
Thessaloniki FSRU

Project summary



June 2022

- Elpedison already possesses and operates two CCGTs with a capacity of 400 MW each, one in Thessaloniki area (North Greece) and one in Thisvi, Viotia area (South Greece), while the company is currently developing an 800 MW CCGT next to the existing one in Thessaloniki.
- With the construction of Thessaloniki II power plant, Elpedison will possess a significant power generation capacity in Thessaloniki area (1200 MW), which, combined with Thisvi power plant and Elpedison's gas supply activities, will require significant quantities of natural gas. Our forecasts estimate 10 TWh/year of gas volumes for the power plants.
- Congestion in Revythoussa LNG terminal as well as in the National Natural Gas Transmission System may result in additional fees for gas shippers and gas consumers in DESFA's network
- By building and operating its own LNG import infrastructure and connection to Thessaloniki site, Elpedison will benefit from the flexibility to optimize its own gas supply schedules and from serving other gas suppliers.



Contribution to system adequacy and enhancement of competition

- Contribution to avoidance of congestion in Greek NG system
- Enhancement of security of supply by installing an additional entry point for NG in the country
- Enhancement of competition in Greek and regional gas and electricity markets
- Creation of small scale LNG supply point for northern Greece



Added value for Elpedison

- Avoided transmission and balancing costs
- Benefit from flexibility
- Benefit from possibility to exploit LNG storage opportunities
- Benefit from serving other gas suppliers
- Revenue from small-scale LNG
- Increased competitiveness in power generation

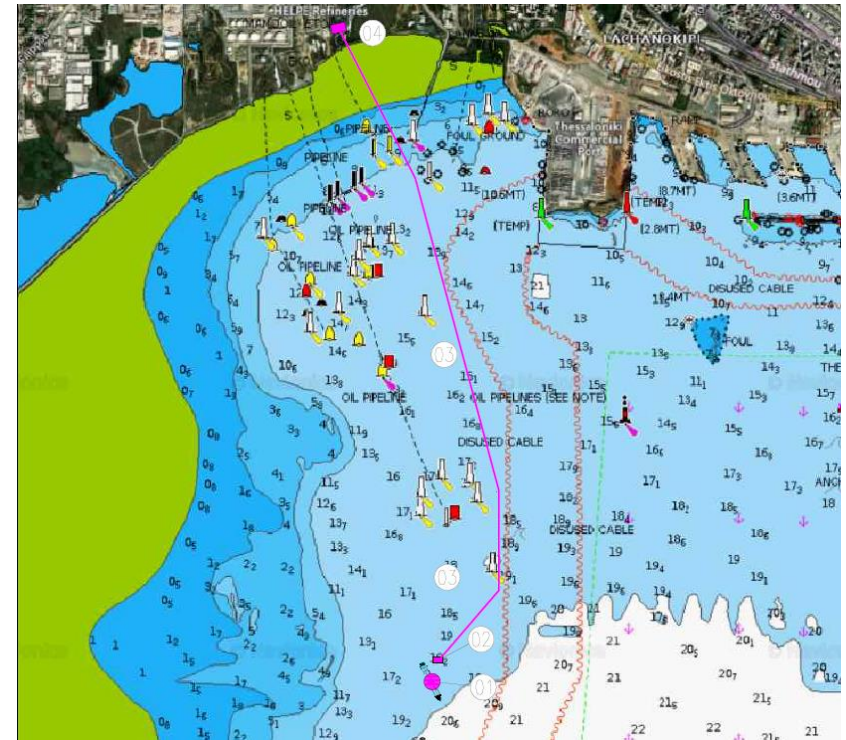
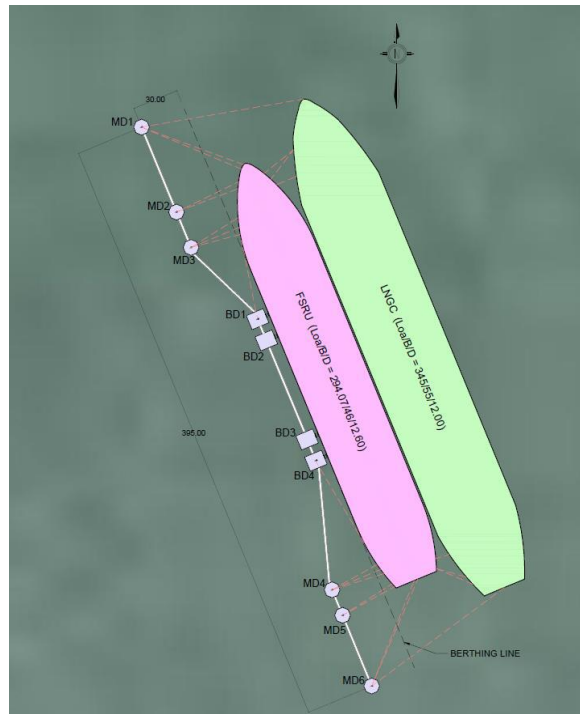


- New entry point to the Greek transmission system in northern Greece, west of Karperi-Komotini branch which is currently congested, will contribute to NNGS congestion management, as well as providing geographical differentiation to the only LNG entry points existing (Revithoussa), under construction (Alexandroupolis) and under development (Agiioi Theodoroi).
- Close to Elpedison's major gas consumption
- Proximity to major gas infrastructure under development, such as the Interconnection Greece – North Macedonia and the South Kavala UGS will create synergies
- LNG supply point for LNG fueled vessels in Thessaloniki port which is currently not served by any LNG fuel infrastructure (existing or planned)

- **LNG storage capacity:** 140.000 – 170.000 m³ LNG
- **Regasification capacity:** 500 – 750 mmscfd corresponding to max 153,000-220,000 MWh/day
- **FSRU:** max. length 325 m, max. beam: 50 m, max. draught 13 m
- **Pipeline length:** Subsea ~4,5 km, Land ~7 km
- **Pipeline diameter:** 24 inch - **Pipeline design pressure:** 80 barg

FSRU mooring

- Probable mooring system consists of breasting and mooring dolphins
- Other alternatives have been identified (SPM or spread mooring) in case first option proves non feasible



Siting of FSRU and offshore pipeline routing

- Selected FSRU location: 4.40km S-SE from shoreline of HELPE refinery
- Preliminary offshore pipeline routing follows the magenta line on the map above

- Elpedison has applied for a INGS (ΑΣΦΑ) license from RAE. Issuance is expected within the next few months
- Conceptual engineering design of marine infrastructure and pipelines is ongoing
- Geophysical and bathymetric survey in the area to be performed within the next weeks
- Environmental studies to be initiated soon
- Communication with DESFA is ongoing, with the view to identify the optimum solution for supplying the National Natural Gas System and enhance the country's security of supply
- Evaluating alternatives for ensuring the timely provision of the appropriate FSRU vessel