

NATURAL GAS PUBLIC COMPANY (DEFA)

UPDATE ON THE CYPRUS LNG PROJECT

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The Cyprus LNG Import Terminal Project



- Acquisition of FSRU
- Construction of the jetty for FSRU berthing and mooring equipment
- Construction of the jetty borne gas pipeline and Loading Arms
- Construction of onshore gas pipeline
- Construction of shore side above ground installation (AGI) pressure reduction and metering station (PRMS)
- Construction of pipeline storage array as a Natural Gas buffer solution

Contractor has <u>24 months</u> from beginning of works to delivering the complete working solution.



LNG Import Project - Tender





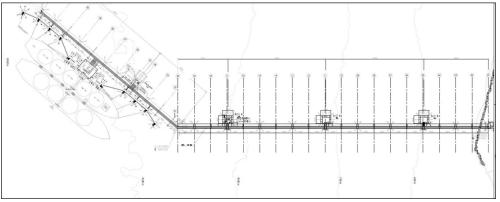
- Proposals Submission Deadline was 12 July 2019
- Major companies active both in Europe and internationally participated in the tender process.
 Proposals were submitted by 3 Consortia:
 - Consortium of JV China Petroleum Pipeline Engineering Co Ltd. and METRON S.A., with Hudong-Zhonghua Shipbuilding Co. Ltd and Wilhelmsen Ship Management Limited
 - Consortium Samsung C&T, Posco E&C, Mitsui O.S.K. Lines, Osaka Gas
 - European Consortium (DAMCO Energy S.A., ENAGAS Services Solution S.L.U., GasLog LNG Services Ltd., SNAM Spa, TERNA S.A.)

First Ranked Proposal – Technical Description



- LNG Import Terminal with Jetty Construction on piles, an FSRU based on conversion of the "GALEA" LNGC (currently owned by Shell Tankers (Singapore) Private Itd) and jetty and onshore pipe works with onshore gas facilities
- Conversion Works at HUDONG Shipyard in China. Will be classed as both LNGC and FSRU.
- Vessel Description and Conversion Works:
 - Year and Place of Build: 2002, NSMW Mitsubishi Heavy Industries
 - Classification Society Lloyds Register
 - Containment System: Moss Rosenberg (spherical tanks)
 - 5 Tanks with overall LNG storage capacity of 136,141 m3 (at normal filling level)
 - Dimensions: Overall Length 290m, Breadth moulded 46m, Depth moulded 25.5m
 - Propulsion: Steam, Dual Fuel
- After conversion from LNGC to FSRU the vessel will be equipped with a stateof-the-art regasification modular unit delivered by Wärtsilä.
- The FSRU will be capable of accepting LNG from LNG carriers ranging in size from 120,000m3 to 217,000m3 (Q-FLEX).





LNG Import Terminal Summary Project Financials



- Project Financials Estimated total cost (CAPEX + OPEX) ca. <u>€499 million</u>
 - CAPEX: ca. €289 million
 - OPEX: ca. €210 million (for 20 years)
- Project Financing CAPEX (Total facility negotiated under discussion) €409 million. Various alternative scenarios are also presently being explored.
- OPEX will be covered through actual gas supply to users. Income will be regulated by CERA.
- Contractor has <u>24 months</u> from beginning of works to delivery the complete working solution.

LNG Supply Procurement Process



- 2 Stage Process: EoI (prequalification) & RfP
- Participants asked to express interest in supplying LNG through SPA and/or MSAs
- SPA short to mid term duration (3-5 years)
- Cyprus' LNG Demand will be allotted between SPA and MSAs
 - SPA will cover base load Quantities
 - MSAs will be used for supplementary cargos
- RfP stage expected for early 2020 and following the award of the LNG Import Terminal Tender to include info impacting the procurement process
 - FSRU Storage Capacity
 - Commencement of Operations Date

LNG Supply Procurement Process



25 EoIs Received: Participants to expressed interest in supplying LNG through SPA and/or MSAs

- Gunvor International B.V. Amsterdam
- Naturgy LNG Marketing Limited
- Centrica LNG Company Limited
- Endesa Energia S.A.
- Cheniere Marketing International LLP
- Equinor ASA
- Novatek Gas & Power Asia Pte Ltd
- Shell International Trading Middle East Ltd
- Enel Global Trading
- Eni Trading & Shipping S.p.A.
- Total Gas & Power Asia Private Ltd
- Osaka Gas Kabushiki Gaisha
- Powerglobe LLC

- Repsol LNG Holding S.A.
- Petronas LNG Ltd
- BP Gas Marketing Limited
- Vitol SA
- B.B. Energy (ASIA) Pte Ltd
- Mytilineos S.A.
- Uniper Global Commodities SE
- Marubeni Corporation
- SONATRACH and Public Gas Corporation (DEPA) S.A.
- Eni SpA (Gas & LNG Marketing and Power)
- Glencore Energy UK Ltd
- Mitsui & Co. Ltd

DEFA Driven Projects/Initiatives



Owner's Engineer Tender

To be announced in the coming weeks

Open Season Process

- Determination of Major End Users, NG Quantities per buyer and Spatial Allocation
- 3 current licensed IPPs

NG Pipeline Network Development

- Preliminary Design and Feasibility Study Completed
- Phase A' Power Generation supply and development of backbone transmission network

Other NG Consuming Markets

- Bunkering
- Industry
- Road Transport



Thank you!

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