# Energean's Karish Sales In Doubt As Israel Gas-To-Power Market Hots Up

Over half of the 7.1bcm/y sales deals for Energean's Karish project offshore Israel are in danger of being terminated. Buyers cite repeated start up delays, but the availability of cheap alternate Tamar gas is an additional factor.

ondon-listed Greek firm Energean is in danger of losing key customers for its 7.2bcm/y (700mn cfd)

Karish development offshore Israel. Of 7.1bcm/y (684mn cfd) in gas sales contracts, more than half is under threat.

Energean's three largest customers are all looking to back out of their gas purchases on contracts signed with Energean in 2017, citing delays to the project that was originally due online in late 2020 (MEES, 30 March 2018). Energean now eyes first output in mid-2022 (MEES, 3 September), with the 800mn cfd-capacity Energean Power FPSO due to set sail from its Singapore shipyard in Q1 next year.

Initial output will be from the 1.4tcf Karish field, and this will then be supplemented by the tie-in of the nearby 1.2tcf Karish North field from the second half of 2023 (see map). Planned output is 1.9bcm for 2022, rising to 5.2bcm for 2023, 6.8bcm for 2024 and plateau output of 7.2bcm/y (700mn cfd) from 2025. The 0.9tcf Tanin field 45km to the west, and potentially finds from nearby Energean exploration blocks (MEES, 2 July), would then be tied in to bolster output at a later date.

But the threat to key sales deals now puts a question mark against the need for gas from Karish North, never mind further expansion (see chart). A complicating factor is that Energean is eying the liquids output from Karish North's wet gas as a key high-margin revenue stream (see box).

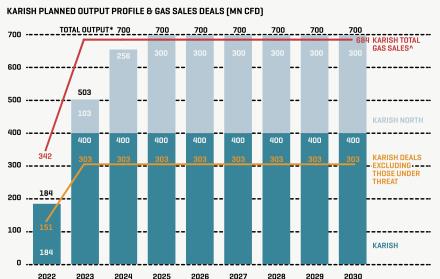
### STRIKE ONE...

Energean's most recent corporate presentation acknowledges that "one buyer representing 11% of ACQ [annual contracted quantities] has served a notice to terminate" their contract to purchase Karish gas.

This is a reference to the 900MW Dalia power plant west of Jerusalem, which in 2017 signed up to take 11.5bcm over 15 years, equating to 0.77bcm/y (74mn cfd) or just under 11% of Energean's total annual contracted sales of 7.1bcm/y (684mn cfd).

# STRIKE TWO...

It gets worse. Energean's largest



\*IMPLIED MID-2022 START-UP FOR KARISH AND 2H2023 START-UP FOR KARISH NORTH WITH RAMP-UP THEREAFTER, AN USALES DEALS IN THEORY BEGIN WITH START-UP OF KARISH. SALES DEALS PROFILE IGNORES ANY RAMP-UP PERIOD. 2022 FIGURES ARE BASED ON A HALF-YEAR OF FULL VOLUMES

#### **ENERGEAN'S KARISH SALES DEALS:** MORE THAN HALF ARE UNDER THREAT AS 700MN CFD PROJECT NEARS MID-2022 START UP

Buyer	Signed	bcm	tcf	bcm/yr	mn cfd	years	% of total^
TOTAL UNDER THREAT		64.3	2.3	3.9	381		55.7
Dalia*	May17	11.5	0.41	0.8	74	15	10.8
Or Power**	May17	11.5	0.41	0.6	56	20	8.1
Ofer Group:*	Dec17	41.3	1.5	2.6	251		36.8
Bazan Oil Refinery		19.6	0.69	1.15	111	17	16.3
OPC Rotem & Hadera	***************************************	9.0	0.32	0.60	58	15	8.5
Israel Chemicals		12.8	0.45	0.85	82	15	12.0
Dorad	Oct17	6.75	0.24	0.5	47	14	6.8
Edeltech Group	Oct17	2.4	0.08	0.2	17	14	2.4
Rapac Group	Dec17	4.9	0.17	0.3	28	17	4.1
IPM Beer Tuvia	Jan19	5.5	0.19	0.3	28	19	4.1
Alon Tavor (MRC)	Nov19	8	0.28	0.5	48	15	7.1
Ramat Hovav & Partners	Sep20	28	0.99	1.4	135	20	19.8
TOTAL		119.9	4.2	7.1	684		

\*LOOKING TO BACK OUT OF DEAL. \*\*PLANT LOOKS UNLIKELY TO BE BUILT. \*BASED ON PER-YEAR/DAY VOLUMES. SOURCE: ENERGEAN, MEES CALCULATIONS.

customer is also looking to terminate its contract. Energean acknowledges that in addition to Dalia, "counterparty buyers (representing in aggregate, c.36% ACQ) have asserted or notified to preserve contractual rights to terminate... and/ or to money damages due to delay to first gas." Such contractual rights apply "as early as Q4 2021" Energean says.

This is a reference to the total of 41.3bcm, or 2.6bcm/y (250mn cfd)

that the Ofer Group agreed to purchase for three of its subsidiaries in a 2017 deal. This stipulated the supply of 0.69bcm/y to the 197,000 b/d Bazan oil refinery in Haifa; 0.60bcm/y to OPC, operator of two power plants with combined 610MW capacity at Hadera and Rotem; and 0.85bcm/y to petch-

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first gas by November 2020.

ems firm Israel Chemicals (see table). MEES understands that Ofer Group's deal stipulated

Energean is disputing both Dalia and the Ofer Group's termination attempt as "invalid and in breach of the relevant contract." Energean says that due to Covid-related delays to construction work in both Singapore and China it has a valid "force majeure" claim and is confident it will win any arbitration ruling.

These two threatened deals equate to 47.6% of current contractual volumes.

#### STRIKE THREE

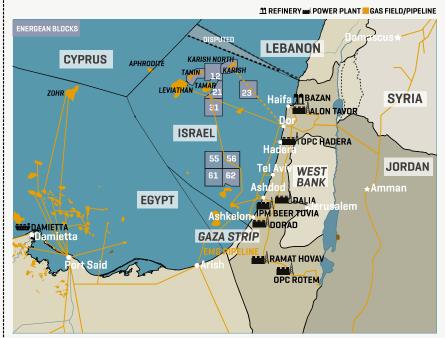
And it gets worst still. A third deal, also for 11.5bcm (0.58bcm/y over 20 years; 56mn cfd) with Or Power looks unlikely to go ahead.

Or Power's planned plant has yet to receive a license never mind start construction. Indeed, no information has been made public concerning a possible site for the plant nor its capacity, casting more doubt over the deal with Energean. It is unclear whether this contract, or indeed the others Energean has signed, has an enforceable takeor-pay element though Energean says that around 75% of overall Karish sales volumes include take-or-pay provisions.

Adding in the quantities reserved for the proposed Or Power station would increase the share of deals that could be terminated to 3.9bcm/y (381mn cfd), some 55.7% of total volumes. Losing more than half of its customers would be a huge blow for Energean at this stage with the project now more than 90% complete according to Energean's latest announcements.

Energean's finances are highly leveraged, with \$1.69bn of net debt

#### **ENERGEAN ISRAEL KEY ASSETS & GAS SALES CUSTOMERS**



as of end-June rising to an expected \$2.0bn at end 2021. The firm raised \$1,275bn via a Senior Credit Facility and a further \$460mn from an IPO on the London Stock Exchange in March 2018 in order to take FID on Karish, which is Energean's key project.

Energean got the Karish project off the ground in early 2018 in the face of widespread Israeli skepticism - after all the then-producing Tamar together with the under-development Leviathan were already offering far more gas than was needed in the domestic Israeli market.

Karish's unique selling point was price, with Energean securing sales deals with pricing of around \$4-5/mn BTU which undercut that offered from the Leviathan and Tamar fields which were (and are) operated by the same company - then Noble Energy (in partnership with Israel's Delek Drilling), now Chevron.

Noble and Delek effectively preferred to cede part of the market to their upstart competitor rather than undercut their existing domestic sales deals. However, once Leviathan started up at the end of 2019 this meant that there was not enough demand to go around: as Noble and Delek favored the larger field (in which they have larger stakes than at Tamar), Tamar output slumped to multi-year lows.

This led the several minority partners at the 10.5tcf Tamar field to call for the right to independently market their own share of gas rather than have Noble/Chevron veto sales deals that would undercut Leviathan. The minority partners won a ruling on this last year (MEES, 24 April 2020), with this ruling entering effect at the start of July this year (MEES, 5 February).

## KARISH OIL AWARD

Energean has hiked its estimate for plateau liquids output from the Karish and Karish North fields to 31,000 b/d from 2024, having previously hiked the figure from 10,000 b/d to 28,000 b/d last year (MEES, 27 November). Almost all of this will come from the Karish North field, which is slated to come online in 2H 2023.

Though liquids output from the Karish development will be far lower than the planned 700mn cfd plateau gas output on an 'oil equivalent' basis, this understates the importance of these liquids to Energean's economic model in developing the fields. Energean appears to have been willing to sell gas on the domestic market at a cut-price \$4-5/ mn BTU in the expectation of a hefty profit margin from sales of condensate on the international market.

Cargoes will load directly from the 'En-

ergean Power' FPSO. And Energean this week awarded Oslo-based Kanfa a contract "for the supply of a second, 700-ton oil train for the Energean Power FPSO."

"The addition of a new oil/condensate separation module will increase the FPSO's liquid production capacity from 18,000 b/d to 32,000 b/d," Energean says. Kanfa is a subsidiary of Paris-based TechnipFMC which has done much of the development work and planning for the Karish project.

As per this latest award, this suggests that Energean is pressing on with the development of the liquids-rich 1.2tcf Karish North field despite a threat to several of Energean's Karish gas sales contracts that suggests limited near-term gas demand for gas supplies beyond the initial 1.4tcf Karish field, which is due online in mid-2022 (see main story).

# **ALTERNATE OPTIONS**

This means that as of Q3 this year, Energean suddenly has competition at the budget end of the Israel gas supply market, with the Tamar field split among seven shareholders including the newest entrant, Mubadala (MEES, 10 December). And unlike Karish, the Tamar field, which has been producing well below 1.2bn cfd capacity (MEES, 26 November), can offer volumes with immediate effect.

With Dalia now looking elsewhere for gas according to local Israeli media reports, it is perhaps no surprise that it is reportedly in talks with partners at the Tamar field to replace the volumes it was planning to take from Karish.

From an average of approximately \$5.30/mn BTU for Q1 2020, the average achieved price for Tamar gas fell to around \$4.60/mn for Q3 this year on increased competition. ••

