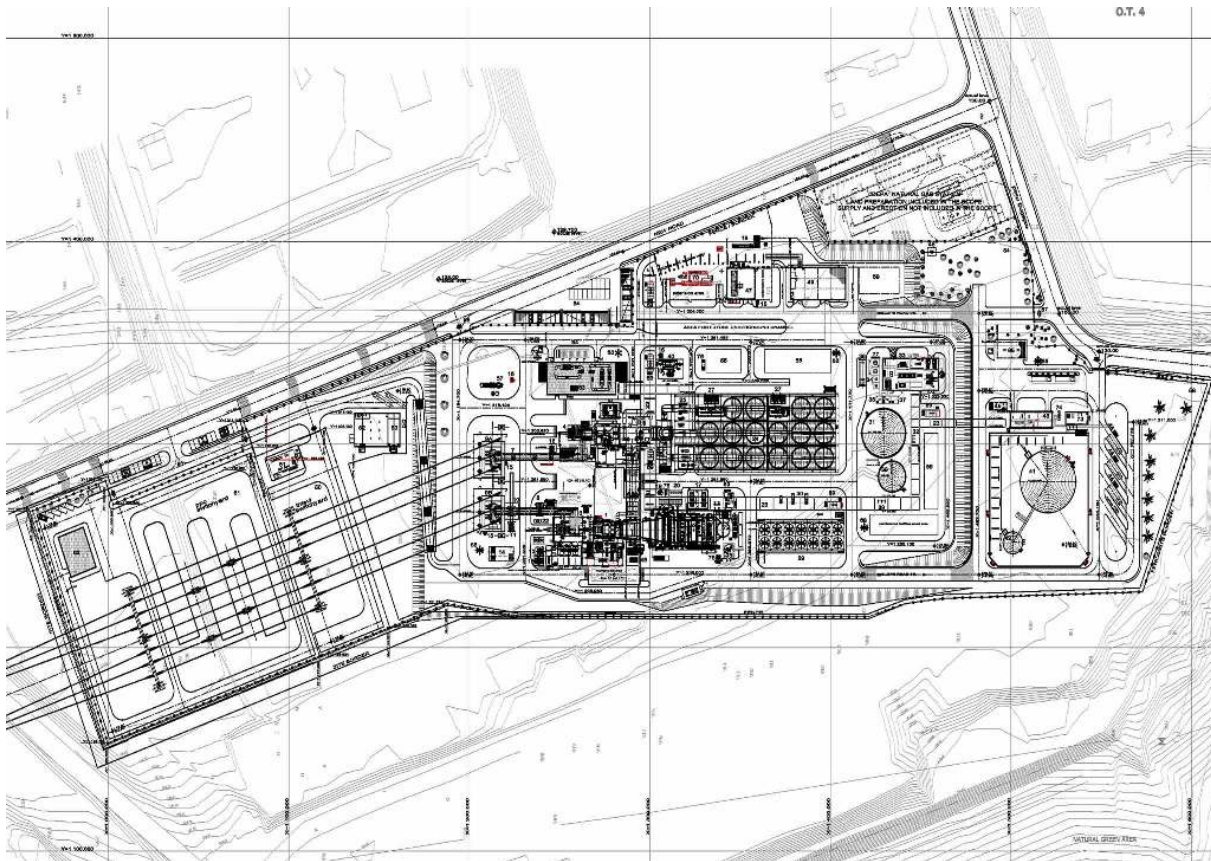
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24/04/2026

Pg

6/17

### General Layout Drawing





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7/17

### *Power Production Units*





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8/17

## Heat Recovery Steam Generator





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9/17

*HRSG Stack 60m high*





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10/17

*Pipe rack*





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11/17

*ACC-Main Pipe rack*





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12/17

*Main Transformers T1-T2*





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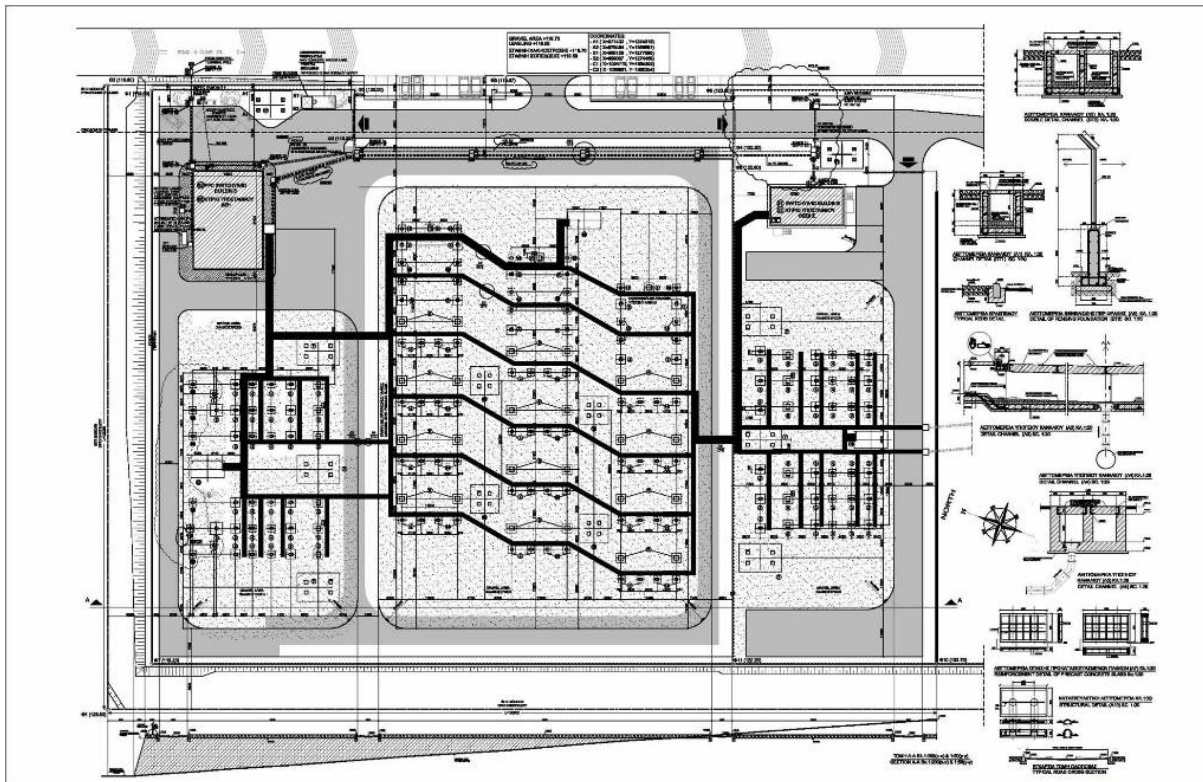
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24/04/2026

Pg

13/17

*Substation General Layout Drawing*



CLIENT: elpe power	EDISON	THISVI COMBINED CYCLE POWER PLANT 421 MW	CIVIL WORKS CONSTRUCTION DESIGN	DWG NUMBER: J110PLEC551	TITLE: 400kV SUBSTATION GENERAL LAYOUT	DESIGNER: design and application engineers s.a.
			MAY 2008 - MAY 2010			



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14/17

*400 KV Substation General View*





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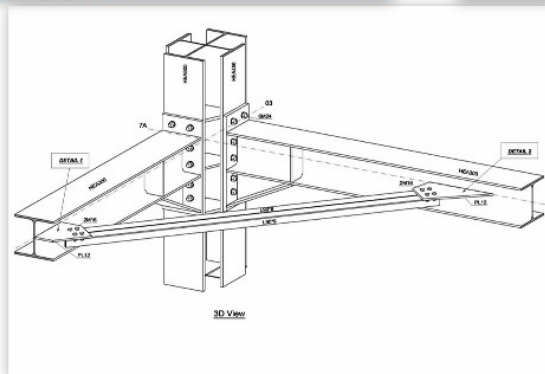
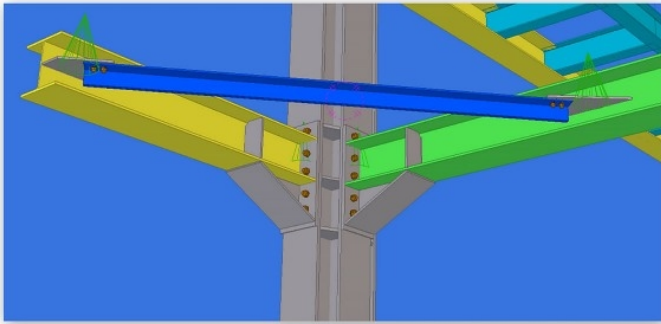
15/17

## *Substation Equipment*





*Pipe Rack Steel Joint (Model-Drawing-As built)*





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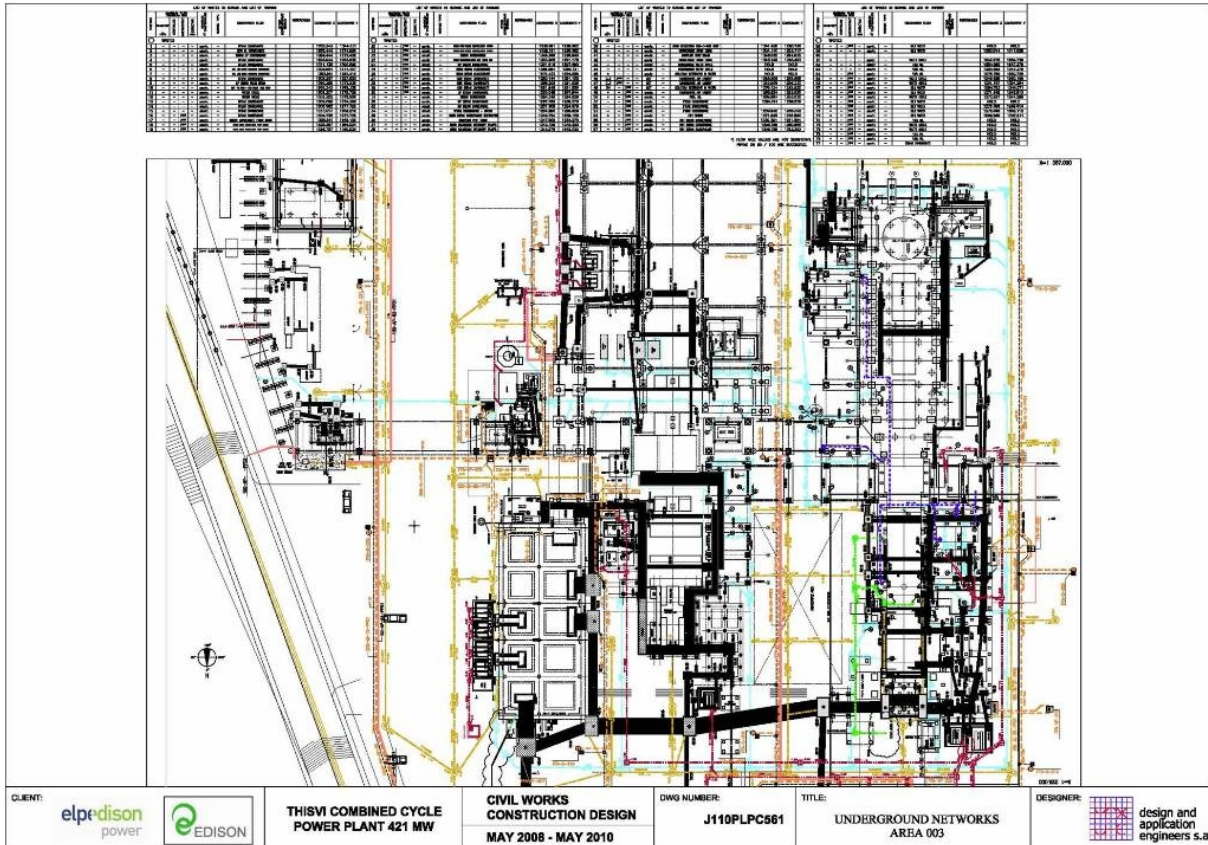
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Pg

17/17

*Underground Networks Partial Drawing*



CLIENT: **elpe** edison power **EDISON** **THISVI COMBINED CYCLE POWER PLANT 421 MW** **CIVIL WORKS CONSTRUCTION DESIGN MAY 2008 - MAY 2010** DWG NUMBER: **J110PLC561** TITLE: **UNDERGROUND NETWORKS AREA 003** DESIGNER: **design and application engineers s.a.**