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## Global market movers

■ Crude oil futures remained in negative territory late on Thursday pressured by rising crude stocks in the US and bearish economic data emerging from the Eurozone. Rising unemployment claims in the US also attributed to the bearishness.

## OTC markets at a glance

### ICIS LNG SPOT DES ASSESSMENTS 27 FEBRUARY 2014, \$/MMBTU

Location	Apr '14	Day on day diff	EAX Spread	NBP Spread	May '14	Day on day diff	EAX Spread	NBP Spread
Turkey	16.040	0.000	-3.104	6.681	15.330	0.030	-2.395	6.016

### ICIS TURKISH GAS PRICE ASSESSMENT, 27 FEBRUARY 2014

Period	Bid	TL/kscm		\$/MWh		€/MWh		\$/MMBTU	
		Offer	Diff	Midpoint	Diff	Midpoint	Diff	Midpoint	Diff
Day-ahead	760.000*	800.000*	10.000	33.077	0.675	24.144	0.428	9.694	0.198
Day-7 Ex-Post	760.000*	802.000*	-1.500	33.474	-0.343	24.334	-0.263	9.810	-0.101

\*Indicative bids/offers  
Price assessments do not include a special consumption tax

### ICIS TURKISH POWER PRICE ASSESSMENT 27 FEBRUARY 2014

Period	TL/MWh			Change %	€/MWh	
	Bid	Offer	Day on day diff		Midpoint	Day on day diff
Week 10 '14	152.000*	154.000*	2.000	1.33	50.256	0.892
March '14	150.000	151.000	0.000	0.00	49.262	0.215
April '14	147.000*	148.000*	-0.500	-0.34	47.846	0.054
May '14	150.000*	152.000*	0.000	0.00	48.531	0.213
Q2 '14	151.500*	153.500*	0.000	0.00	49.017	0.216
Q3 '14	170.000*	172.000*	-0.500	-0.29	53.487	0.057
Q4 '14	162.000*	165.000*	0.000	0.00	49.794	0.128
Q1 '15	160.000*	170.000*	0.000	0.00	48.951	0.143
Year 2015	165.500*	167.500*	0.000	0.00	47.545	0.126
Rolling Year from 1 Mar '14	160.500*	165.500*	-0.150	-0.09	50.793	0.136

\*Indicative bids/offers

### ICIS CRUDE OIL PRICE ASSESSMENTS 27 FEBRUARY 2014, \$/BBL

	Price	Day on day diff	Diff to dated BFOE
Dated BFOE	108.70	-0.76	n/a
Kirkuk FOB MED	106.20	-0.86	-2.50
Saharan FOB MED	110.10	-0.76	1.40
Azeri Light CIF Augusta	113.40	-0.76	4.70
CPC Blend CIF Augusta	108.80	-0.91	0.10
Urals MED (80) CIF Augusta	107.40	-0.76	-1.30
Urals MED (140) CIF Augusta	107.10	-0.76	-1.60

16:30 London time

### ICIS PHYSICAL COAL INDEX 27 FEBRUARY 2014, \$/TONNE

Contract	Month	Index Price	Volume 1,000 tonnes	No. of Trades
DES ARA	January '14	83.508	900	18
FOB RB	January '14	83.000	1,750	34

## Power market comment

### Spot supported by outages, low wind, moderate demand

**Turkey's spot price** continued to move upwards on Thursday supported by high consumption and continuing outages. Curve values were rather range-bound amid unchanged fundamentals and low liquidity.

The Day-ahead for delivery on Friday outturned at TL168.28/MWh on the exchange PMUM, TL3.33/MWh above Thursday's level.

Consumption on Tuesday and Wednesday stood at around 732.40GWh – the highest since 7 February, according to data from grid operator TEIAS.

Wind generation fell to 10.70GWh on Wednesday, but slightly higher thermal and hydro production at 596.50GWh and

107.80GWh respectively may have compensated for the wind shortage. However, a 155MW thermal power plant was off line throughout most of day and evening on Thursday and another 420MW oil-fired plant will be off line from Friday until Thursday, according to PMUM data.

Meanwhile, opinions about hydro levels varied with one market source saying that not only were the reservoirs quite empty but water for domestic use was getting also insufficient. However, another source insisted that reservoirs were just not being used that much in a bid to save water for the summer. "I'm optimistic about the hydro," the source said.

The first one was also sceptical whether Georgia will have enough electricity to cover potential shortages in Turkey in the spring. "Let them [Georgia] meet their own demand first," he remarked. Earlier this week Georgian grid operator said it may boost exports to Turkey in April as fears about dry spring in the latter persist.

The trader also noted that there had not been much liquidity on the Turkish OTC market lately as market participants were in a waiting mode for the upcoming elections after which an increase of the gas and power tariffs is expected.

**Irina Peltegora**

NO TURKISH POWER TRADES WERE REPORTED ON 27 FEBRUARY 2014

TL/MWh

## Gas market comment

### Spot supported by higher than expected demand

**Turkish natural gas** prices failed to take a consistent direction this week as spot was mainly driven by changes in demand while balancing prices were marked by end-of-month position closures.

On Thursday the Day-ahead was assessed higher as expectations for easing demand did not materialise and offers quoted to ICIS reached TL801-802/kscm which is close to BOTAS' February balancing price.

One trader noted that erratic weather

during the day had supported gas demand in the country.

Russian flows through the Malkoclar entry point stood at an average 43.995mcm/day on Wednesday which is only 0.257mcm/day below the highest level reached this month on 8 February, data from Bulgartransgaz shows.

The depreciating exchange rate of the Turkish Lira against the US dollar lent further support to the spot price.

However, ICIS assessed the day-after contract slightly lower session on session as shippers have already balanced themselves for this month on 18 February and are yet to open new positions for next month.

Meanwhile, two spot LNG cargoes were expected to arrive in Turkey this week, the first from NLNG was due to offload at Marmara terminal on Monday and the second one from Sonatrach was due at the Aliaga terminal on Tuesday. **Irina Peltegora**

#### RECENT AND EXPECTED LNG ARRIVALS 27 FEBRUARY 2014

Name of Ship	Vessel size M <sup>3</sup>	Spot/Contract	Sold by	Port	Date of Arrival
Bachir Chihani	129,767	Contract	Sonatrach	Aliaga	25/02/2014
LNG Lagos	122,255	Contract	NLNG	Marmara	24/02/2014
Ramdane Abane	126,190	Contract	Sonatrach	Marmara	21/02/2014
Onaiza	210,000	Spot	RasGas	Aliaga	20/02/2014
LNG Finima	132,588	Contract	NLNG	Marmara	16/02/2014

SOURCE: Ship Tracking Data

NO TURKISH GAS TRADES WERE REPORTED ON 27 FEBRUARY 2014

TL/kscm

## Emissions market comment

### Prices retrace from 14-month high after back-loading passes

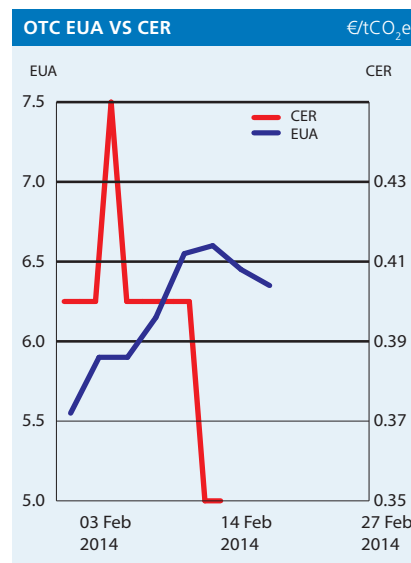
**EU allowances (EUA)** prices began 20-26 February strong amid anticipation of the back-loading of emissions allowances to later in phase III of the EU emissions trading system. However, prices tracked down into the new week.

The benchmark December '14 EUA contract hit a 2014 high of €7.20/tonne of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) on 21 February. This is the highest the product has been since December 2012.

On Monday, the EU Council, which represents

member states, gave the go-ahead to back-loading, allowing the plan to clear its final hurdle. Changes to the auction regulations are expected to come into effect in mid-March.

After the verdict from the Council, prices began a downward trajectory, however. December '14 ended the period at €6.55/tCO<sub>2</sub>e. Bearish pressure was added by falling German power prices, profit-taking, technical trading and some EU states handing out 2014 free allowances. **Ben Lee**



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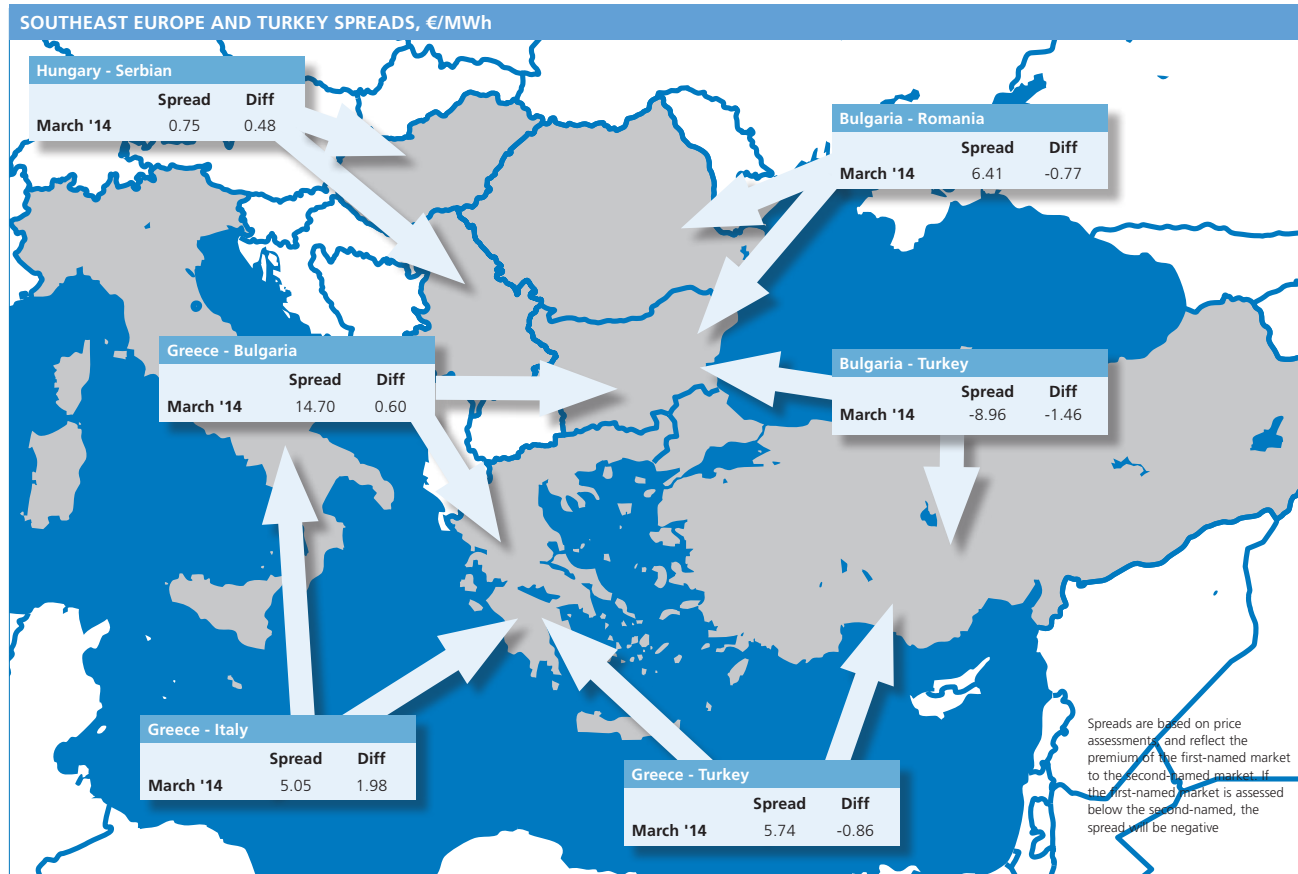
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## Cross-border electricity trade



### TURKISH CROSS-BORDER AUCTION RESULTS FOR MARCH 2014

Direction		MARCH 2014			FEBRUARY 2014			Price change (€/MWh)
From	To	Requested (MW)	Sold (MW)	Price (€/MWh)	Requested (MW)	Sold (MW)	Price (€/MWh)	
Turkey	Greece		67	4.53		67	4.95	-0.42
Greece	Turkey		92	0.22		75	0	0.22
Turkey	Bulgaria					10	0	
Bulgaria	Turkey		183	7.49		183	9.67	-2.18

Source: TEIAS

### SEE CROSS-BORDER AUCTION RESULTS FOR MARCH 2014

Direction		March 2014			February 2014			Price change (€/MWh)
From	To	Requested (MW)	Sold (MW)	Price (€/MWh)	Requested (MW)	Sold (MW)	Price (€/MWh)	
Bulgaria	Greece	543	150	15.32	201	25	21.79	-6.47
Bulgaria	FYROM	141	50	0.56	75	10	7.97	-7.41
Bulgaria	Romania	123	25	0.37	193	25	3.83	-3.46
Bulgaria	Serbia	233	60	0.48	211	25	4.46	-3.98
Bulgaria	Turkey	595	183	6.19	686	183	11.03	-4.84
Greece	Bulgaria	165	165	0.00	65	55	0.00	0.00
Romania	Bulgaria	153	25	4.76	177	50	0.21	4.55
Serbia	Bulgaria	294	50	3.76	130	50	0.18	3.58
Turkey	Bulgaria	250	133	0.02	150	133	0.01	0.01
FYROM	Bulgaria	0	0	0.00	0	0	0.00	0.00

Source: ESO

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## News

### Liberalising Turkey's gas sector is 'an obligation, not a choice'

Turkey's private gas sector could lose \$200m (€147m) in 2014 because of the combined effect of cross-subsidies and the record depreciation of the Turkish lira. However, the speedy liberalisation of the sector, the introduction of a cost-based pricing mechanism and the unbundling of the incumbent BOTAS should make Turkey's gas sector an investment hotspot, the new board chairman of PETFORM, the leading association for Turkey's private gas companies told ICIS.

Private gas companies have been exposed to the full force of the record depreciation of the Turkish lira in recent months, having to pay expensive prices for US dollar-denominated Russian gas imports, while being expected to sell cheaply at regulated wholesale tariffs domestically. Earlier this month Russia's Gazprom granted a discount to private importers, but Aytac Eren, the newly-elected board chairman of PETFORM said even though companies had been given a reprieve by Gazprom, the losses were important for a sector that was still in its infancy.

"Since Turkey is heavily dependent on natural gas - domestic production is slightly over 1% of the total demand of the country - pricing becomes a major issue," he said.

"We see the cost-based pricing system as the definite solution. PETFORM is talking about this issue closely with politicians and bureaucrats. If we cannot agree on this, differential pricing can be a second alternative," he explained.

#### Pricing

The Turkish energy sector operates a cross-subsidies system that allows the gas incumbent BOTAS to uphold a two-tier pricing system that effectively ensnares both the electricity and the gas sectors. Private energy companies have been clamouring for the liberalisation of both markets and the introduction of a more flexible pricing environment. A cost-based pricing system would allow a business entity to charge for services in relation to the amount of money it costs to provide those services. A differential pricing allows for a product to be valued according to the type of customer, delivery time, payment terms etc.

Eren noted that the introduction of the cost-based pricing mechanism along with the enactment of amendments to the Natural Gas Market Law and the unbundling of

BOTAS were his three short-term priorities as chairman of one of Turkey's most powerful lobby groups.

"We pay high attention to the enactment of the draft Natural Gas Market Law as soon as possible. The second issue for us is the unbundling of BOTAS which had to be completed in 2009. With its 75% dominance on the market, it is not possible to create a flourishing private sector. The third and the most important one is [...] the lifting of subsidies of BOTAS in the market. Since BOTAS is selling its gas below the import price, we cannot develop price signals in Turkey and help investors in taking their investment decisions," he said.

Given the challenges facing Turkey - growing gas demand, soaring investment needs - Eren said the liberalisation of Turkey's gas sector was an obligation and not a choice.

"Over the last 10 years, Turkey became the second country after China in terms of demand increase for natural gas and the first among OECD countries.

"In accordance with BOTAS estimates, the total gas demand in Turkey will exceed 60 billion cubic metres (bcm) in 2020. Eight million new households are expected to be connected to the gas grid in the next 10 years. [...] In this regard we consider the liberalisation of the gas market as the inevitable part of security of energy supply in Turkey. It is clear that a multi-supplier natural gas market in Turkey will bring more opportunities to import gas from various sources. If we can establish gas-to-gas competition in the market, Turkish people will be consuming gas and electricity at cheaper prices," he explained.

#### Imports

Turkey's gas demand is expected to reach 46.5bcm this year and is likely to see a steady increase throughout the decade. As a result, Eren said, Turkey needs to consider all import opportunities regardless of the origin of natural gas.

"Free imports are a pillar of market liberalisation. We support the import of gas from any part of the world to Turkey in a liberal way. My personal impression, since we are very close to hydrocarbon reserves is that Turkey and our companies should focus on [neighbouring] countries. Northern Iraq and the eastern Mediterranean (Cyprus and Israel) are good opportunities.

Eren who has an extensive experience in

“Free imports are a pillar of market liberalisation. We support the import of gas from any part of the world to Turkey in a liberal way”

the E&P sector having worked in many oil and gas-rich countries said Turkish companies could also explore opportunities in Iran as the country may soon see the lifting of sanctions.

"Iran is a very important oil and gas country, especially with its 33 trillion cubic metres of proven gas reserves. Such a big quantity definitely offers opportunities in the E&P sector. Turkish companies can bid in licensing rounds alone or under a consortium to produce oil and gas and export it to Turkey. It is very difficult to say whether Turkey's engagement with Iran can be replicated as in the northern Iraq case, but if both countries can develop solid relations, this partnership can go beyond," he said.

#### Domestic exploration

Eren said Turkey itself could prove a treasure trove for gas companies in search of exploration and production (E&P) opportunities. He said that last year only 168 exploration, production and approval wells were drilled in Turkey. The total number in the history of Turkey is only 4,300.

"When we consider that 20,000 wells were drilled in the US last year, it emerges as a clear fact that E&P activities should be intensified in Turkey to understand our potential accurately," he said.

"With the enactment of the new Petroleum Law, the Turkish government brought two major changes to the sector: First each company is obliged to submit a work programme and 2% for onshore and 1% for off-shore blocks investment guarantee. Second, no stamp tax will be charged for bilateral agreements. There are also incentives offered for investing in high-priority provinces. We will see the positive impact of this new law in the next two years and predict that drilling numbers will increase." **Aura Sabadus**

## Hydro-strapped Turkey may boost Georgian imports in Q2

**Georgia may boost** electricity exports to Turkey in April as the latter faces a dry spring and a shortage of hydro generation, a source at the Georgian grid operator GSE told ICIS on Monday.

GSE is in the process of allocating the yearly capacity on the newly-launched 400kV Borcka-Akhaltsikhe line that could range between 100–300MW throughout the year. However the source said GSE and its Turkish counterpart TEIAS were expecting to meet shortly to discuss the possibility of increasing the capacity in April and May given that hydro levels are currently below the expected average in Turkey. Georgia has abundant hydro generation throughout spring and summer as the snow in the mountains melts, replenishing reservoirs.

"The most difficult months will be April and May because Turkey expects to have some important limitations in the east [where the bulk of hydro generation is concentrated]," he said. "That's why we are going to cooperate to increase the NTC [net transfer capacity] and will organise additional tenders for the rest of the capacity, if needed," he explained.

According to figures published by TEIAS, the cumulative hydro level in dams for February '14 stands at just over 1.8 billion cubic metres, compared to 4.4bn3 the same month last year. This means that this February's reservoir levels represent only 55% of the expected average for the month. January '14 was also drier than the same month last year

as there were only 2.4bn3 in dams compared to 5.1bn3 in January '13.

As a result companies active in the Turkish electricity market expect April '14 Baseload prices to out-turn virtually on a par with March '14 Baseload. Currently April '14 Baseload is assessed at an average Turkish Lire (TL) 144.17/MWh (€48.10/MWh), while March '14 Baseload hovers around TL144.58/MWh. Comparatively, the average April '13 discount to the average March '13 Baseload price stood at TL8.00/MWh. The April '14 Baseload discount to May '14 has also shrunk from last year's TL11.00/MWh to TL4.68/MWh this year, according to ICIS data.

A Turkish trader was more optimistic, noting that the spring months may see more rain that would help ramp up run-of-river generation.

### Allocation of capacity

GSE said the allocation of capacity, which will be announced on 4 March, would ensure that newly-built hydro plants in Georgia would have priority access to the interconnector and would see full allocation of capacity for the year. A second category of companies – those with existing hydro generation or those expecting to transit electricity from Azerbaijan or Russia – would be allocated the remaining capacity.

He said the deadline for submission of documents had been extended from 21 to 28 February, but added that some six companies – mostly Georgian – had submitted thorough documents to support their ap-

plications. He said new hydro power plants such as the Akhmeta or Paravani may have the capacity guaranteed as their production is moderate and would tally with the NTCs earmarked for 2014.

He added that the average allocated capacity for 2014 would range between 100–300MW, although there is a possibility that this may increase in the summer period.

"We expect to see some limitations in the first part of 2014, but the capacity may increase from the second part of 2014," he said. "However, we are working with TEIAS to increase the capacity to an annual average of 500MW for next year," he added.

TEIAS was not available for comment.

Earlier in January, two of Georgia's important hydro plants, the 1.3GW Enguri and the 220MW Vardnili, tendered a combined 200GWh for June, July, August 2014. The capacity was allocated to Turkey's AKSA at a reported price of \$75.00/MWh (TL163.260/MWh, €54.56/MWh). **Aura Sabadus**

“We are working with TEIAS to increase the capacity to an annual average of 500MW”

## Gazprom grants retroactive 15% discount to Greek DEPA

**Greek state-owned natural** gas supplier DEPA has secured a 15% discount on supplies from Russia's Gazprom, according to Greece's Ministry of Environment, Energy and Climate Change.

“All the other European [firms] started this process in 2010, so why then did DEPA wait until June 2013 to ask for a discount?”

The new price will be applied retroactively from 1 July 2013 and will last until 2016. DEPA will then be committed to buying from Gazprom for an additional 10-years, with two further price renegotiations possible during that time-frame.

In addition, the ministry said DEPA's take-or-pay obligation would be reduced. A source within the Greek power sector suggested this could mean a cut to 2 billion cubic metres (bcm)/year from the 2.4bcm/year it was committed to.

One independent supplier within Greece said that based on the last year's third-quarter import price of Russian gas, DEPA's contract would be reduced to about \$397 per thousand cubic metres, equivalent to €27.416/MWh.

While welcoming any fall, he said this kept the price above other countries in western Europe, although it would be below neighbouring markets. In addition, he questioned why it took so long for DEPA to request the renegotiation.

"All the other European [firms] started this process in 2010, so why then did DEPA wait until June 2013 to ask for a discount? That is two lost years of paying higher prices", the source said.

Last month, Greek energy regulator RAE revealed that the average import price in the third quarter of 2013 was €31.50/MWh.

That price includes the cost of LNG deliveries into the country's Revithoussa port and pipeline supplies from Turkey. **Ben Samuel**



## Turkish traders braced for 13% gas price hike in electoral year

**Turkish energy companies** expect an average 13% increase in the price of natural gas that should be announced shortly after the local elections in March, an ICIS survey has found.

Expectations for the gas price hike ranged between 0-20%, with most companies arguing that the rise should be enacted on the 31 March, a day after the local elections, or from 1 April.

Broken down, four out of 11 respondents said they expected a 15% increase, three thought a 20% rise was more likely, although one said he did not exclude a 25% rise after a second round of elections in October. Two were more sceptical arguing that the mark-up should be 10%.

One participant said he did not envisage any price increases at all this year, reiterating reports that the government would avoid increasing the gas price at a time when Turkey prepares for a long electoral cycle starting in March. Another trader said he expected a 13% increase this year, but that it should be staggered - 3% in April and 10% in October.

An average 13% gas price increase from April would bring the wholesale gas price to Turkish Lira (TL)811.11 (€25.50/MWh)/thousand cubic metres (kcm), making it €2.12/MWh more expensive than the April Dutch TTF hub price and €1.68/MWh higher than the Austrian VTP hub price for the same month, based on ICIS price assessments.

A rise in the Turkish regulated gas price would also attract a hike in the regulated electricity tariff and have a further bullish impact on the non-regulated electricity market.

Typically a gas price increase translates into an electricity price rise that is half as much. In this instance a 14% mark-up may attract a 7% increase in the regulated electricity price, but this is not an exact science.

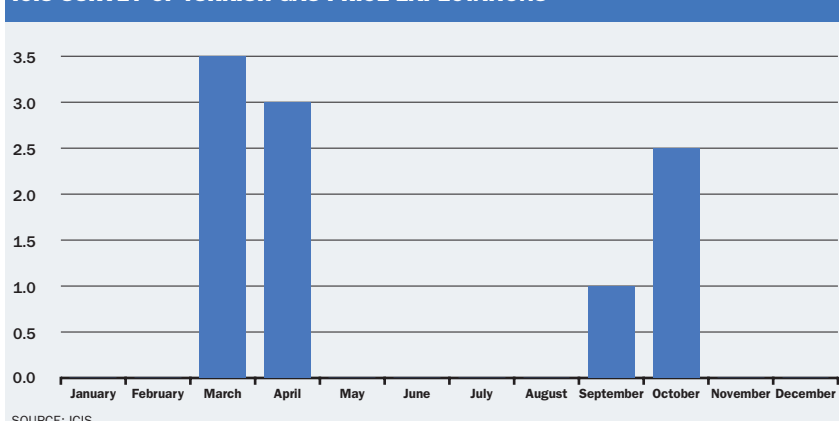
### Reversal of fortunes

Electricity and gas companies argue the price rise is overdue for two reasons.

Firstly, they say, the government has not enacted an increase for the last 16 months which means that it had not been able to capture the fluctuations in the exchange rate. The Turkish lira depreciated by 23% against the US dollar between 31 October 2012 and the end of January when it reached a record low of TL 2.34. It has since appreciated and is trading at an average TL 2.17 to the US dollar.

The depreciation meant on the one hand they were paying high prices for US

### ICIS SURVEY OF TURKISH GAS PRICE EXPECTATIONS



### Number of expectations for gas price increase broken down by months

dollar-denominated Russian imports, on the other they had to sell at a cheaper regulated wholesale price set in Turkish lira that led to important losses.

Eventually, Russia's Gazprom granted a 10% discount on the current import price paid by Turkish independents which is reportedly \$305.00/kcm (TL664.00/kcm) for 2014.

If only a month ago Turkish gas companies faced losing some TL100.00/kcm because of the widening spread between the import price and the regulated wholesale price, they are now expecting a reversal of fortunes. The combined effect of the gas price discount, the appreciation of the lira and a potential gas price increase of 13% from March/April could give private gas companies some relief and earn them a margin.

Secondly, energy companies point out that power prices were bearish last year because of muted weather-driven demand, making it difficult for gas-fired power plants to break even. In order to make a profit, gas-fired plants need to run on prices ranging between TL160 - 170.00/MWh, although the older plants with lower efficiency may require a higher price of TL180.00/MWh. Comparatively, Calendar Year 2013 Baseload delivered TL30.00/MWh lower than that value.

### Tough to predict

While electricity and gas companies were happy to share their expectations for a gas price increase, they were also keen to point out that figures reflected purely their views and not the certainty of such an action. This is largely because the enactment of a gas

price increase depends to a large extent on the decision of the Prime Minister himself and therefore it is beyond the scope of any company to predict with confidence the course of events over the upcoming months.

"I would much rather bet on a draw between Besiktas and Galatasaray than on a gas price increase in Turkey," a source said before the game last week.

Nevertheless, forecasting a voter-unfriendly gas price increase in a year with two important elections may prove even more unmanageable. **Aura Sabadus**

### Disclaimer

While changes in the price of natural gas and electricity are purely the remit of the Turkish government, ICIS has intermittently run monthly surveys over the last two years. The survey aims to reflect market participants' expectations for tariff increases, and follows their request for greater transparency in the Turkish electricity and gas markets.

The survey targets a minimum of 10 companies and typically runs on a monthly basis for as long as there is an expectation of an increase in the natural gas tariff. It asks standardised questions and collects data on an anonymous basis.

The average of the tariff increase expected reflects the arithmetic average of all the percentage figures submitted to ICIS each month.

The timing of the anticipated tariff increase reflects the mean of all the percentage figures submitted to ICIS each month.

Anyone interested in taking part in the survey can contact [aura.sabadus@icis.com](mailto:aura.sabadus@icis.com)



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## Turkey to have one of driest years on record – forecaster

**Concerns are mounting** over Turkey's hydro production this year as the country faces one of the driest years on record, European weather forecasters WSI have warned.

Hydro levels in dams stand at two billion cubic metres (bcm) in February, half the predicted amount to be in dams at the of the month and nearly a third of the volumes accumulated during the same month last year, according to figures published by the electricity grid operator TEIAS.

January proved equally dry as there with only 2.47bcm of water in dams, half the levels seen in January 2013.

However, Mark Stephens-Row, meteorologist at WSI, said the situation was unlikely to improve over the coming weeks, predicting even a long-term dry scenario. He added that 2014 could be one of the driest years on record for Turkey.

"There is no sign of prolonged wet weather," he said. "Certainly over the next few months there could be some rainfall but not for extended periods of time. The odds are tilted to the wetter-side for May, but going out to June, July and August, the forecast is on the dry side."

The dry-weather outlook is already reflected in electricity curve prices with April Baseload prices virtually on a par with those for March and May.

On Wednesday, average forward April prices estimated by ICIS stood at Turkish lira 144.49(€47.28)/MWh, just TL0.37/MWh lower than the average forward March Baseload price. Comparatively, last year, the average April Baseload price stood at TL126.75/MWh and its average discount to March Baseload stood at TL8.00/MWh.

Stephens-Row said there may be some localised rainfall in the mountains in the eastern and southern part of Turkey over the coming weeks, but stressed that the precipitation would not be for a lengthy period of time.

He added that the dry weather experienced now could cause the ground to heat up quicker.

"Drought begets another drought and this is what we could see over the summer months. Temperatures may easily get to 40°C in the summer," he added.

He stressed that long-term weather patterns were difficult to predict, but added this year there were few signs globally to indicate any dramatic changes that may overturn the verdict for a dry year in Turkey. **Aura Sabadus**

## Bulgaria: Front month price exceeds expectations

**In the beginning** of the month, Bulgarian traders had bearish expectations for March Baseload quoting falling prices in the region and in Hungary.

In February Bulgarian producers failed to sell significant volumes because of reductions of export cross-border capacities, which prompted some traders to believe that producers would adjust their asking prices for March to the regional levels in order to attract more buyers.

In the end only 1.6GW Maritsa East 2 coal-fired power plant and state-owned utility NEK launched tenders to sell various March products with starting prices above traders' expectations. The 2GW Kozloduy nuclear power plant did not offer any electricity for March.

Traders said that reportedly only three companies had taken part in the Maritsa East 2 tender buying minimal quantities as the starting price for Baseload was Bulgarian Lev (Lv) 76.00/MWh (€38.86/MWh) – well above the Hungarian equivalent which had dropped from €36.00/MWh on Friday to €34.85/MWh on Wednesday, according to ICIS data.

NEK on the other hand had attracted slightly more buyers. According to one market source, the utility sold 15MW out of 70MW for March Baseload with hourly deviation from -20% to +30% at the minimum asking price of €40.70/MWh. NEK also received bids for 55MW out of 100MW for March high tariff at an average €42.22/MWh.

On Thursday market participants polled by ICIS quoted Lv70-74.00/MWh as levels at which traders were offering the Bulgarian March Baseload.

According to one source, some companies may be exporting at a loss in March as export cross-border capacities to Greece and Turkey were bid relatively high but others would still be able to make good margins through transits or by exporting cheaper Bulgarian electricity, which had been secured on long-term contracts.

ICIS assessed the Bulgarian front-month Baseload at €40.30/MWh, taking into account the midpoint of traders' estimates and including the export tariff of €3.53/MWh.

**Irina Peltegora**

## Ukraine: Short-term concerns over natural gas, long-term opportunities

**The prospect** of a divided country and mounting political conflict with neighbouring Russia in light of recent political unrest is raising questions about Ukraine as a reliable transit country for natural gas.

In that respect, viewed from the perspective of energy, Ukraine could bring short-term concerns, but also long-term opportunities.

### Concerns over transit gas

While transit volumes to Europe through Ukraine have been unaffected by the recent political turmoil, domestic Ukrainian demand is now being met more by storage withdrawals rather than imports from Russia.

Daily off-take of gas from Ukrainian storage has jumped from an average of 60 million cubic metres (mcm)/day in January 2014 to 100-105mcm/day in the second half of February 2014, according to reports in the local media. Neither incumbent Naftogaz nor transmission system operator Ukrtransgas have replied to ICIS's requests for confirmation of this. At the same time, recently published Russian official figures show Russian gas exports into Ukraine dropped substantially over February, according to analysts. These figures showed that over 1-2 February this

year Ukraine had been importing Russian gas at about 147mcm/day, according to Valery Nesterov, chief analyst at Sberbank CIB. This fell to around 50mcm/day after 10 February and in the last few days slumped down to 10-13mcm/day. From 1 January till 23 February 2014 the official average daily import figure for Russian gas going into Ukraine was 63mcm, while the equivalent figure last year was 74mcm. Ukraine is thought to have some 11bcm in storage at the moment.

The level of gas in storage at Ukraine's western border is important because it can affect gas transit volumes to Europe and Turkey. Ukraine's main gas consumption is in the east of the country, and during a cold winter additional gas is sometimes drawn off the transit lines to supply high demand. This could have an impact on Turkey which is one of the recipients of Russian gas that is shipped along the Western line through Ukraine, Romania and Bulgaria.

Normally, the gas should then be put back into transit lines from storage in the west and taken on to Gazprom's customers.

In 2006 and 2009, Ukraine was accused of unsanctioned off-take of Russian transit gas - giving rise to deficits in the [Page 9](#)



## Short-term concerns, long-term opportunities

» Continued from page 8

supply to European customers. Ukrainian gas usage is highly inefficient and gas demand goes up exponentially in cold weather, partly to maintain pressure in the entire Ukrainian gas grid.

Such a scenario appears unlikely for now not least because the country may be over the peak winter season and the weather is mild, depressing demand. But in the likelihood of a cold spell Ukraine may run out of storage gas fast and either turn to Russia for more volumes or tap into transit gas. Should Ukraine's gas needs increase abruptly, the security of transit gas will depend on the political developments between the new government in Kiev and Moscow, and Ukraine's ability to pay its outstanding debt to Russia.

### Long-term opportunities

Ukraine's volte-face on an EU trade pact and its turn towards Russia last November may have triggered a chain of events that climaxed in bloody mass-protests this month, but it also earned Ukraine an enviable gas price reduction from \$400.00/kcm to \$268.50/kcm. But Gazprom may increase the price back to \$400.00/kcm in the aftermath of recent events, Russian press reports suggested this week.

The information cannot be confirmed, but if true, that would push Ukraine to look increasingly west to Europe for the purchase of spot natural gas volumes, opening up important trading opportunities for Ukrainian as well as foreign companies.

Ukraine had already been importing volumes from Poland and Hungary since 2012 after Germany's RWE took advantage of the fact that hub gas in Europe was cheaper than Russian oil-indexed contract prices in Ukraine. Regulated prices for industrial end-users in Ukraine stood at €31.90/MWh last

year. Even when transportation costs were considered, it was advantageous for Ukraine to buy on the traded hubs of Europe and import eastward.

The hefty price reduction offered by Moscow in November made it less attractive for Ukraine to purchase gas on European hubs, but that may change once more if Gazprom increases the price.

Such a development would force Ukraine into a tighter relationship with Europe and potentially lead to the liberalisation of its gas market.

Equally interesting are Ukraine's storage facilities that could open up not just to European customers but also to Turkey.

Two years ago, Ukraine offered Turkey its underground storage facilities, pointing out that Turkish companies may leave some of the purchased Russian gas in Ukrainian storage during the summer and withdraw it at times of higher demand in winter. Similar offers were made to German and Slovak companies.

Ukraine has 12 storage facilities controlled by state-owned incumbent Naftogaz. They have a total working capacity of 31bcm and the charge for gas injection, storage and off-take is much cheaper than in European countries.

Any potential opportunities will have to be weighed up against the upcoming course of political events. It is important to remember that whatever direction the country will take, its reliance on Russia as an important supplier of gas cannot be severed. However, a diversification of sources, greater pricing flexibility and the opening up of trading opportunities could place Ukraine in a position to challenge Russia's monopoly in the region. **Elizbeth Stonor and Aura Sabadus**

## Revised start date likely for Turkish transparency platform

**Turkey's regulator EPDK** and the natural gas incumbent BOTAS are expecting to announce a fresh deadline for the launch of the much-anticipated transparency platform, a source at the watchdog told ICIS this week.

BOTAS had been under pressure to launch the updated electronic bulletin board (EBB) platform that would centralise and publish more transparent data by March.

But the source at the watchdog said there had been some technical issues that obstructed BOTAS from connecting the EBB platform to the software operated by distribution companies.

"It [BOTAS] had problems in connecting and transferring data from the distribution companies to EBB which means that we are now working to announce a new calendar for the launch [of the platform]," he said.

A trader said BOTAS may also hold a new tender for software as arrangements for the current software may not be working out properly. The source at the regulator confirmed the information, but said there were no concrete details regarding the new tender.

Turkey is in the process of launching a balancing market for gas that would allow companies to adjust their positions on a daily rather than monthly basis as is the current case, and bring more transparency to the market. Since EBB is essential to this project, any delays in bringing it into operation is likely to delay the launch of the balancing market itself. **Aura Sabadus**



## Aggressive positioning pushes up Turkish cross-border price

**Traders active in** the Turkish market said companies had taken aggressive positions in the March cross-border auctions, pushing up the Bulgarian-Turkish spread price or the

month. A total of 183MW was allocated by the Turkish grid operator TEIAS on the Bulgaria-Turkish border at €7.49/MWh, €1.30/MWh higher than the price published by the Bulgarian counterpart ESO for the same direction.

The TEIAS Bulgaria-Turkey spread for March is €2.18/MWh lower than the February price for the same direction.

"Some companies took big volumes," a source said. "Some of them have retail branches and [for that reason] they are trying to close all their exposure to PMUM [the Turkish Day-ahead electricity market]."

One Bulgarian trader said last week after the publication of the ESO results that a

price of €4.00-5.00/MWh would have given sufficient incentive to export from Bulgaria. But a participant on the Turkish market suggested the result of the ESO auction seemed fair because enough buyers were willing to pay €6.19/MWh.

Meanwhile, a total of 67MW was allocated from Turkey to Greece at €4.53/MWh.

"The price is more reasonable, taking into account the potential depreciation of the Turkish lira," a Turkish trader said.

The Turkish currency has seen some sharp drops against the euro and the US dollar in recent months, but has been relatively stable in February following the intervention of the country's central bank. **Aura Sabadus**

**“The price is more reasonable, taking into account the potential depreciation of the Turkish lira”**

## Romania's energy grid needs €1bn investment inflow

Romania's transmission system operator Transelectrica has called for the fast-tracking of key projects such as the interconnector to Turkey amid reports that the TSO needs €1bn worth of investment in the short run.

The TSO's monitoring board member Carmen Neagu said at an industry event last week that decisions should be fact enough to maintain project feasibility.

"A project whose execution decision exceeds 10 years becomes unfeasible," Neagu said, pointing out that any development plans were strictly connected with the overall investments in the entire Romanian energy sector. Transelectrica aims to follow through with its development plan between 2014 and 2017.

Romania first mooted the possibility of building a subsea cable to Turkey some 10

years ago, recognising the opportunities for trade that could open up between the two countries.

For example, the Romanian March Baseload trades at an average €16.00/MWh discount to the Turkish counterpart. The interconnector which could have a capacity of up to 1GW according to previous reports, may bring additional energy to the heavily-urbanised Marmara region in Turkey and help Romania to clear congestion in its southern Dobrogea province.

However, despite the visible advantages that such a link could create, Romania has been slow in materialising it. A source active in Romania said such a project would be too expensive.

Another project that may attract cash would be the expansion of the cross-border

capacity with Hungary. Some sources said that Serbia could also be used as a transit country, and added that the current capacity was sufficient.

Meanwhile others pointed to rising exports into Hungary and a continuing profitable spread between the two markets.

Traders previously told ICIS that the recent cuts in the country's export tariff boosted exports, which had almost tripled flows into Hungary.

The interconnector between Romania and Hungary currently has the capacity of 700MW. According to data by the Hungarian TSO MAVIR, 247MW were allocated for year 2014, but almost 1.3GW were requested. A similar situation occurred for March, when almost double the allocated cross-border capacity was requested. **Sophie Udubasceanu**



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## Eastern Europe seeks US LNG alternative to Russian gas

In Washington, lobbying efforts are now under way to expedite the approval process of LNG export projects that could conceivably deliver more flexible supply to eastern and southeastern European buyers

**The oncoming wave** of US LNG exports has attracted not only the attention of buyers in the premium Asian – and South American – markets, but is increasingly captivating the interest of eastern and southeastern European governments keen to reduce both the cost of their natural gas imports and their dependence on Russian gas.

To this end, a group of representatives from Lithuania, Poland, Estonia, Finland, Czech Republic, Slovakia and Hungary have pressed for support from US government officials to expedite LNG export approvals to their countries.

US LNG export projects must receive approvals from the US Department of Energy (DOE) for both free trade agreement (FTA) countries and non-FTA nations. By law, FTA approvals are granted without delay, but the US DOE has used its discretion to more stringently consider non-FTA applications, which include all EU member states.

Both US industrial manufacturers that are concerned about the potential for domestic gas prices to rise and opposition from US environmental groups have given the government reasons to pause.

The DOE has approved only six non-FTA export licences for five projects in the last four years, while a bottleneck of more than two dozen applications has been pending.

However, facilitating US LNG exports to EU states – and particularly those that are more dependent on Russian gas supplies – has received strong support in many quarters in Washington.

Two US senators introduced legislation in 2013 aimed at giving preferential treatment for North Atlantic Treaty Organization (NATO) member nations and Japan, but the bill has been referred to the Senate Committee, where it is pending.

The group of EU representatives has yet to establish a formal group in Washington to press its case. And it remains to be seen whether the recent events in Ukraine will speed up the Senate's review of the bill or if LNG exports will be included in the Transatlantic Trade and Investment Partnership which is currently under discussion between Washington and Brussels.

But Margo Thorning of the LNG export advocacy organisation Act on LNG said it was likely that a formalised lobby group

would form on behalf of the eastern European countries.

"Politically, to be able to rely less on Russia is just critical for those countries, not only for the economic benefits of the US," she said.

### Lithuania leads the way

The lobbying push has been championed by Lithuania, which is on track to become the first eastern bloc state to start importing LNG. Klaipėdos Nafta, as the state-owned terminal developer, is targeting start-up of its first floating storage and regasification (FSRU) terminal by December 2014. LitGas, a subsidiary of state-run power incumbent Lietuvos Energija, is expected to finalise a five-year supply contract by March this year. LitGas is also responsible for sourcing the commissioning cargo.

Poland will closely follow Lithuania, although the planned 5 billion cubic metre (bcm)/year terminal at Swinoujście has been beset by delays, with start-up now expected in 2015.

Given the current tightness in the LNG market, LitGas may struggle to

Reef Features

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secure competitively priced LNG for its mid-term contract. But for Lithuania and other countries that lack the diversity of supply, the allure of US Henry Hub-based gas can also help leverage against higher-priced oil-indexed contracts, as Japanese buyers have learned. While most participants are likely to use the prospect of US LNG to push for pricing concessions from Russia's Gazprom, Polish incumbent PGNiG may attempt to use it as leverage with the oil-indexed 1mtpa LNG contract it has signed with Qatari state-owned supplier Qatargas.

Lithuania pays for the highest-priced gas in Europe, close to \$15.17/MMBtu equivalent in 2012, and more than one-third more than Germany's hub prices, according to a July 2013 estimate by the European Commission provided to state-owned Klaipėdos Nafta.

For Poland, this was about \$11.63/MMBtu, according to the commission estimate.

It is, however, questionable whether US LNG will ultimately be delivered into the Baltic or southeastern Europe at more competitive prices than their existing contractual pipeline supplies.

## Cost-competitive?

The US's Cheniere Energy was the first export developer to provide its customers with long-term agreements based on a capacity model, which means that it took the risk of procuring feedgas for its customers.

Under the agreements, the project's offtakers – including UK-based BG Group, Spain's Gas Natural Fenosa, Indian network operator GAIL and South Korea's KOGAS – pay a range of fixed fees between \$2.25/MMBtu to \$3.00/MMBtu plus 115% of the US Henry Hub front-month price on a free on board (FOB) basis.

The remainder of the US projects have fixed tolling agreements, whereby the capacity holders take the Henry Hub risk themselves, secure the gas themselves and only pay the liquefaction project a set tolling fee to lift FOB, which have ranged around \$3.00/MMBtu.

One estimated shipping distance from Sabine Pass to Klaipėda (a journey of 5,480 nautical miles) is about 11.5 days' voyage. Based on the ICIS charter rate assessments of around \$77,000/day, this would equate to nearly \$2.00/MMBtu for shipping plus associated fuel costs.

If a minimum \$3.00/MMBtu liquefaction fee could be sought from the US Gulf, estimated landed prices into Lithuania could then be considered around \$12.00/MMBtu based on a US Energy Information Administration (EIA) projected Henry Hub average for 2015 at \$4.11/MMBtu.

While that headline price sounds appealing, the likelihood is limited, given that the eastern and southeastern European companies would be smaller buyers with limited

offtake and potentially lower credit, warranting a mark-up.

In addition, the US Gulf brownfield projects that are the 18mtpa Sabine Pass, the 13.2mtpa Freeport LNG and the 12mtpa Cameron have all reached long-term agreements with major Japanese and Asian buyers, as well as portfolio sellers such as UK-based BP and Paris-based GDF SUEZ.

For potential buyers in southeastern and eastern Europe, it is those portfolio sellers that are most likely to be in a position to source between 500,000 tonnes per annum to 2mtpa each of US LNG and offer it to regional customers. Cheniere Energy itself, which has a dedicated 2mtpa for trading from its first four trains and has signed a memorandum of understanding (MoU) in the past to supply Klaipėdos Nafta, may also be well-positioned to meet the demand pull from southeastern and eastern Europe.

While Lithuania's immediate LNG requirements and its complete dependence on Russian pipeline supplies have meant that it is driving the lobbying push in Washington, other EU states with existing LNG import infrastructure are also not only looking to the US but to other competing sources of supply to push their import costs down.

Harry Sachinis, CEO of the Greek gas incumbent DEPA, said countries such as Greece are also targeting supplies from Azerbaijan, Iraq, Iran, Cyprus and Israel that could be supplying conventional volumes to Turkey and southeastern Europe within the next five years.

"At this point, you will have to ask whether it is more convenient to import US LNG, which is sensitive to a Henry Hub price increase, or look regionally where we may get a price decrease because of an expected gas glut," he told ICIS.

Sachinis also viewed the potential reality of an oversupply from Turkey. A total of 16bcm/year could reach southern European markets by 2019, including Greece. Of those volumes, 6bcm/year would be earmarked for Turkey. And at a time when Turkish gas demand is slowing down, while the western Balkans also has seen reduced consumption, Sachinis could be predicting more length arriving sooner than when US-sourced LNG could arrive.

"When markets are interconnected, and there is an oversupply, then a hub may form," he said. "Interconnections are the best way to secure a price and you will have to test what the attraction of US LNG will be against this scenario."

However, Greece is not immune from Russia's influence. Greece has been paying upwards of \$13.70/MMBtu equivalent for Russian pipeline gas, according to the commission's estimates, although DEPA has recently secured a price discount of 15% on its supplies from Gazprom.

## AT A GLANCE

- Eastern European countries are pressing the US to expedite LNG export approvals to their countries, emboldened by legislation introduced in 2013 and aimed at giving preferential treatment for North Atlantic Treaty Organisation (NATO) members. Nevertheless the bill is still pending.
- Lithuania which pays the highest priced gas in Europe could become the first country in the Eastern Bloc to import US LNG, followed by Poland, although there are still questions whether supplies purchased on Henry Hub prices could be more competitive than pipeline contract gas in the long term.
- As more regional suppliers emerge, Turkey and southeast Europe could see a gas glut forming which would ultimately drive prices down. The oversupply may also lead to the formation of traded gas hubs, encouraging competitive prices.

said the Gazprom was first observing the outcome of its antitrust investigation initiated by the commission.

## Price isn't everything

While the apparent competitiveness of US LNG is a key driver for European buyers, price is not everything, with many government equally motivated to secure US supplies to boost their energy security.

During its first year, the regasification capacity of Lithuania's FSRU – aptly named *The Independence* – will be limited to 1.7bcm/year, but ideally would reach up to 4bcm/year, which could be achieved after a new domestic pipeline starts up in 2016, according to Tadas Matulionis, deputy director of the terminal for Klaipėdos Nafta.

This is more than Lithuania's annual consumption, and its lobbying efforts in the US come in the wake of Lithuanian gas incumbent Lietuvos Dujos launching arbitration proceedings against Gazprom, seeking a price discount of at least 20% on its supply contract, which expires in 2015.

The government has already filed a case in the international arbitration court in Stockholm, seeking compensation of at least 5bn Lithuanian litas (about \$2bn) on claims that the country allegedly overpaid for gas since 2004.

Although LitGas may not be able to directly secure a US cargo sourced from Sabine Pass or Freeport by the end of its Gazprom contract, its vocal criticisms against the Russian supplier and courting efforts of US LNG export developers may prove to be incremental measures toward long-term energy price reductions for the next decade. **ICIS reporters**



## Exchange and TSO data

PMUM TURKISH POWER FOR DELIVERY 28 FEBRUARY 2014		
Period	TL/MWh	€/MWh
Day-ahead	168.29	55.42

GREEK SMP 27 FEBRUARY 2014		
Period	€/MWh	Day on day diff
28 February 2014	64.589	-6.321

SOURCE: ADMIE

BOTAS BALANCING GAS PRICE (MONTHLY) 19 FEBRUARY 2014	
Period	TL/kscm
February 2014	801.405

The balancing price does not include a special consumption tax

EXCHANGE RATES 27 FEBRUARY 2014			
Period	£	€	\$
Day-ahead	0.271	0.329	0.451
Day-7 Ex-Post	0.273	0.331	0.456
Week 10 '14	0.270	0.328	0.450
March '14	0.269	0.327	0.449
April '14	0.267	0.324	0.445
May '14	0.264	0.321	0.441
Q2 '14	0.264	0.321	0.441
Q3 '14	0.257	0.313	0.429
Q4 '14	0.251	0.305	0.418
Q1 '15	0.245	0.297	0.407
Year 2015	0.236	0.286	0.392
Rolling Year from 1 Mar '14	0.257	0.312	0.427

SOURCE: Bloomberg

TURKISH POWER FUNDAMENTALS DATA (TEIAS) 26 FEBRUARY 2014	
	MWh
Imports	19,478.00
Exports	7,159.00
Total Consumption	n/a
Total Production	39,183,196.28
Refined Products	1,051,988.21
Coal/Lignite	11,275,239.51
Natural gas/LNG	18,300,293.94
Geothermal	326,996.80
Hydro	6,966,614.44
Wind	1,092,352.08
Biogas/Other	169,711.31

SOURCE: TEIAS

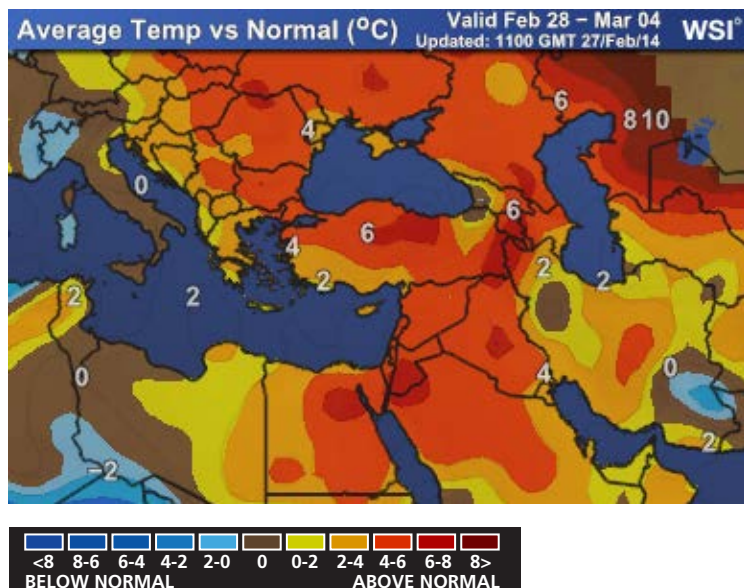
## Power plant outages

TURKISH POWER PLANT OUTAGES 27 FEBRUARY 2014					
Plant	Fuel	Total installed capacity	Shutdown start	Shutdown end	Notes
ANTALYA DOGALGAZ	Natural Gas	231.8	27/02/2014 00:01	10/06/2014 07:59	In operation 177 MWH
CEVRIM SANTRALI	Electric	160	22/02/2014 17:06	28/02/2014 12:59	In operation 0 MWH
EREN ENERJİ TERMIK	Electric	160	27/02/2014 00:00	03/03/2014 09:00	In operation 0 MWH
SANTRALI ZONGULDAK	Gas	238.9	02/03/2014 00:00	03/03/2014 21:59	In operation 119 MWH
ALPASLAN 1 HES	Fuel oil	420	28/02/2014 00:00	05/03/2014 23:59	In operation 0 MWH
CENGİZ 240MW SAMSUN					
GAZ YAKITLI KOMBİNE					
CEVRİM ENERJİ SANTRALI					
AMBARLI FUEL-OIL					

SOURCE: PMUM



# Turkish Energy Hub Daily



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## Days 1-5 Outlook: 28 February - 4 March

- High pressure will gradually be replaced with a weak area of low pressure from the northwest through Friday, 28 February. Showers will move into countries bordering the Adriatic coast, where they may turn heavy over the Julian and Dinaric Alps and Greece.
- Later on Saturday 1, March, rain will spread in about this low into the region, with snow above mid-levels on the Carpathian Mountains. Heavy rain will spread into Greece and then Turkey from the SW on Monday, 03 March, and then an unsettled picture for most on Tuesday with heavy snow for the Julian and Dinaric Alps.
- Mean temperature anomalies will be +1 to +3°C for western Balkan States down into Greece, with +3 to +6°C elsewhere. Daily anomalies of +5 to +6°C in Hungary and Slovakia through the period, possibly +6/+7°C in Turkey from Sunday, 2 March. Precipitation anomalies around 150-200% for the Julian and Dinaric Alps and the Carpathian mountains.

## Days 6-10 Outlook: 5 - 9 March

- A fairly large slack area of low pressure extending across the region on Tuesday, 04 March, will retreat southwards towards Turkey through Friday, 7 March, gradually being replaced by high pressure ridging in from the west. A cooler northeasterly flow will then develop across northern and central parts of the region.
- Mean temperature anomalies will be +1 to +2°C for coastal areas in the west, increasing to +3 to +5°C for much of Romania, Slovakia, Hungary and central Turkey. Precipitation anomalies 150-200% for the Carpathian Mountains.



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