

Montoir LNG Terminal Development

Matching European Gas Market needs by
enhancing the maritime compatibility

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New LNG market developments Expert Forum



Patron



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Montoir LNG Terminal

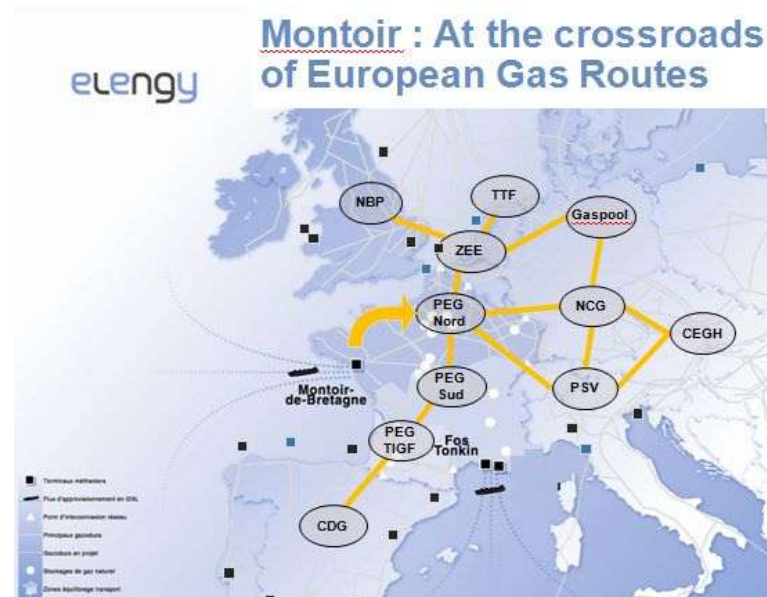
- LNG is going East – Temporary weakness of the European LNG Market

- Opportunity for European Terminals:
 - To expand their maritime compatibility
 - To develop new service features



Relevant features for market players

- A large development potential
- A positive local insertion
- A reliable maritime configuration
- A dynamic hinterland



Preliminary technical reviews LNG Tanks investigations

- Concrete ageing
- Thickness measurements of reinforcement steel cables
- Drilling of concrete sample
- Infra red thermography



Preliminary technical reviews

Process expertise

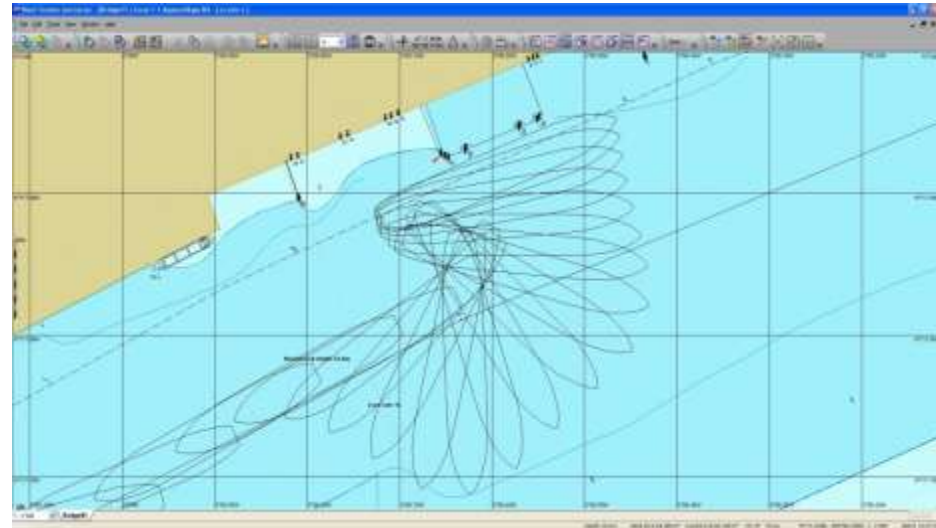
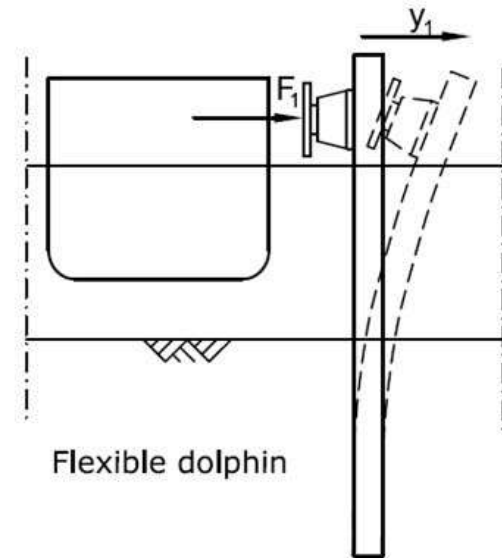
- Identification of main corrosion locations
 - Pipe supporting systems
 - Platform supporting frames
 - Electric boxes
 - ORV support structures



Preliminary technical reviews

Maritime expertise – Qmax

- Assessment of berth structural features
- Assessment of Port environment
 - Navigation simulations
 - Required tug capacity



Focus on works

LNG tanks and process

- Full refurbishment of the insulation on tank domes
- Valves replacement
- New overhead bridge



- Full 6,6 kV power transmission network replacement
- New ORV supporting structures

Focus on marine works to achieve Qmax compatibility

- Fenders and associated piles upgrading
 - Head of each dolphin pile replaced
 - Prefabricated fender module installed

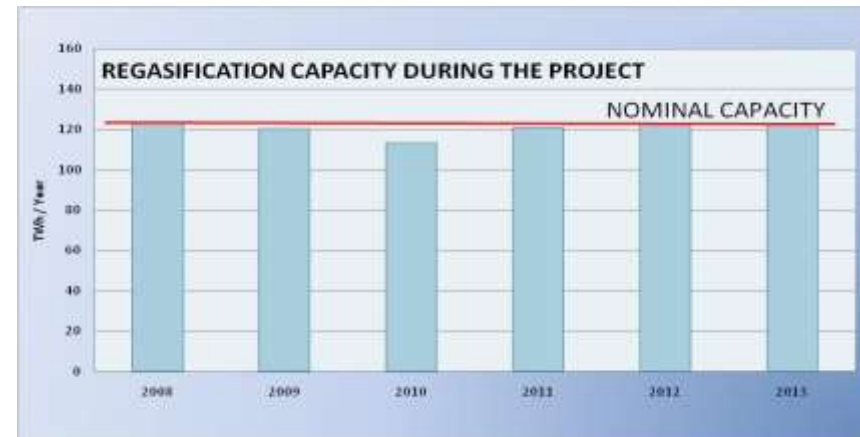


- Mooring points and hooks
 - Increased safe working load
 - New foundations
 - Additional hooks
 - Rock slope reshaped

Limited commercial impact

- The regasification capacity has not been affected by the project
 - Specific execution methodology
 - Dedicated operations team

- Development of the customer portfolio
 - Validation of this life expansion strategy



Conclusion

- Current market situation is considered as an opportunity:
 - To strengthen existing facilities
 - To develop their maritime compatibility
 - To develop new service features
- From this strong basis, new issues can be addressed:
 - Enhance arbitrage possibilities
 - Develop small scale LNG logistics
 - Identify new environmental innovations