

## BREAKING NEWS

### Egypt's Egas buys spot LNG cargo from Noble

Hong Kong-based commodities trading firm Noble Group subsidiary Noble Clean Fuels has won a tender to supply Egypt's state-owned gas company Egas with one LNG cargo for delivery in late June, according to market sources.

The cargo will be supplied in addition to the deal between Noble and Egas to supply seven cargoes over two years with deliveries starting in April.

Noble Clean Fuels supplied the first two cargoes regasified at Egypt's 3.65mn t/yr import terminal in Ain Sukhna south of the Suez Canal. Both cargoes were sourced from the 77mn t/yr Ras Laffan liquefaction facility in Qatar.

Egas has secured 55 cargoes for delivery in 2015-16 and 35 for 2015-20. Trading firms Trafigura and Vitol, Algeria's Sonatrach and Russia's Gazprom have agreed to supply the Egyptian buyer. Egas has also been in discussion with BP for delivery of 21 cargoes, the oil ministry said earlier this year.

In addition to Qatari volumes, Egypt has received cargoes from Spain, Algeria, Australia and a reload from India. Of the seven cargoes so far delivered to Ain Sukhna, four have been supplied by Trafigura and one by Sonatrach.

Egypt is likely to receive LNG from Asia-Pacific liquefaction facilities in the second and third quarter. A number of

## PRICES

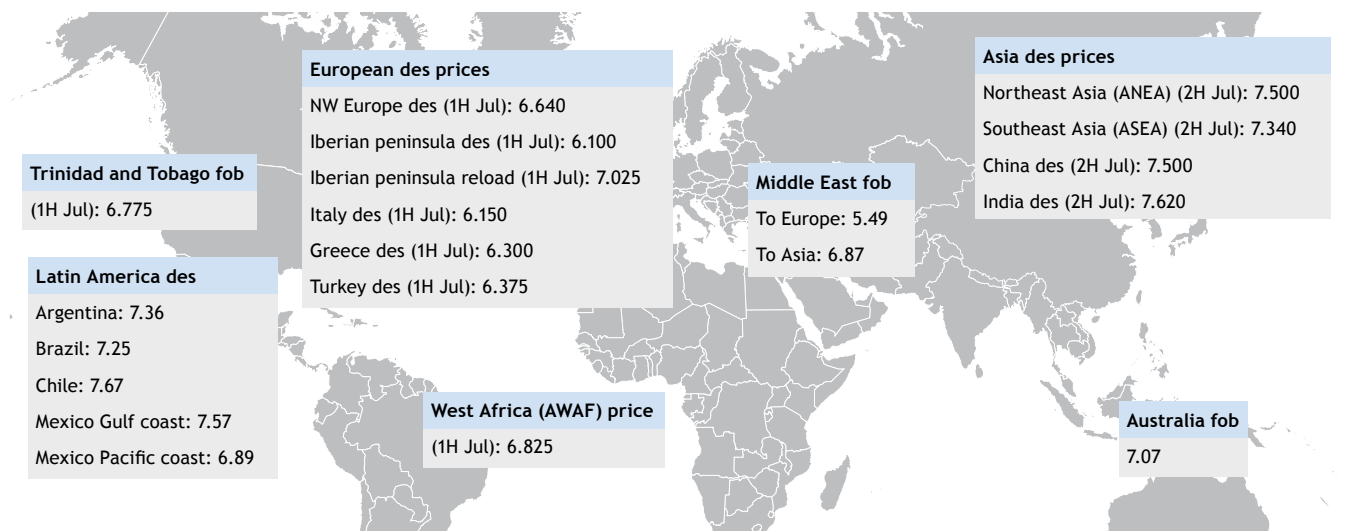
Argus Asia-Pacific des spot LNG					\$/mn Btu	
	Delivery	Bid	Offer	Midpoint	±	
Northeast Asia (ANEA™)	2H Jul	7.26	7.74	7.500	0.000	
	1H Aug	7.24	7.73	7.485	0.000	
	2H Aug	7.24	7.73	7.485	0.000	
China	2H Jul	7.26	7.74	7.500	0.000	
	1H Aug	7.24	7.73	7.485	0.000	
	2H Aug	7.24	7.73	7.485	0.000	
India	2H Jul	7.36	7.88	7.620	-0.010	
	1H Aug	7.32	7.84	7.580	-0.010	
	2H Aug	7.32	7.84	7.580	-0.010	

Argus fob spot LNG					\$/mn Btu	
	Loading	Bid	Offer	Midpoint	±	
Iberian peninsula reload	1H Jul	6.55	7.50	7.025	-0.055	
	2H Jul	6.55	7.50	7.025	-0.055	
	1H Aug	6.48	7.38	6.930	-0.025	
West Africa (AWAF™)	1H Jul	6.60	7.05	6.825	-0.065	
	2H Jul	6.60	7.05	6.825	-0.065	
	1H Aug	6.53	6.98	6.755	-0.060	
Trinidad and Tobago	1H Jul	6.50	7.05	6.775	-0.050	
	2H Jul	6.50	7.05	6.775	-0.050	
	1H Aug	6.43	6.93	6.680	-0.060	

Argus Atlantic Basin fob spot LNG					\$/mn Btu	
	Loading	Bid	Offer	Midpoint	±	
Atlantic Basin	1H Jul	6.58	7.28	6.925	-0.060	
	2H Jul	6.58	7.28	6.925	-0.060	
	1H Aug	6.50	7.18	6.842	-0.043	

## Latest price snapshot

\$/mn Btu



cargoes loading over the coming months are being offered in Asia-Pacific while availability from Atlantic basin liquefaction facilities is relatively limited.

Companies that have agreed to supply Egypt have also reached supply deals with companies with offtake from Qatar and positions in Spain, sources said.

## MARKET COMMENTARY

### Asia-Pacific market awaits tender results

Northeast Asian spot prices are unchanged, as market participants continue to await results from recently closed tenders to sell.

A tender by Russia's 9.6mn t/yr Sakhalin LNG has been awarded, traders said, but this could not be confirmed. One July, two August, and one September des cargoes were offered in the tender, which closed on 8 June with bids valid until 10 June. But details on the number of cargoes awarded and prices are unclear. At least one recipient of the Sakhalin cargoes was a consumer buyer.

Consumer demand remains weak in northeast Asia, with potential July and August purchases from Taiwan's state-controlled CPC, Japanese utilities and Chinese state-controlled and private-sector importers. Japan's Kyushu Electric Power now expects its 890MW Sendai No.1 nuclear reactor to resume operations only in mid-August, later than the previous schedule of the end of July. Market participants expect the utility to have base spot requirements of around one to two cargoes a month, assuming no nuclear power output.

Northeast Asian consumer buyers have tentative buying ideas at a high \$6/mn Btu for July and August cargoes. "Some buyers from Japan may be able to take cargoes despite their high inventories, if the price is very attractive. This means below \$7/mn Btu," one buyer said.

But portfolio participants and trading firms that have optimisation demand are able to pay as high as mid-\$7/mn Btu for July and August supplies. Portfolio firms that have term offtake agreements with the 6.7mn t/yr Yemen LNG could require spot volumes to meet supply commitments, with the production at the plant halted for close to two months now. Yemen LNG produces around 8-10 cargoes a month at nameplate capacity. "If these Yemen offtakers have supply contracts with end-user buyers at high oil slopes, then it would be economically attractive for them to seek cheaper spot cargoes for supply commitments. But if the slope is low, and the term price is lower than the spot price, then the optimisation would be limited," a northeast Asian buyer said.

The 6.9mn t/yr Papua New Guinea LNG offered a 24-25 July des cargo via a tender that closed on 4 June with bids valid until 8 June. But results have yet to emerge. Indone-

Argus Latin America des spot LNG				\$/mn Btu	
	Delivery	Price		±	
Argentina	Prompt	7.36		-0.03	
Brazil	Prompt	7.25		-0.03	
Chile	Prompt	7.67		-0.02	
Mexico Gulf coast	Prompt	7.57		-0.03	
Mexico Pacific coast	Prompt	6.89		0.00	

Argus European des spot LNG					\$/mn Btu	
	Delivery	Bid	Offer	Midpoint	±	
NW Europe	1H Jul	6.28	7.00	6.640	+0.025	
	2H Jul	6.28	7.00	6.640	+0.025	
Iberian peninsula	1H Jul	5.20	7.00	6.100	-0.005	
	2H Jul	5.20	7.00	6.100	-0.005	
Italy	1H Jul	5.30	7.00	6.150	+0.010	
	2H Jul	5.30	7.00	6.150	+0.010	
Greece	1H Jul	5.60	7.00	6.300	+0.020	
	2H Jul	5.60	7.00	6.300	+0.020	
Turkey	1H Jul	5.75	7.00	6.375	+0.010	
	2H Jul	5.75	7.00	6.375	+0.010	

Key netbacks				\$/mn Btu	
	Delivery	Price		±	
Southeast Asia (ASEA)	2H Jul	7.34		-0.01	
	1H Aug	7.33		0.00	
	2H Aug	7.33		0.00	
Australia fob	Prompt	7.07		-0.01	
Middle East fob (Asia-Pacific bound)	Prompt	6.87		-0.01	
Middle East fob (Europe-bound)	Prompt	5.49		+0.01	

Argus Northeast Asia swaps				\$/mn Btu	
	Delivery	Price		±	
Sep		7.53		0.00	
Oct		7.43		0.00	
Nov		7.43		0.00	

Argus Japan, South Korea, Taiwan des spot LNG						\$/mn Btu	
	Delivery	Bid	Offer	Mid	±		
Japan, South Korea, Taiwan	2H Jul	7.26	7.74	7.500	0.000		
	1H Aug	7.24	7.73	7.485	0.000		
	2H Aug	7.24	7.73	7.485	0.000		

Argus Wallumbilla Index (AWX) - Friday 12 Jun 2015					
Delivery	Units	Bid	Offer	Midpoint	±
July	A\$/GJ	3.28	3.78	3.530	+0.670
July	\$/mn Btu	2.67	3.07	2.870	+0.548

Argus Victoria Index (AVX) - Friday 12 Jun 2015					
Delivery	Units	Bid	Offer	Midpoint	±
July	A\$/GJ	4.66	5.08	4.870	+0.520
July	\$/mn Btu	3.79	4.13	3.960	+0.428

The AWX and AVX indexes, the first month-ahead indexes for Australia's east coast Wallumbilla and Victorian natural gas markets, are assessed each Friday and reproduced through the week. The date shown is the date of the assessment. The indexes will also appear in the east coast Australian gas markets page each Friday.

sia's 22.6mn t/yr Bontang and 7.6mn Tangguh LNG also have July and August cargoes available through tenders, but the bid validity periods will expire only in about a week. Some stakeholders of Australia's 16.3mn t/yr North West Shelf LNG has offered August cargoes, with indicative selling ideas in line with market levels at a high \$7/mn Btu.

The ANEA price, the Argus assessment for deliveries to China, Japan, South Korea and Taiwan, is unchanged across the board at \$7.50/mn Btu for second-half July, and first- and second-half August deliveries.

Indian spot prices ended the week steady, with July demand from state-controlled importers still providing some support. At least three such buyers are seeking a total of five to six June and July cargoes through tenders to buy that closed over the past two weeks. But it remains unclear how many of these cargoes have been awarded.

Indian requirements have strengthened among domestic power utilities, following the government's plan to boost LNG consumption in the electricity sector through subsidies. It is common for power plants in India to stay idle because of the lack of domestic gas allocations and costly imported LNG.

Delayed monsoon rains this year have also led to incremental gas requirements, as temperatures stay high and hydropower output keeps low. India's monsoon season typically starts in early June and lasts until the end of September or early October. "The monsoon rains have been late this year, but are expected to come towards the end of June. Gas demand should ease on that," a gas consumer said.

Indicative July bids are at a low \$7/mn Btu against offers at a high \$7/mn Btu. Buying focus has yet to shift to August, but early price ideas show a slight backwardation to July.

India's des prices are assessed down by 1¢/mn Btu across the board to \$7.62/mn Btu for second-half July, and \$7.58/mn Btu for first- and second-half August deliveries.

### Atlantic basin fob prices extend decline

Atlantic fob prices extended their losses on Friday amid weak demand expectations and as high levels of supply availability in Asia-Pacific continued to lend pressure.

The Atlantic fob price for the front half-month dropped lower for the fifth consecutive session, and fell further below the \$7/mn Btu support level on Friday.

Deals for June-loading cargoes concluded at around \$7/mn Btu in recent weeks were no longer reflective of the market, because outstanding demand was now negligible.

But spot buying from Egypt's Egas limited losses. Noble Clean Fuels won a tender to supply one cargo to Egypt at the end of June. The cargo will be delivered in addition to its supply commitment to the country. This would be the third cargo the company has delivered to Egypt.

Egas may issue additional spot tenders for cargoes delivering during the summer months when gas demand is supported by higher use of air conditioning. But it had not yet tendered for additional spot volumes, market sources said.

Egypt was yet to sign a supply contract with an oil major, market participants said. Some thought that the deal would be signed soon, which would mean the oil major would be

#### Global supply highlights

Supply	Loading period	First reported	Last updated	Comments
Unspecified number of cargoes from NWS	Aug	12 Jun	12 Jun	Offered by stakeholders: term offtaker and traders
2 cargoes from Tangguh	2H July	27 May	10 Jun	Tender closed 9 June; bids valid until 19 June
4 cargoes from Sakhalin	1 in Jul, 2 in Aug, 1 in Sept	03 Jun	09 Jun	Tender closed 8 June, with bids valid until 10 June
1 cargo from Papua New Guinea	24-25 July delivery	03 Jun	04 Jun	Tender closed 4 June, with bids valid until 8 June
1 cargo from Darwin	30 Jun-1 Jul	27 May	04 Jun	Tender closed 2 June; bids valid until 5 June
2 reloads from Spain	28 May and 30 May	27 May	27 May	Both are provisional
1 cargo from Bontang	Jul	26 May	26 May	Tender closed 26 May; bids valid until 21 June
1 cargo from Nigeria LNG	14-16 Jun	26 May	26 May	Bid deadline is 1 June
1 cargo from PNG	Jul	11 May	22 May	Cargo sold to a term offtaker at around high \$7/mn Btu: traders
1-2 cargoes per month from Bintulu	Apr-Dec	01 Apr	22 May	Sold up to July
2 cargoes from Brunei	Jun/Jul	07 May	21 May	Sold at mid- to high- \$7/mn Btu fob to trader and Japanese utility: traders
14 cargoes from Bontang, Indonesia	Late May-Dec	03 Feb	20 May	Sold 5 May-Jul cargoes at low \$7/mnBtu; 2 Jun-Jul cargoes at \$7.50/mn Btu

Global demand highlights				
Demand	Delivery period	First reported	Last updated	Comments
4 cargoes from Pakistan's PSO	Jul-Oct	11 May	12 Jun	Revised forward a month. Bid deadline revised to 15 June, valid until 29 June
3 cargoes from India's Gail	1 in June, 2 in July	02 Jun	10 Jun	Tender closed on 8 June; Cargoes likely to be awarded this week
1 cargo from India's GSPC	July	10 Jun	10 Jun	Close to finalizing deal; Target price below \$7.50/mn Btu
1 cargo from Chinese private buyer	Jul	28 May	09 Jun	Bought at mid-\$7/mn Btu; traders; regas capacity access unconfirmed
1 tendered, 38 expected from Jordan	1 in Aug, 38 in 2015-17	20 May	08 Jun	Tender for 36 for 2016-17 expected next week, 2 more for 2015
1 cargo from India's IOC	12-13 July delivery	03 Jun	05 Jun	Tender closed 4 June, bids valid until 19 June
3-4 cargoes from Japanese utilities	July	29 May	29 May	
Up to 4 cargoes from Japanese utilities	Jun	07 Apr	29 May	Requirements fulfilled: traders
3-4 cargoes from IOC	Jul-Dec	20 May	20 May	
7 cargoes from Argentina's YPF	Jun-Aug	30 Apr	14 May	Heard 1 awarded to European oil firm, bulk to trading house
6-10 cargoes from India's Gail	Late 2015 - late 2016	24 Mar	12 May	Closed 27 March; 7 cargoes awarded - 1 for Oct 2015, 6 for Jan-Dec 2016
2 cargoes from India's Gail	May-Jun	21 Apr	11 May	Tender closes 23 Apr. Offers being considered

able to supply Egypt from its portfolio. Others thought that Egypt may request cargoes from other traders, which could create demand for spot fob cargoes.

Noble has sourced the previous two cargoes it has delivered to Egypt from Qatar. If the company is in a position to make a spot purchase to meet the supply commitment, it would be incentivised to participate in tenders in Asia-Pacific. Several cargoes are available from tenders in the region.

By contrast supply available in the Atlantic basin is relatively limited. A spot tender for a cargo from the 22mn t/yr Bonny facility in Nigeria has not been launched since late May. Production at trains two and three at the 14.8mn t/yr Atlantic facility in Trinidad would be curtailed by 40pc until October, an offtaker said.

If Atlantic fob prices continue to drop, offers for north-west European reloads based on European hub prices would no longer be competitive with offers for cargoes loading from other Atlantic basin liquefaction facilities.

Recent deals for June-loading cargoes from the 8.7mn t/yr Gate terminal in the Netherlands and the 15mn t/yr Grain terminal in the UK were sold for over \$7/mn Btu, which at the time of the transaction was equivalent to 95pc of the hub price plus the loading cost and a margin, traders said.

The July contract at the UK NBP and Dutch TTF gas hubs were at \$6.58/mn Btu and \$6.61/mn Btu respectively on Friday. Assuming a loading cost of about \$0.20/mn Btu from

the UK terminal and \$0.30/mn Btu from the Dutch terminal, the marginal cost - not adjusted for profit - to sellers of July-loading cargoes from Grain would be \$6.45/mn Btu and \$6.60/mn Btu from Gate.

This suggests that if the price of cargoes from west Africa and Trinidad continues falls below about \$6.60/mn Btu, sellers of Gate reloads would no longer be in a position to offer cargoes at levels competitive with alternative supply in the basin.

Spanish reloads continued to be offered at levels not competitive with other sources, with offers for July-loading reloads from Spain almost \$0.50/mn Btu above the price of west Africa fob cargoes that month.

The 160,000m<sup>3</sup> Palu LNG - which loaded at Spain's 6.4mn t/yr Sagunto terminal on 1 June - will be delivered to Kuwait on a des basis by a Spanish utility, sources said. The utility would deliver multiple cargoes to the Middle Eastern buyer on a des basis which would likely be sourced from Spain under a deal concluded last year, sources said.

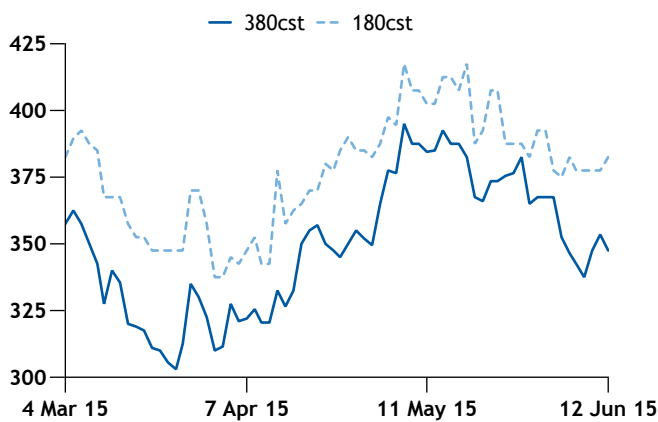
Brazil was also not expected to buy additional cargoes for the next couple of months. State oil firm Petrobras has made a number of spot purchases and was balanced for the summer, traders said.

Also, the 138,000m<sup>3</sup> Exceletrate tanker was heading to Bonny and set to arrive on 14 June. The vessel is expected to load a cargo for the trading house that won the most recent Nigeria LNG tender.

Global shipping highlights						
Vessel	Capacity m <sup>3</sup>	From	To	Loading	Arrival	Notes
Arctic Discoverer	140,000	Snohvit, Norway	South America	02 Jun	12 Jun	
Methane Patricia Camila	170,000	Point Fortin, Trinidad	Quintero, Chile	22 May	12 Jun	
British Diamond	155,000	Point Fortin, Trinidad	Atlantic Basin	28 May	13 Jun	Off coast of Argentina
Arctic Spirit	89,880	Point Fortin, Trinidad	Escobar, Argentina	06 Jun	14 Jun	
British Sapphire	155,000	Bilbao, Spain	South America	01 Jun	14 Jun	Possibly Argentina
Exquisite	150,900	Ras Laffan, Qatar	Port Qasim, Pakistan	12 Jun	14 Jun	FSRU
Grace Cosmos	150,000	Arzew, Algeria	Gate, Netherlands	01 Jun	14 Jun	
Al Safiya	210,100	Ras Laffan, Qatar	Map Ta Phut, Thailand	02 Jun	15 Jun	
Catalunya Spirit	138,000	Point Fortin, Trinidad	Escobar, Argentina	04 Jun	17 Jun	
Cool Runner	160,000	Ras Laffan, Qatar	South Atlantic	23 May	17 Jun	Petrobras vessel
Cool Voyager	160,000	Ras Laffan, Qatar	Red Sea	09 Jun	17 Jun	Possibly Egypt
LNG Ogun	149,600	Bonny, Nigeria	Japan	21 May	18 Jun	
Ribera Del Duero Knutsen	173,410	Bonny, Nigeria	Japan	18 May	20 Jun	
Wilforce	160,000	Zeebrugge, Belgium	Yung-An, Taiwan	26 May	21 Jun	Re-export
Cadiz Knutsen	138,800	Bonny, Nigeria	Dahej, India	28 May	22 Jun	
Grace Acacia	150,000	Bethouia, Algeria	Niigata-Nihonkai, Japan	29 May	22 Jun	
LNG Akwa Ibom	142,600	Bonny, Nigeria	Japan	23 May	24 Jun	
Palu LNG	159,800	Sagunto, Spain	Kuwait	01 Jun	24 Jun	Re-export
Arctic Discoverer	14,000	Snohvit, Norway	Bahia Blanca, Argentina	02 Jun	27 Jun	
GDF Suez Point Fortin	154,200	Arzew, Algeria	Joetsu, Japan	19 May	28 Jun	
Pskov	170,200	Ras Laffan, Qatar	Bahia Blanca, Argentina	26 May	03 Jul	
LNG Oyo	140,500	Bonny, Nigeria	Inchon, Japan	08 Jun	07 Jul	

Middle East bunker fuel - Fujairah

\$/t



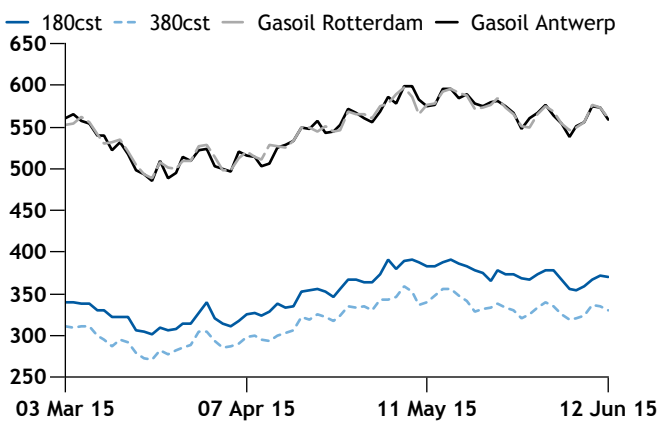
Benchmark price snapshot

Market	Delivery	Price
Natural gas \$/mn Btu		
Nymex	Jul	2.78
NBP	Jul	6.58
Zeebrugge	Jul	6.58
Peg Nord	Jul	6.69
PSV	Jul	7.18
AOC	Jul	6.99
Crude \$/bl		
WTI	Jul	60.19
Brent	Jul	64.25
JCC*	Mar	54.78

\*Japanese Crude Cocktail

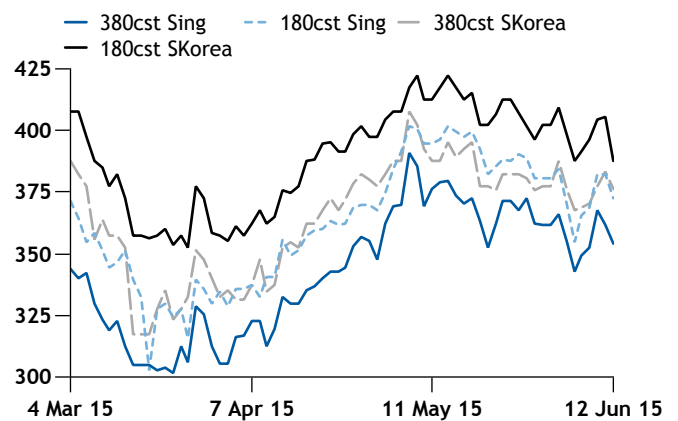
European bunker fuel - Rotterdam

\$/t



Asia Pacific bunker fuel

\$/t



## NEWS

**QCLNG train 2 indicated to start in July**

The 4.25mn t/yr second liquefaction train of east Australia's Queensland-Curtis LNG (QCLNG) plant is being signalled to start production in July, with it then having a shutdown related to commissioning and testing the following month.

The dates were indicated in the minutes of a Gladstone LNG community consultative meeting on 19 May, which was attended by representatives from plant operator QGC, Australia-Pacific LNG (APLNG), Gladstone LNG (GLNG) and various members of the Gladstone community. But QGC, the Australian subsidiary of UK energy firm BG, could not be reached for confirmation on the dates. The official guidance for the second train's start-up remains in the third quarter of this year.

An August shutdown for train 2 suggests a much quicker testing and commissioning phase compared with that for the first train, which lasted around five months.

"If anything, earlier experience accumulated with QCLNG train 1 would help speed up QCLNG train 2's commissioning process," a trader said.

Train 1 started operations on 28 December last year, with the shipment of its first cargo on 5 January. Cargo loadings continued for around 2½ months before it shut down in mid-March for two weeks, as part of its commissioning process. Commercial operations started on 22 May, when US contractor Bechtel handed over operatorship to QGC.

Market participants expect QCLNG's train 2, as well as liquefaction trains at the 9mn t/yr APLNG and 7.8mn t/yr GLNG, to largely follow QCLNG train 1's schedule towards commercial production. All three projects share the same contractor and CBM reserves.

Related flaring activity is expected to accompany the shutdown. The shutdown means gas feedstock cannot be absorbed for liquefaction, so QGC has the option to flare the gas or pipe it to the domestic markets for spot sales.

Both QCLNG production trains will receive gas feedstock from the 440TJ/d (11.75 m<sup>3</sup>/d) Ruby Jo, 220TJ/d Bellevue

and 144TJ/d Berwyndale South processing plants. Two other plants, the 453TJ/d Jordan and 453TJ/d Woleebee Creek, will provide the additional gas supplies required when train two comes on line. The gas processing plants are in Queensland's Roma region, where QCLNG's coal-bed methane gas reserves are located.

The five plants produced a total of 680.7TJ/d of gas, or 13,450 t/d of LNG equivalent on 10 June, according to data from Australia's national gas bulletin board. This is over 60pc of QCLNG's expected plateau production level of 8mn t/yr, which QGC expects the plant to reach in 2016. The Ruby Jo, Jordan and Woleebee Creek plants are producing significantly below capacity. Jordan and Woleebee Creek are still in the production ramp-up phase, while Ruby Jo is incrementally raising output following an earlier shutdown for scheduled maintenance.

BG holds a 97.5pc operating stake in QCLNG train 2, with Japan's Tokyo Gas owning the remaining 2.5pc. BG owns a 50pc operating stake in train 1, with China's state-controlled CNOOC holding the other 50pc.

**Poland still unsure about LNG terminal start date**

Poland's state-controlled Polskie LNG is still unable to commit to a specific date for completion of the country's first LNG terminal. But it has reiterated plans to start the terminal operations by the end of this year.

The company is still holding talks with a consortium led by Italian contractor Saipem and it will only commit to a

Latest estimated LNG distribution by destination		m <sup>3</sup>
Asia-Pacific		11,207,537
Europe		3,899,936
North America		438,730
South America		434,100
Upstream		21,176,003

*Based on vessels at sea, final destination and estimated arrival time. Upstream figure includes all major production regions.*

Netbacks	\$/mn Btu (front half month)											
	India	China	Japan	South Korea	Taiwan	Iberian peninsula	Greece	Italy	Turkey	NW Europe	North-east US	US Gulf
Middle East	7.45	6.73	6.64	6.69	6.81	5.22	5.59	5.35	5.66	5.64	1.40	1.57
Australia	7.11	7.07	7.01	7.02	7.15	4.79	5.14	4.96	5.21	5.24	1.08	1.25
Nigeria	6.68	6.18	6.09	6.13	6.26	5.66	5.71	5.59	5.76	6.11	1.95	2.18
Norway	6.37	5.72	5.63	5.68	5.79	5.79	5.80	5.69	5.85	6.42	2.12	2.28
Algeria	6.73	6.07	5.98	6.03	6.15	6.01	6.19	6.02	6.25	6.48	2.11	2.30
Trinidad and Tobago	6.24	5.81	5.72	5.76	5.89	5.66	5.69	5.58	5.75	6.14	2.24	2.57
Russia	6.82	7.30	7.33	7.33	7.26	4.50	4.87	4.68	4.94	4.95	1.10	1.26

completion and start date when those negotiations are finalised, Polskie LNG said.

“We are getting very close now, but it would be still premature to specify a month or quarter for the planned completion,” the company said. Polskie LNG is looking for commissioning cargoes for the terminal.

The 3.6mn t/yr terminal, which was originally planned for completion in mid-2014, is already running a year behind schedule and contributing to disagreements between Polskie LNG and Saipem over final costs and completion date.

Uncertainty around the terminal's completion was compounded this week following the resignation of the country's treasury minister Włodzimierz Karpinski, who was overseeing the talks between Polskie LNG and Saipem.

The Polskie LNG terminal is intended to regasify around 5bn m<sup>3</sup>/yr and is located in the port of Swinoujście near Poland's border with Germany. All parties from the mainstream political spectrum support the terminal development and diversification of gas imports to Poland.

### Pakistan rejects CBM LNG for first buy tender

Pakistan is not accepting coal-bed methane (CBM) LNG for its first buy tender for four cargoes, state-owned oil marketer PSO said.

But it may consider CBM LNG in future tenders, PSO said. A number of Australian CBM-to-LNG projects have started or are about to start production. The 8.5mn t/yr Queensland Curtis LNG exported its first cargo at the end of last year. And the 9mn t/yr Australia Pacific LNG (APLNG) and 7.8mn t/yr Gladstone facilities are expected to start this year.

PSO issued a tender in May for a total of four cargoes, one to be delivered each month between July and October. The tender closes on 15 June, with bids expected to remain valid until 29 June, according to an updated tender document. It was initially expected to close on 8 June, with bid validity until 18 June. Cargoes are up to 143,000m<sup>3</sup> in size.

Pakistan is expected to receive its fifth LNG cargo, with the arrival of the 150,900m<sup>3</sup> *Exquisite* LNG tanker on 14 June.

The *Exquisite*, which operates as a floating storage and regasification unit (FSRU) at Pakistan's Port Qasim, left Qatar's 77mn t/yr Ras Laffan LNG export facility today, following the loading of a cargo. The journey from Qatar to Pakistan typically takes around two days.

Pakistan has so far received all its four LNG cargoes, including a commissioning cargo, from Qatar. The *Exquisite* has been plying between Qatar and Pakistan because of dredging problems. And the FSRU has had to travel to Qatar to load cargoes because suppliers have not been comfortable with the depth of the port in Karachi.

NBP				\$/mn Btu
Delivery	Bid	Offer	Midpoint	±
<b>Day-ahead</b>	<b>6.67</b>	<b>6.67</b>	<b>6.669</b>	<b>+0.075</b>
Jul	6.58	6.59	6.582	+0.004
Aug	6.55	6.56	6.553	-0.000
Sep	6.58	6.59	6.582	+0.008
3Q15	6.55	6.58	6.569	+0.004
4Q15	7.23	7.26	7.245	+0.030
1Q16	7.67	7.70	7.681	+0.018
Winter 2015-16	7.45	7.48	7.463	+0.024
Summer 2016	6.80	6.83	6.819	+0.016
Winter 2016-17	7.82	7.85	7.834	+0.015
2016	7.21	7.24	7.223	+0.017
2017	7.45	7.47	7.459	+0.002
2018	7.62	7.64	7.630	+0.017

Indicative USGC fob LNG (11 Jun 2015)		\$/mn Btu
Contract	Price	±
Jul 15	6.24	-0.08
Aug 15	6.28	-0.07
Sep 15	6.29	-0.08
3Q15	6.27	-0.08
4Q15	6.49	-0.06
1Q16	6.77	-0.05
2Q16	6.55	-0.03
Winter 2015	6.63	-0.05
Summer 2016	6.59	-0.02
Winter 2016	6.89	-0.01
Summer 2017	6.72	0.00
Cal 2016	6.68	-0.02
Cal 2017	6.84	0.00
Cal 2018	6.93	0.02

Japan oil-linked des LNG (11 Jun 2015)		\$/mn Btu
Contract	Price	±
Jul 15	8.95	0.00
Aug 15	8.99	-0.01
Sep 15	9.37	-0.02
3Q15	9.10	-0.01
4Q15	9.84	-0.05
1Q16	10.18	-0.09
2Q16	10.35	-0.08
Winter 2015	10.01	-0.07
Summer 2016	10.41	-0.08
Winter 2016	10.62	-0.08
Summer 2017	10.77	-0.09
Cal 2016	10.39	-0.09
Cal 2017	10.76	-0.09
Cal 2018	10.99	-0.09

Argus spot LNG freight		\$/day
	Price	±
Freight west of Suez	33,000	0
Freight east of Suez	33,000	+1,000

PSO said the maximum vessel size that can deliver LNG was 217,000m<sup>3</sup>, which rules out the larger 260,000m<sup>3</sup> Q-Max Qatari tankers.

The FSRU has a peak regasification capacity of 690mn ft<sup>3</sup>/d (7bn m<sup>3</sup>/yr) or 5mn t/yr of LNG and is operated by private-sector firm Elengy Terminal Pakistan, with PSO acting as LNG buyer.

### UK books third June LNG cargo

The UK's South Hook has booked a third LNG cargo this month, but the interval between deliveries is the longest since March.

The 266,000m<sup>3</sup> Aamira was scheduled to arrive at the terminal on 18 June following the 217,000m<sup>3</sup> Al Khuwair's delivery on 6 June. The 12-day interval was the longest since the arrival of the 217,000m<sup>3</sup> on 30 March, which was also 12 days after the previous cargo.

South Hook received nine cargoes in May, with the average gap between arrivals just 3.4 days. Deliveries had remained frequent in early June, with two cargoes arriving in the first six days of the month.

New importers have started receiving Qatari LNG, which could mean fewer uncommitted cargoes going to the UK over the last two months. Since late March, Egypt has imported two cargoes, Pakistan has imported four and loaded its fifth, and Jordan has imported one. And Argentina was expected to receive more Qatari LNG. The 170,200m<sup>3</sup> Pskov is on course to deliver a Qatari cargo to Bahia Blanca on 3 July. This may be the first of a series of Qatari cargoes for delivery to Argentina.

South Hook sendout has slowed with the drop in receipts. Regasification slipped to 23.3mn m<sup>3</sup>/d through the first half of Friday's gas day from 26.1mn m<sup>3</sup> on Thursday and 33.2mn m<sup>3</sup>/d on 1-10 June. Sendout had been as high as 51.1mn m<sup>3</sup>/d in the second half of May, when cargoes arrived at an average interval of 2.5 days.

South Hook stocks stood at just over 416,500m<sup>3</sup> of LNG on Thursday morning. The terminal could comfortably maintain sendout in line with the 26.1mn m<sup>3</sup>/d on Thursday until the arrival of the Aamira on 18 June.

### French state to part finance Russia's Yamal LNG

The French state will bear some of the risk of financing the multi-billion dollar 16.5mn t/yr Yamal LNG project in Russia with main stakeholder Russian independent gas producer Novatek unable to raise US dollar financing because of US sanctions, French credit agency Coface said.

Coface is commissioned by the French state to manage its account for financing the project.

Financing for Yamal has faced issues since Novatek,

which has a 60pc stake in the project, was placed on a US sanctions list last year. "The main consequence of the sanctions is that the project will not be able to raise US dollar financing. So basically, the financing will be delayed," Total chief financial officer Patrick de la Chevadiere said in October last year.

Total is looking for \$10bn-15bn in yuan equivalent from Chinese banks. And, as well as the French state, further financing will come from Russia's sovereign wealth fund, Russian banks, Italian credit agency Sace and potentially other credit agencies in Germany, Japan and South Korea, Total said.

Italy's Sace could not be reached for comment.

Total said on 9 June that it plans to have financing secured before the end of this year while Total chief executive Patrick Pouyanne said last week that project financing would be in place by mid-year.

Around \$9bn had been spent on the \$27bn project by late last month.

Total has a 20pc stake in the Yamal LNG project while French gas company Engie, formally GDF Suez, signed a 23-year contract with Novatek to receive 1mn t/yr of LNG from the project at the beginning of June.

French engineering firm Technip, along with Japanese firms JGC and Chiyoda, signed the final and full engineering procurement and construction contract for the Yamal LNG project last year.

Yamal LNG remains on schedule, Pouyanne said last week. Developers plan to commission its first 5.5mn t/yr LNG train in 2017 and reach full capacity in 2019.

### Petronas pushes ahead with Pacific NorthWest LNG

Malaysia's state-owned oil firm Petronas and its partners in Pacific NorthWest LNG (PNW LNG) have agreed to proceed with the development of the venture in Canada's British Columbia (BC), having met the project's technical and commercial requirements.

But confirmation of a final investment decision (FID) on the \$35bn project is still dependent on approval of a tax and royalty agreement, as well as the federal Canadian government's approval of an environmental assessment.

A BC law enacted this year allows the province to establish long-term royalty rates, providing minimum guaranteed payments to the government and more fiscal certainty to developers. The package must be approved by all the PNW LNG partners and then by the BC parliament.

PNW LNG told *Argus* in May that it is targeting FID this year, with exports likely to start in 2019-20. It said in December that it was delaying such a decision because of falling oil prices, which could make the project uneconomic as



most long-term LNG contracts with Asian buyers are indexed to oil prices.

The firm will continue its discussions with local communities, stakeholders and regulators to support the FID.

The Lax Kw'alaams Band First Nations Group in BC rejected a package worth around C\$1.5bn (\$1.22bn) to support the project. The offer was made by Canadian pipeline firm TransCanada, which will build and operate the pipeline providing gas to the liquefaction project, and the BC government. First Nations groups have numerous territorial and ancestral claims in BC and their interests are considered in the governmental approval process of major infrastructure projects, which means they can block or slow the approval of such projects.

The group rejected the offer mainly because of concerns about potential environmental damage to the Skeena river estuary, which is a habitat for salmon. But it has said it understands the package could benefit the group and will work with PNW LNG to resolve the matter.

PNW LNG's first two liquefaction trains have an estimated cost of \$10bn and would have a combined baseload capacity of 13.1mn t/yr. The baseload capacity could be expanded to 19.7mn t/yr with a third train. About \$14bn is expected to be spent on upstream development.

Malaysia's state-owned Petronas owns 62pc of the project, with China's state-controlled Sinopec holding a 15pc stake, Japanese upstream firm Japex with 10pc, India's state-controlled oil firm IOC with 10pc and state-owned oil firm Petroleum Brunei with 3pc.

### Japan at odds over new coal-fired power plants

Japan's environment ministry has moved to block new coal-fired power development on environmental grounds, only two years after it lifted an effective ban to offset electricity shortages in the wake of the Fukushima nuclear disaster.

Environment minister Yoshio Mochizuki today objected to the trade and industry ministry (Meti) about a project to build two 600MW coal-fired power generation units at Ube in Yamaguchi prefecture as part of the project's continuing environmental assessment process. The project has been proposed for a start-up in the early 2020s by a joint venture

led by Japanese power wholesaler J-Power and gas utility Osaka Gas.

This is the first objection made by environment minister for any coal-fired power development project since the country's 2013 lifting of a ban in the wake of Japan shutting its nuclear power plants for safety checks following the Fukushima disaster. The environment ministry attributed its opposition to a lack of measures to cope with high CO2 emissions from the proposed project.

The government currently requires developers of new coal-fired power plants to use the best-available technology to maximise fuel efficiency and minimise CO2 emissions. But coal-fired power development, even when the best-available ultra-super critical technology (USC) is applied, is seen as producing more than double the amount of CO2 compared with a combined-cycle gas turbine (CCGT). Developers are also required to secure GHG reduction measures elsewhere to make up for any gap in CO2 emissions if they choose to develop coal-fired power over gas-fired power.

The objection by the environment minister is not legally binding, but is expected to complicate the environmental assessment process amid Tokyo's new 2030 goal to reduce GHG emissions by 26pc against 2013 levels. Meti will make a final verdict in the coming months.

"If development of new coal-fired power capacity continues at this pace, it will put at risk the fulfillment of our GHG reduction target," Mochizuki said today.

Premier Shinzo Abe informed the other G7 leaders of his

#### Argus Webinar North American LNG: the Race to FID

June 25 • 10 am CDT | 3 pm GMT  
Presented by: Ron Nissimov - LNG Reporter

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## ANNOUNCEMENT

### Argus extends and completes second annual losco assurance review

Argus has now completed its second external review of its generating fuel and coking coal price benchmarks, including those for LNG markets. The review was carried out by professional services firm PwC. An annual independent and external review of non-oil benchmark prices is encouraged by international regulators under losco's Principles for Oil Price Reporting Agencies (the PRA Principles). For more information and to download the report, visit our website <http://www.argusmedia.com/About-Argus/How-We-Work>

country's 2030 target during the 7-8 June summit meeting in Germany, following months of debate in tandem with Japan's 2030 power fuel mix targets. Tokyo aims to generate 20-22pc of its total power output in 2030 from nuclear and 22-24pc from renewable sources, with a 27pc, 26pc and 3pc respective reliance on LNG-, coal- and oil-fired power generation.

But Japan's 2030 power fuel mix targets have been received with scepticism amid strong public opposition against nuclear power and growing environmental concerns over coal-fired power development. The fuel targets are subject to a revision every three years.

Japan is currently processing environmental assessment for numerous coal-fired development projects with more than 7,000MW power generation capacity. But none of them have completed the process, with two 500MW integrated gasification combined-cycle pilot projects proposed by Japanese power utility Tokyo Electric Power in Fukushima prefecture making the most progress.

Small-scale coal-fired power development projects with around 110MW capacity have been springing up nationwide, raising concerns about increased CO2 emissions. This has also led the environment ministry to consider capping development of such small-scale power plants, which currently are not required to go through an environmental assessment.

The Fukushima disaster and subsequent reactor shut-downs have boosted Japan's reliance on fossil fuel burning for power generation to above 80pc. The country's consumption of coal and LNG burning for such purposes remained at record-high levels at 60mn t and 57mn t respectively in the 2014-15 fiscal year ending 31 March.

### Japanese utilities cut coal, LNG use in May

Coal and LNG consumption by Japan's main utilities fell during May on the back of weaker electricity demand amid warmer

than normal weather and higher hydropower generation.

The utilities consumed 3.2mn t of coal in May, down by 21pc compared with the same month last year, according to Japan's federation of electric power companies. Coal-fired capacity fell by 4,956MW in May, as seven units were off line for regular maintenance during the month. This compares with six units totalling 4,100MW in May 2014.

Demand for regasified LNG fell by 7pc to 4mn t from a year ago, despite falls in base-load coal-fired output. Crude consumption also dropped by 30.5pc against a year ago to 86,370 b/d/, although requirements for fuel oil rose by 10.9pc to 154,631 b/d during the period.

Thermal generation in May fell by 9.8pc to 43.37mn MWh from a year earlier, while hydropower output increased by 16.5pc to 6.83mn MWh during the period. There was no nuclear output, as all the country's reactors remain closed for stricter safety checks following the 2011 Fukushima disaster. Japan's total power output in May was 64.98mn MWh, down by 3pc from a year earlier.

### SGX creates Singapore LNG price

Singapore exchange SGX, together with its subsidiary the Energy Market Company (EMC), have created a Singapore fob LNG price the FOB Singapore SGX LNG Index Group, or Singapore Sling, aimed at providing another LNG data point for the market.

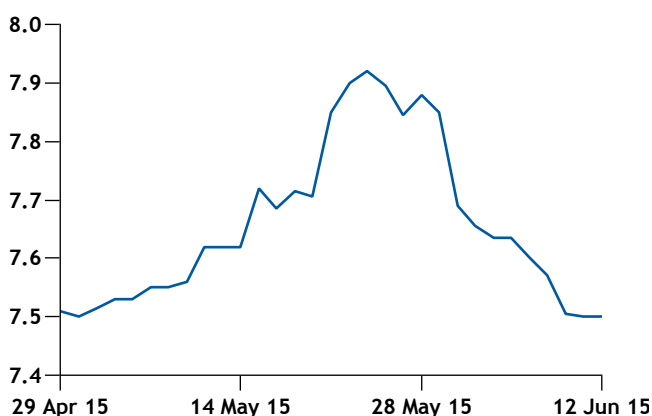
But there are no immediate plans to list the index, which remains private.

A plan to develop a Singapore LNG reference price first surfaced in September last year, when Singapore's state-owned Pavilion Energy announced it was working with several stakeholders, including SGX and government trade agency IE Singapore, to develop a Singapore LNG price indicator. The firm said such a price would be a stepping stone to creating a regional LNG hub where prices are transparent and better reflect gas supply and demand. Soaring LNG import costs have been behind the push for a regional gas hub and price in recent years, with Asian buyers seeking to reduce oil indexation in favour of gas-indexed LNG in term contracts.

The rationale for a Singapore-based LNG price is the country's central location within Asia, meaning that a Singapore price can be extended to origin and destination ports as a proxy for an Asian spot LNG price. Singapore would be a virtual reference location.

Contributing stakeholders are the only ones with access to the Singapore Sling index, which could potentially be used to develop such products as financial swaps for hedging purposes after a trial and calibration period. EMC collates weekly spot price assessments from 13 participating LNG firms active in the LNG physical market. The assessments for

Northeast Asia (Anea) LNG first-half month \$/mn Btu



a fob Singapore price relate to a virtual reference point in Asia, which means a cargo in the vicinity of, but not originating in, Singapore from the SLNG terminal because of such additional costs as terminal charges.

SLNG received its first commercial cargo in May 2013, following the plant's start-up in March the same year. All cargoes imported into Singapore currently fall under UK energy firm BG's exclusive 3mn t/yr import franchise, which will expire when it reaches the 3mn t/yr mark in long-term sales. Its sales currently stand at 90pc of this amount.

BG, together with Pavilion, Shell and domestic utility group SembCorp were short-listed by Singapore's energy regulator to enter the second phase of a two-phase request for proposal process to select up to two new LNG importers for the country. The new importers will each be allowed to import up to 1mn t/yr of LNG, following the end of BG's exclusive franchise.

### TransCanada makes conditional FID on LNG pipeline

TransCanada today made a conditional positive final investment decision (FID) on its planned \$5bn, 900km (559-mile) Prince Rupert Gas Transmission pipeline.

The line would bring gas to the proposed Pacific NorthWest LNG export project on the western Canadian coast.

Typically an FID means that a developer has committed to spending the money to build a project. TransCanada took the unusual step of making a conditional FID because Pacific NorthWest, which would be located on Lelu Island, British Columbia (BC), did the same thing yesterday.

None of the dozens of proposed Canadian LNG projects has committed to spending the money for construction because of competition from cheaper US projects and falling oil prices, which have reduced the economic prospects for Canadian projects as their sales would be indexed to oil prices.

TransCanada and Pacific Northwest both said they would commit to spending the money if the BC government approves a proposed long-term royalty agreement and the federal Canadian government grants Pacific NorthWest environmental approval. The projects expect to commit to spending the money this year after getting both of those approvals, and LNG exports likely would start in 2019-20.

Pacific NorthWest has a total estimated cost of \$36bn, but only about C\$11bn (\$9bn) would be for the first-phase LNG terminal, which would have capacity of 13.1mn t/yr, equivalent to 1.75 Bcf/d (50mn m<sup>3</sup>/d). The total cost includes \$5.9bn that the Pacific NorthWest partners previously spent to acquire Canadian upstream company Progress Energy, the planned TransCanada pipeline and \$14bn for upstream development in the North Montney shale formation in western

BC. Some of that development could move forward without Pacific NorthWest by serving Canadian and US markets.

TransCanada said it plans to start construction this year and place the pipeline in service in 2019-20. The BC government in November 2014 issued an environmental assessment certificate for the project and TransCanada is awaiting a construction permit from the BC Oil and Gas Commission. The pipeline would have initial capacity of 2 Bcf/d and could be expanded to 3.6 Bcf/d if Pacific NorthWest is expanded.

The onshore portion of the line would comprise a single 48-inch (122cm) diameter pipe, and the subsea portion to Lelu Island would comprise two 36-inch diameter pipes.

The line would bring gas from the North Montney region near Fort St John, BC, via a connection with TransCanada's Nova Gas Transmission (NGTL) system being developed to link the western Canadian sedimentary basin with major markets.

The Canadian federal government earlier this week formally approved TransCanada's \$1.7bn North Montney Mainline project, which would include a 2.4 Bcf/d pipeline from NGTL's Groundbirch mainline to the northern area of the Montney shale. It would also connect to the Prince Rupert Gas Transmission line.

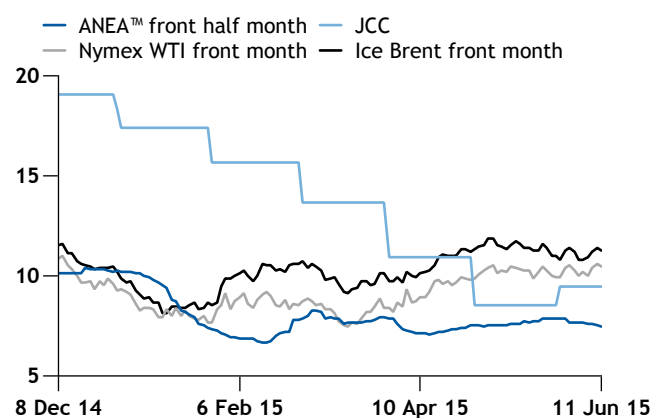
Progress Energy has signed a contract for 2 Bcf/d of firm receipt service and 2.1 Bcf/d of firm delivery service on the North Montney Mainline project.

"The Pacific NorthWest LNG decision and the government of Canada's approval of the North Montney project are significant advancements to new market access for Canada's abundant natural gas resources," said TransCanada chief executive Russ Girling.

Malaysia's state-owned Petronas owns 62pc of Pacific NorthWest, with China's state-controlled Sinopec holding a 15pc stake, Japanese upstream firm Japex with 10pc, India's state-controlled oil firm IOC with 10pc and state-owned oil firm Petroleum Brunei with 3pc.

JCC, Brent, WTI vs LNG

\$/mn Btu



## AUSTRALIA WEEKLY - MARKET COMMENTARY

### July prices extend gains

Argus-assessed prices for month-ahead gas deliveries at Queensland's Wallumbilla region and Victoria extended gains this week, propped up by incremental LNG production, expectations of tighter gas supply management and an increased heating load on cold winter weather.

Increased LNG production is expected in July, with the second train of the 8.5mn t/yr Queensland-Curtis LNG plant to start operations and the first train producing.

Ramp gas supplies from the 9mn t/yr Australia-Pacific LNG (APLNG) and 7.8mn t/yr Gladstone LNG (GLNG) plants will increase in the month ahead, as plant operators intensify upstream processing ahead of a planned start-up at around September 2015. But gas supply management is increasingly expected to be tight, with more outlets available to absorb the excess volumes. APLNG's ramp gas supplies, for instance, could be supplied to QCLNG for liquefaction production via third-party supply contracts. They could also be absorbed by Australia's Origin Energy for its gas-fired power utilities. Origin is the upstream operator of APLNG. GLNG and APLNG also have access to underground gas storage facilities, as well as technology allowing the effective capping and turning down of well flows, which will help in managing gas supply portfolios.

The arrival of winter in Australia has increased gas requirements for heating, particularly in Victoria state where demand is more seasonal. Month-ahead gas prices in Victoria saw significant gains this week, amid expectations of continued strength in heating load requirements. An earlier Victorian prompt price rally, sparked by unusually cold weather and potential plant issues, also contributed to more bullish forward sentiment.

"We have had a significantly colder start to winter this year. And if this carries on, it would defy forecasts of a milder winter, and help boost gas prices," a trader said.

A cold snap in early June had boosted gas requirements, prompting spot gas prices to spike to A\$6.98/GJ in Victoria and A\$8.31/GJ in the Sydney short-term trading market (STTM) on 2 June. Sydney STTM spot prices were also stoked by unspecified constraints on the 298TJ/d (8mn m<sup>3</sup>/d) Eastern Gas Pipeline (EGP), which links gas supplies from the Gippsland production zone to the Sydney demand centre, traders said. Gas flows on the Sydney zone of the EGP fell to around 100TJ/d during 1-5 June from their typical levels at around 150TJ/d, gas bulletin board data showed.

Australia's meteorology bureau continues to forecast mild winter weather ahead. The El Nino phenomenon continues to develop, with ocean temperatures continuing to rise in the tropical Pacific, the bureau said in its latest update this week. It predicts an above 60pc probability of above-average minimum temperatures across most of east Australia,

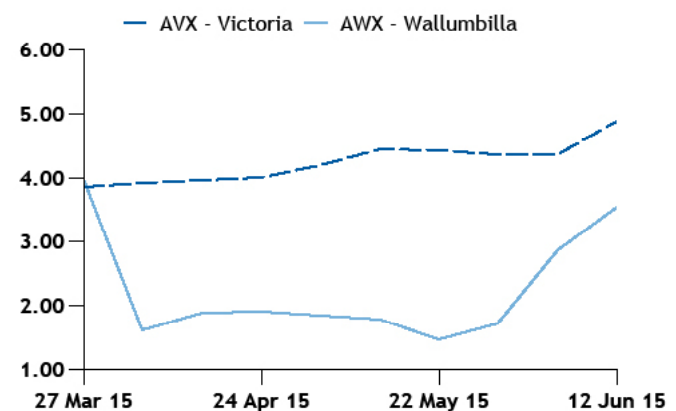
Argus Wallumbilla Index (AWX)					
Delivery	Units	Bid	Offer	Midpoint	±
July	A\$/GJ	3.28	3.78	3.530	+0.670
July	\$/mn Btu	2.67	3.07	2.870	+0.548

Argus Victoria Index (AVX)					
Delivery	Units	Bid	Offer	Midpoint	±
July	A\$/GJ	4.66	5.08	4.870	+0.520
July	\$/mn Btu	3.79	4.13	3.960	+0.428

AEMO weekly average Victoria 6am price			
Delivery	Units	Price	±
Prompt	A\$/GJ	4.51	-0.98
Prompt	\$/mn Btu	3.67	-0.79

LNG netbacks weekly average			
	Units	Price	±
Gladstone oil-linked LNG	A\$/GJ	10.16	+0.03
	\$/mn Btu	8.26	0.00
Gladstone spot LNG	A\$/GJ	8.85	-0.11
	\$/mn Btu	7.19	-0.11

### Argus Victoria Index vs Wallumbilla Index AUD/GJ



lia, except in parts of central and western New South Wales where that probability drops to around 50pc.

Market participants continue to keep an eye on potential threats of industrial action at the 1,010TJ/d Longford gas plant. But output remains high at the plant amid winter demand. The plant has produced above 1,000TJ/d during 9-10 June, according to gas bulletin board data.

The AWX, the Argus-assessed index for month-ahead Wallumbilla gas deliveries, is at A\$3.53/GJ (\$2.882/mn Btu) for July deliveries, up by A67¢/GJ from 5 June. The AVX, the index for gas traded on the Victorian Declared Transmission System, is assessed at A\$4.87/GJ (\$3.975/mn Btu) for July, up by A52¢/GJ from 5 June.

## NEWS

**EnergyAustralia mulls offers for Iona gas storage**

Australian utility and gas group EnergyAustralia is considering the sale of its 22PJ (590mn m<sup>3</sup>) Iona gas storage plant in Victoria, after receiving unsolicited expressions of interest from potential buyers for the plant that supplies the Victoria and South Australia gas markets.

EnergyAustralia, which is owned by Hong Kong-based energy and infrastructure group CLP Group, said it has made no decision yet on the offers.

"It is appropriate that we give serious consideration to the offers, and to see if there may be others interested," the company said.

Iona is located near the 60PJ/yr Otway gas plant, which is owned by Australian utility and gas plant Origin Energy. Iona is also connected to the nearby Minerva gas plant, which is operated by UK-Australian resources group BHP Billiton, via the South East Australia gas pipeline that connects the Iona plant to Adelaide in South Australia.

Iona is one of eight gas storage facilities in east Australia with the latest one, the 1.5PJ Newcastle gas storage facility in New South Wales formally opened today by its owner Australian utility and gas group AGL Energy.

**Origin has option to call back third-party gas**

Australian upstream and utility group Origin Energy said it has options to call back gas that it has earmarked to be sold to Gladstone LNG projects in Queensland for its gas-fired power generation plants at prices of A\$10/GJ (\$8.13/mn Btu).

Origin has the option to divert up to 40-50PJ (1.07bn-1.34bn m<sup>3</sup>) of gas to large industrial customers, or to LNG projects, until 2017 as it expects gas for its power generation business to fall amid higher domestic gas prices.

At A\$10/GJ it equates to wholesale electricity prices of A\$100/MWh compared with prevailing base-load wholesale 2016 futures prices of about A\$50/MWh in Queensland, where some of Origin's gas fired power stations are located.

"When electricity prices exceed the equivalent LNG sales price, Origin has the option to call back gas to its gas peaking portfolio," Origin chief executive Grant King said. Origin has three gas peaking plants in Queensland at Roma, Darling Downs and Mt Stuart.

Origin has a 37.5pc stake in the 9mn t/yr Australia Pacific LNG (APLNG) project at Gladstone. APLNG plans first shipments in the second half of this year. During the ramp-up phase of APLNG gas flows between Wallumbilla in southern Queensland and the Moomba gas facility in the

Cooper basin in South Australia can reach up to 300TJ/d, King said.

The 8.5mn t/yr Queensland Curtis LNG (QCLNG) project operated by UK firm BG started shipments from its plant last December. Origin had bought 28PJ of ramp gas in the first half of the 2014-15 fiscal year to 30 June, King said. The ramp-up of QCLNG briefly sent domestic gas prices to below A\$1/GJ. Another 40PJ of ramp-gas is expected to be monetised in the second half of 2014-15.

**ACCC sees disquiet about east Australia gas deals**

The Australian Competition and Consumer Commission (ACCC) said concerns have been raised by market participants about gas negotiations in east Australia, with claims that producers are holding back from entering new supply deals in the hope of obtaining higher prices in the future.

There are also claims that the contract terms and conditions offered by gas suppliers are burdensome for gas users and leave them increasingly exposed to the whims of the international market, or with less surety and flexibility in managing their gas supply, ACCC chairman Rod Sims said in a speech to the Energy Networks Association in Melbourne.

There are, of course, alternative explanations for what is being observed in the gas market, said Sims, who is overseeing the ACCC inquiry into the east Australia gas market.

"Real uncertainty from gas suppliers about the adequacy of reserves to meet long-term domestic contracts may be causing contract terms to shorten along with the uncertainty of international markets," he said.

The inquiry will test the accuracy of these claims and seek hard evidence that either supports or disproves them, Sims said.

There are other factors that the inquiry will be testing, which could be acting to limit or even stifle the development of new gas supplies, he said.

"At a time when many governments are expressing alarm about the gas market, there continues to be concern that regulatory regimes and regulatory barriers may be making the development of new gas supplies more onerous than it needs to be," Sims said.

The east Australia gas market is going through a structural change with the three coal-bed methane (CBM) gas to LNG projects at Gladstone, Queensland all expected to be operating by the end of this year. Once all six trains are operating at full capacity they will triple gas demand in east Australia.

The inquiry is also seeking views and information about the potential for access to key gas production infrastructure

to act as a barrier to the development of new gas supplies, Sims said.

A number of market participants have raised the Moomba gas hub in South Australia as a particularly important gateway for both new and existing gas supplies between the southern states and Queensland, the ACCC chairman said.

The ACCC is one of two inquiries currently under way in the east coast gas market, with the Australian Energy Market Commission (AEMC) reviewing the sector to assess if it is developing in the most efficient way. The review covers the design, function and roles of the existing gas markets and gas transportation arrangements on the east coast. The Council of Australian Governments, a grouping of federal and state governments, requested the AEMC inquiry.

### Ruby Jo gas plant returns

The 440TJ/d (11.75mn m<sup>3</sup>/d) Ruby Jo gas processing plant in Australia's Queensland state has begun ramping up production since the start of this week, following a scheduled maintenance shutdown from 31 May.

The Ruby Jo plant is the main provider of gas feedstock to east Australia's 8.5mn t/yr two-train Queensland-Curtis LNG (QCLNG) facility. The upstream plant started up in mid-2014 and has been supplying gas to QCLNG's 4.25mn t/yr train 1 since liquefaction production started at the end of 2014. QCLNG's second train is expected to start up around July. Ruby Jo's output resumption is on schedule and therefore unlikely to affect LNG production at QCLNG. Ruby Jo and QCLNG operator QGC had said in a June operations update that the upstream gas plant would return to normal operations by mid-June. QGC is the Australian subsidiary of

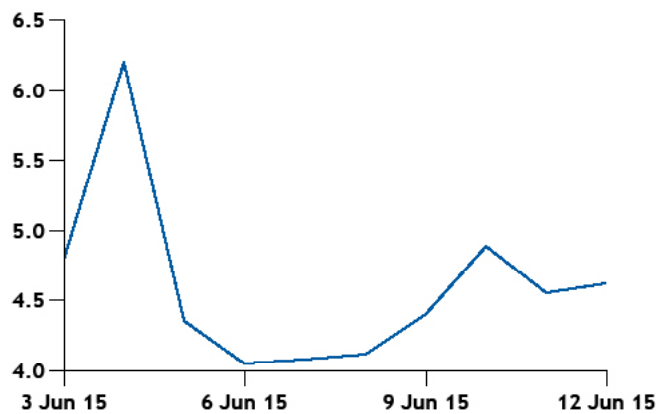
UK energy firm BG.

Gas output from Ruby Jo rose from zero on 7 June to 113.1TJ on 8 June, rising to 232.2TJ on 11 June, according to the latest data from Australia's national gas bulletin board. The plant's output had been above 350TJ/d in the six weeks prior to the routine shutdown.

At least two LNG vessels have loaded QCLNG cargoes from the end of May until today amid lower output from Ruby Jo. The 170,000m<sup>3</sup> *Methane Becki Anne* arrived on 2 June, finished loading a cargo on 5 June and is now heading towards northeast Asia. The 138,000m<sup>3</sup> *Methane Princess* loaded a cargo from 9-11 June, with vessel tracking data listing a Pacific north basin destination. Another three vessels the 155,000m<sup>3</sup> *Gaslog Skagen*, the 145,000m<sup>3</sup> *Methane Lydon Volney* and the 145,000m<sup>3</sup> *Methane Jane Elizabeth* are scheduled to arrive at QCLNG on 14 June, 19 June and 1 July respectively, according to Gladstone port data.

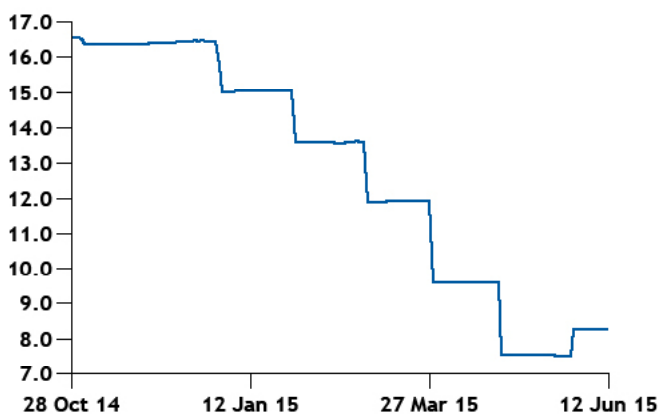
AEMO Victoria daily gas price

AUD/GJ



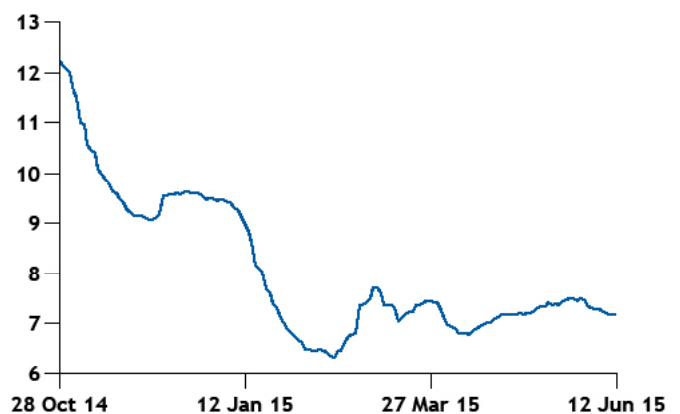
Gladstone oil-indexed netback

USD/mn Btu



Gladstone spot netback

USD/mn Btu



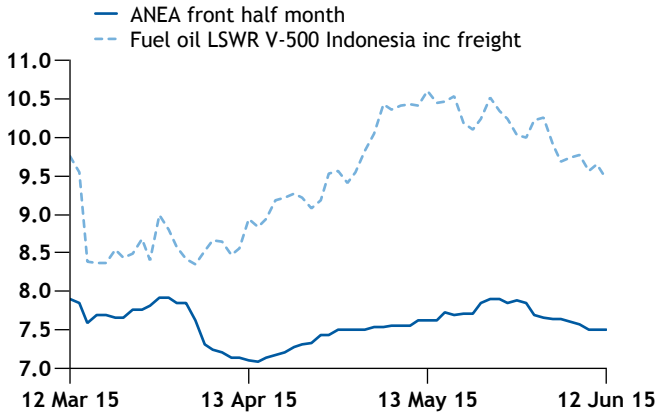
## AUSTRALIA DATA

Daily average eastern Australian pipeline flow rates								TJ
Pipelines/Injection Points	Capacity	05 Jun 15	06 Jun 15	07 Jun 15	08 Jun 15	09 Jun 15	10 Jun 15	11 Jun 15
<b>Victoria</b>								
Lang Lang (BassGas) Gas Plant	70.0	34.0	32.0	31.0	31.0	17.0	8.0	27.0
Longford Gas Plant	1,010.0	1,023.0	935.0	919.0	815.0	1,008.0	1,028.0	na
Orbost Gas Plant	80.0	0.0	0.0	0.0	0.0	0.0	na	na
Iona Underground Gas Storage (Port Campbell)	500.0	109.5	40.6	61.0	39.2	165.6	268.3	115.6
Minerva Gas Plant (Port Campbell)	82.0	73.8	73.8	67.8	60.8	70.8	71.8	73.8
Otway Gas Plant (Port Campbell)	205.0	133.0	133.0	76.0	108.0	133.0	93.0	134.0
Dandenong LNG Storage	158.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NSW-Victoria Interconnect (Culcairn)	120.0	28.9	54.4	24.6	37.3	85.0	72.2	38.0
Longford to Melbourne Pipeline (LMP)	1,030.0	740.7	624.3	618.6	581.7	762.6	770.2	744.9
South West Pipeline (SWP)	429.0	165.1	117.1	137.0	93.4	188.6	264.8	177.3
SEA Gas Pipeline	314.0	117.4	104.6	80.7	102.0	157.5	177.7	173.6
SEA Gas Pipeline (Adelaide zone)	310.0	100.8	92.8	73.3	93.7	140.3	166.0	155.2
Tasmania Gas Pipeline (TGP)	129.0	20.8	16.8	13.1	14.0	16.7	16.0	16.2
Eastern Gas Pipeline (EGP) (Canberra zone)	298.0	33.2	33.2	31.8	27.8	32.4	33.0	34.5
Eastern Gas Pipeline (EGP) (Sydney zone)	298.0	117.2	144.5	144.6	141.8	111.7	103.6	101.0
Eastern Gas Pipeline (EGP)	298.0	244.7	262.1	252.7	243.6	236.0	235.0	232.6
<b>Queensland</b>								
Roma to Brisbane Pipeline (RBP)	233.0	101.1	92.2	83.9	90.5	85.3	77.0	78.4
Queensland Gas Pipeline (QGP) (Roma to Gladstone)	149.0	128.8	132.9	133.3	131.3	132.4	133.4	136.6
Carpentaria Pipeline (CGP) (Ballera to Mt Isa)	119.0	91.0	88.0	85.9	87.2	87.3	87.6	88.9
South West Queensland Pipeline (SWQP)	384.0	158.9	167.0	290.2	235.4	137.8	140.8	142.0
South West Queensland Pipeline (SWQP) (QSN Link)	384.0	186.3	65.8	42.1	42.7	46.3	84.1	100.3
Kenya Gas Plant (Roma)	180.0	138.6	126.9	127.2	129.7	128.3	130.6	128.5
Talinga Gas Plant (Roma)	120.0	47.8	47.9	47.8	46.3	47.9	57.5	59.9
Ballera Gas Plant	80.0	5.0	13.8	12.1	12.2	12.2	na	na
Ruby Jo	440.0	0.0	0.0	0.0	113.1	152.8	194.2	232.2
Bellevue	220.0	170.4	171.2	171.0	174.7	176.8	174.3	na
Berwyndale South (Windibri)	144.0	95.9	111.2	108.9	106.8	112.2	113.4	114.0
Jordan	453.0	40.5	40.7	43.4	42.8	43.2	43.5	43.9
Woleebee Creek	453.0	147.3	143.5	149.7	152.4	152.7	155.3	157.6
Peat	15.0	5.3	5.3	3.6	4.6	5.3	5.3	5.3
Spring Gully	75.0	43.4	45.0	46.5	45.6	46.1	46.1	41.6
Orana	180.0	56.9	56.2	59.3	56.1	56.4	56.3	56.1
Reedy Creek	180.0	54.5	55.3	56.8	57.5	58.4	59.0	59.8
Condabri Central	180.0	91.6	91.6	80.1	76.7	70.4	65.0	65.0
Condabri South	180.0	64.9	61.6	66.9	66.6	66.4	64.4	66.2
Fairview	133.0	98.0	27.0	65.0	65.0	25.0	27.0	27.0
Scotia	32.0	31.6	31.6	28.9	31.5	31.6	na	na
Silver Springs	8.8	na	na	na	na	na	na	na
Strathblane	90.0	51.7	53.6	55.4	54.4	54.9	54.9	49.6
Talooka	75.0	43.4	45.0	46.5	45.6	46.1	46.1	41.6
Yellowbank	30.0	5.1	4.0	6.0	5.7	5.2	4.4	4.1
<b>South Australia</b>								
Moomba Gas Plant	350.0	na	na	na	na	na	na	na
Moomba to Sydney Pipeline System (MSP)	439.0	259.3	159.9	132.2	132.6	215.0	263.9	249.5
Moomba to Adelaide Pipeline System (MAP)	241.0	127.2	89.9	84.8	89.2	128.0	137.8	134.9
Moomba to Sydney Pipeline System (Canberra)	439.0	13.9	12.5	12.8	8.4	11.8	16.4	16.0

COMPETING FUELS IN ASIA AND POWER MARKET INDICATORS

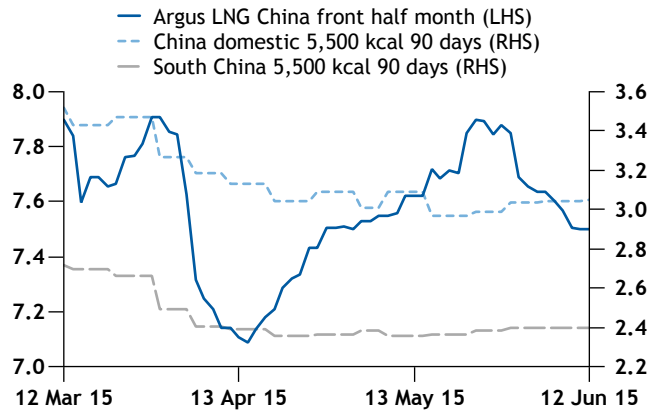
Japan: Fuel oil vs LNG

\$/mn Btu



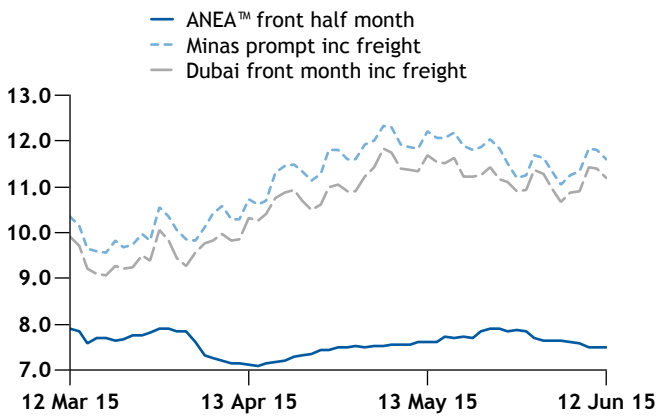
China: Coal vs LNG

\$/mn Btu



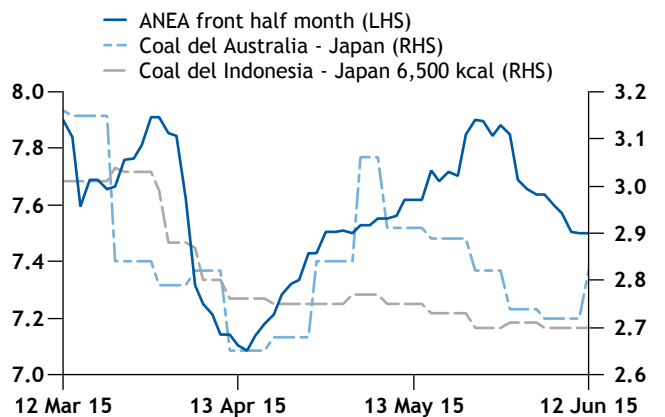
Japan: Crude vs LNG

\$/mn Btu



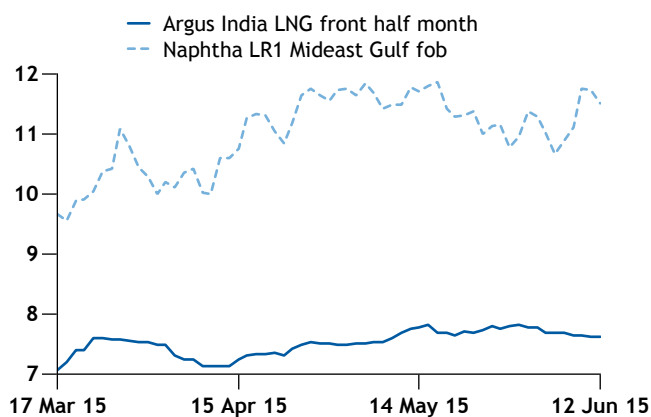
Japan: Coal vs LNG

\$/mn Btu



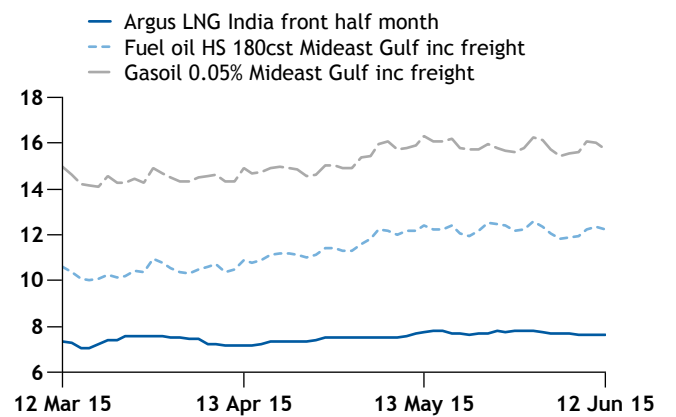
India: Naptha vs LNG

\$/mn Btu



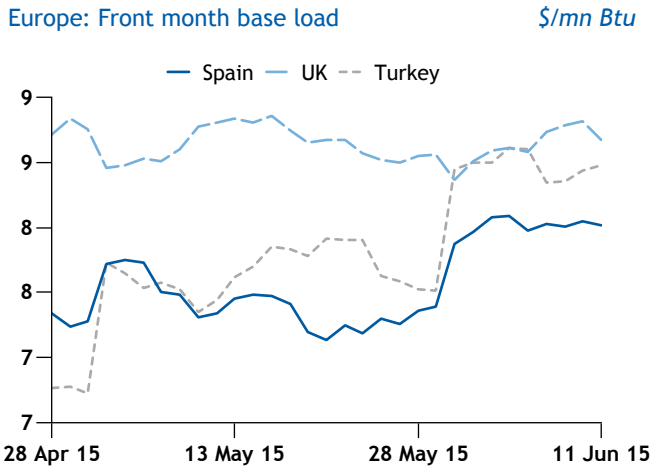
India: Fuel oil, gasoil vs LNG

\$/mn Btu

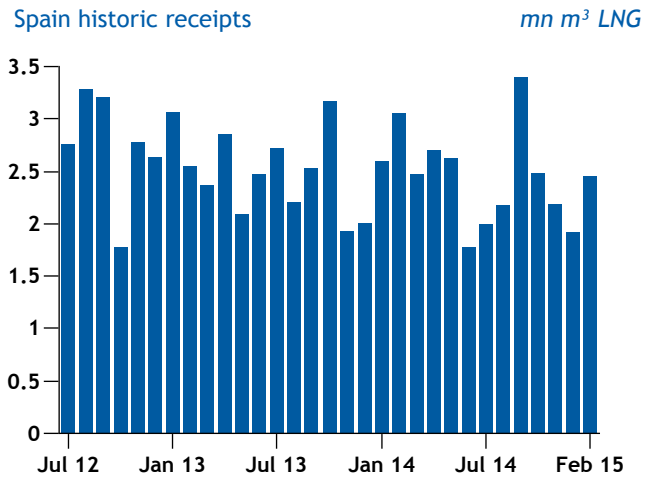
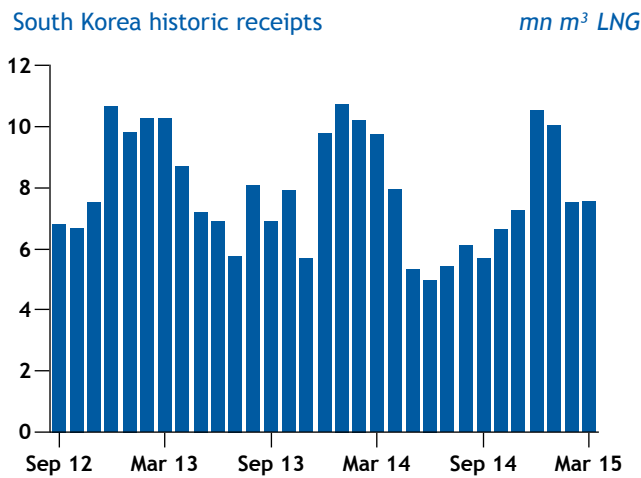
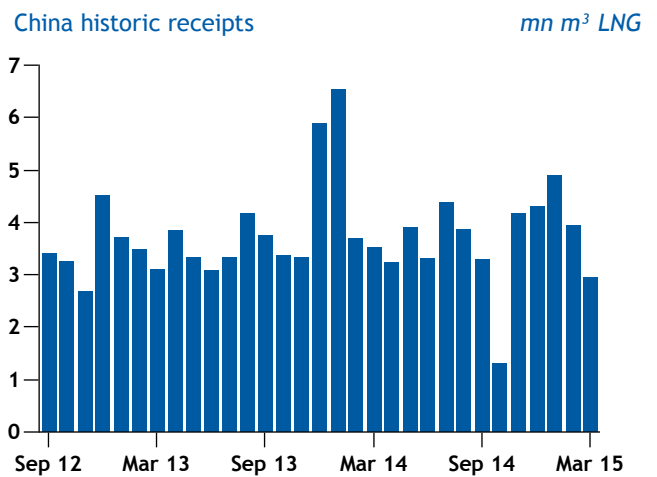
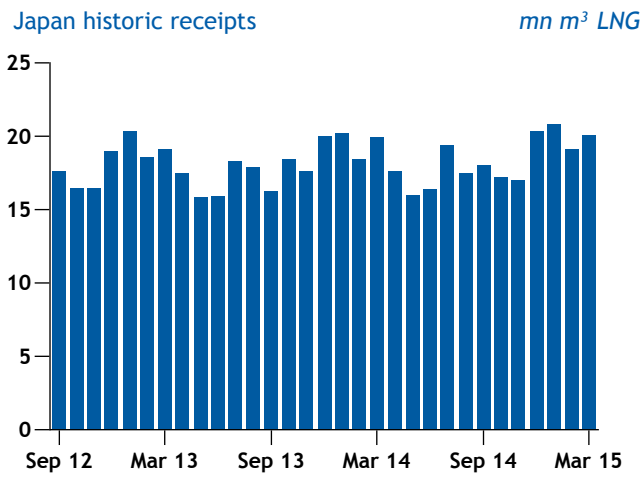




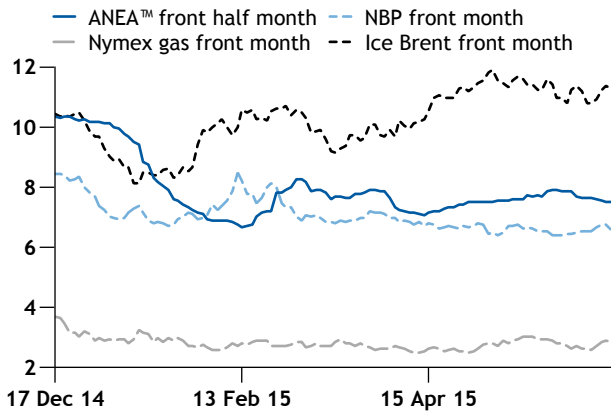
**POWER MARKET INDICATORS: BREAK-EVEN GAS PRICES FOR GENERATION**



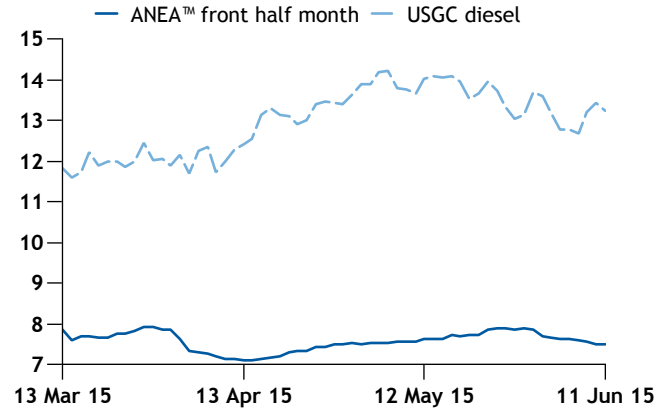
**MONTHLY LNG IMPORT VOLUMES**



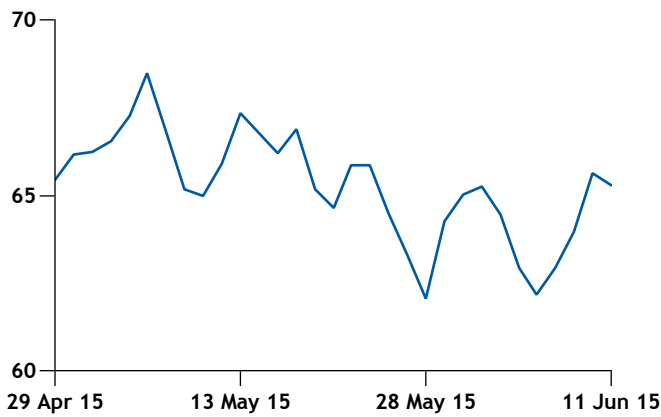
Atlantic benchmarks vs LNG \$/mn Btu



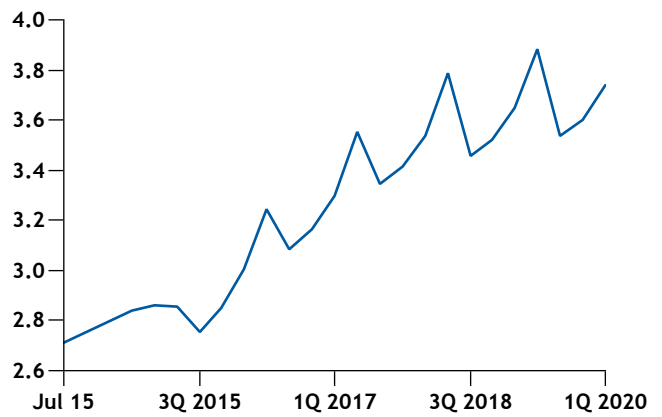
USGC diesel vs LNG \$/mn Btu



Ice Brent front month \$/bl



US Nymex \$/mn Btu



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## Natural gas/LNG

illuminating the markets

