



Mexico Electric Power Sector Reform: The Role of Natural Gas

2016 UT Energy Week

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Editor ICIS Mexico Energy Report



Specialists in energy

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Heren Global LNG Markets

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Market Report

A flurry of tender activity from sellers and buyers kept traders busy looking to the fourth quarter. Pacific supply looked increasingly long with weak macro-economic data, low oil and new supply contributing 2

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China's Guanghui Energy signs LNG deal for Qidong terminal

Chinese independent LNG buyer, Guanghui Energy, has moved closer to securing long-term supply for its first LNG terminal in Qidong, following a framework agreement with Anglo-Dutch major Shell.

Although it was known since July that Guanghui Energy and Shell were planning to sign a collaboration agreement this month, there were conflicting opinions on whether it involved Shell supplying LNG to the Chinese buyer.

"We heard there was a deal taking place, but we did not know if it was Guanghui buying LNG from Shell or if it was an extension of their joint venture for the terminal," one source said.

Guanghui Energy had initially wanted Shell to help construct and operate the Qidong terminal in Jiangsu, but the Chinese company decided earlier this year to take care of the terminal's progress and operations itself, sources familiar with the matter told ICIS.

Shell confirmed the end of its involvement in the terminal to ICIS on 18 August. "Shell is not a party to the Qidong terminal," a spokesman for the oil and gas major said, adding that Guanghui Energy will be the sole investor and operator.

"Our cooperation with Guanghui has evolved and the current scope under discussion, subject to definitive agreement, is a joint venture to purchase, import and on-sell LNG through the Qidong terminal," the Shell spokesman added.

This latest integrated co-operation framework agreement between both companies means Shell will procure LNG with Guanghui Energy and distribute it in China's domestic market. The collaboration will likely boost Shell's plans to expand its downstream LNG development business in China.

Market sources said the non-binding agreement does not necessarily mean 10

Israeli government votes in favour of gas sector reform

Israel's cabinet on 16 August voted in favour of a gas sector reform plan to allow development of the giant Leviathan field, with a target date for start-up of late 2019.

While this marks an important step forward, it is not the final hurdle for the framework, although prime minister Benjamin Netanyahu has repeatedly stated his determination to proceed quickly with the development of the gas sector.

ICIS understands that the new framework could go to the Israeli parliament for a further vote, or alternatively this could be bypassed by the economy minister or the country's antitrust authority.

In comments before the cabinet meeting, Netanyahu said: "Every objective test proves this outline is a significant improvement over the existing situation... The outline will pass one way or another, and it is about time it does."

Progress in exploiting the country's gas reserves has been slowed down by political disagreements. The former head of the antitrust authority, David Gilo, halted development of the 22 trillion cubic feet (tcf) field Leviathan in late 2014, but later resigned after clashing with the government on the issue.

Israeli sources said there could be an opportunity for parliament to vote on the framework on 2 September as part of a session on the country's budget, although spokespeople from the economy ministry and the parliament said this was not yet confirmed.

Competition concerns

The major concern among the country's authorities was that a small group 12

20 YEARS OF THE HEREN PRICE INDEX 1995-2015

SPOT DES PRICES \$/MMBtu

Location	Oct '15	Week-on-week diff	Nov '15	Week off
Spain	6.470	-0.040	6.960	n/a
Britain	6.037	-0.170	6.442	n/a
Argentina	8.090	-0.130	8.210	n/a
EAX	8.050	-0.094	8.131	n/a
Japan	8.050	-0.125	8.138	n/a
India	7.800	-0.100	7.850	n/a

FORWARD GAS MARKETS: UK NBP (ICIS) \$/MMBtu

Period	19 Aug	12 Aug	Change	19 Aug	Change
	15	15	on week	14	on year
Sep '15	6.094	n/a	n/a	7.109	-1.015
Oct '15	6.289	n/a	n/a	8.435	-2.146
Nov '15	6.710	n/a	n/a	9.939	-3.229
Dec '15	6.944	n/a	n/a	10.458	-3.515
Jan '16	7.025	n/a	n/a	10.662	-3.637
Feb '16	7.064	n/a	n/a	10.655	-3.591

FORWARD GAS MARKETS: US HENRY HUB (NYMEX) \$/MMBtu

Period	19 Aug	12 Aug	Change	19 Aug	Change
	15	15	on week	14	on year
Sep '15	2.716	n/a	n/a	3.877	-1.161
Oct '15	2.747	n/a	n/a	3.908	-1.161
Nov '15	2.836	n/a	n/a	3.977	-1.141
Dec '15	2.989	n/a	n/a	4.071	-1.082
Jan '16	3.088	n/a	n/a	4.145	-1.057
Feb '16	3.088	n/a	n/a	4.135	-1.047

CONTRACT GAS MARKETS: (ICIS) \$/MMBtu

Period	NW Europe Oil-Indexed	Japan Import
September '15	10.288	9.499
October '15	10.299	9.870
November '15	10.309	9.683
December '15	10.273	9.040
January '16	10.346	8.319
February '16	10.332	7.968

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- ▶ Leading price provider for European gas and power markets; benchmarks for most liquid European markets such as NBP and TTF.
- ▶ Largest and most specialized LNG market reporting team.
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- ▶ Launched Mexico Energy Report in May 2015: first English-language publication focused exclusively on Mexico's gas and power markets.

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KEY OIL, GAS AND LNG PRICES

CRE MEXICO GAS PRICE \$/MMBtu

Period	Price
August '15	2.734

VPM FORWARD CURVE \$/MMBtu

Period	Price
September '15	2.610
October '15	2.609
November '15	2.693

LNG DES \$/MMBtu

Period	Altamira	Manzanillo
October '15	2.875	2.422
November '15	2.953	2.493

INTERNATIONAL MARKETS \$/MMBtu

Period	Henry Hub	EAX
October '15	2.695	7.750
November '15	2.773	7.681

CRUDE OIL \$/bbl

Period	WTI	Brent
October '15	39.31	43.21

Time frame for VPM regulations uncertain

Amendments to the formula used to regulate natural gas prices which Mexican state companies can charge consumers are taking longer than previously expected to be worked out and may now not be published until the end of the year, ICIS understands.

Mexico's energy regulator, Comisión Reguladora de Energía (CRE) has previously said that changes to the Venta de Primer Mano (VPM) formula would be released for public discussion during the summer period, with the amendments then finalized in October.

However, as of late August the draft formula has yet to be published. According to market sources, there remains uncertainty as to exactly when the final regulations will be passed.

By law, the CRE is committed to having the legislation published before the end of this year. Some sources in Mexico, however, suggest that even this deadline might not be met.

"We have been under the impression that we won't see the new formula until January at best, maybe even later," one market source said. Changes to the VPM price have been highlighted as essential in encouraging private sector companies to enter the natural gas market as wholesalers.

The present VPM formula is heavily influenced by NYMEX natural gas futures and physical hub prices across the southern US. The positioning of the US as an opportunity market for Pemex has often led to the VPM price being cheaper than the price of natural gas traded across the southern US. This has left Pemex making a loss on pipeline gas imports, which accounted for roughly 25% of the country's daily consumption through 2014.

As part of the energy reforms passed by Mexico's government, both Pemex 10

extant state power utility CFE, CRE intends to regulate the costs these companies can charge end-users until the market becomes sufficiently competitive.

While price regulations will not apply to private companies, the VPM price will continue to set the maximum price which the state companies can charge consumers. In order for private companies to take market share away from Pemex and CFE, they will need to secure deals with customers priced competitively against VPM. Many fear this is impossible with the present formula, given that the VPM prices are often below those found on physical hubs across the southern US, the most logical supply source for wholesalers.

"Companies are not going to enter as wholesalers unless they can make a profit from the activity. Uncertainty around when the VPM formula will be changed delays the entrance of new players," the market source added.

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First power project tender expected in October

The first tender for new power projects to be added to Mexico's Sistema Eléctrico Nacional (SEN) power grid will be launched in October this year, according to Energy Minister Pedro Joaquín Coldwell.

The current time frame envisages contracts being awarded by March 2016, Coldwell said during a presentation to the Energía a Debate III Foro Estrategias Energías conference in Mexico City on 18 August.

The tenders will prioritise the addition of clean energy projects, Coldwell added, anchoring both public and private investments in new generating capacity. Contracts offered through the round will commence in 2018 with minimum contract lengths of 15 years, undersecretary of energy César Hernández Ochoa said in a separate presentation.

The tender will be the first for new capacity to be added to the grid organised since the passage of the country's energy reforms, and will provide the private sector with opportunities to develop power infrastructure on the SEN grid independently from state power utility CFE for the first time in 50 years.

CFE previously oversaw the addition of new power capacity, with private companies only able to develop projects under either long-term supply contracts with the utility or bilateral contracts underpinned by the demand of private industrial users.

CFE will be able to participate in the tender, proposing new projects in association with or competing against the private sector.

Mexican authorities hope that the PRODESEN report, which represents a 15-year government master plan for expansion of the country's power grid, will act as a guideline for companies seeking to develop new capacity on the SEN.

The first PRODESEN report, released on 1 July, highlighted over 40GW in power projects which private companies can develop on their own or in association with CFE.

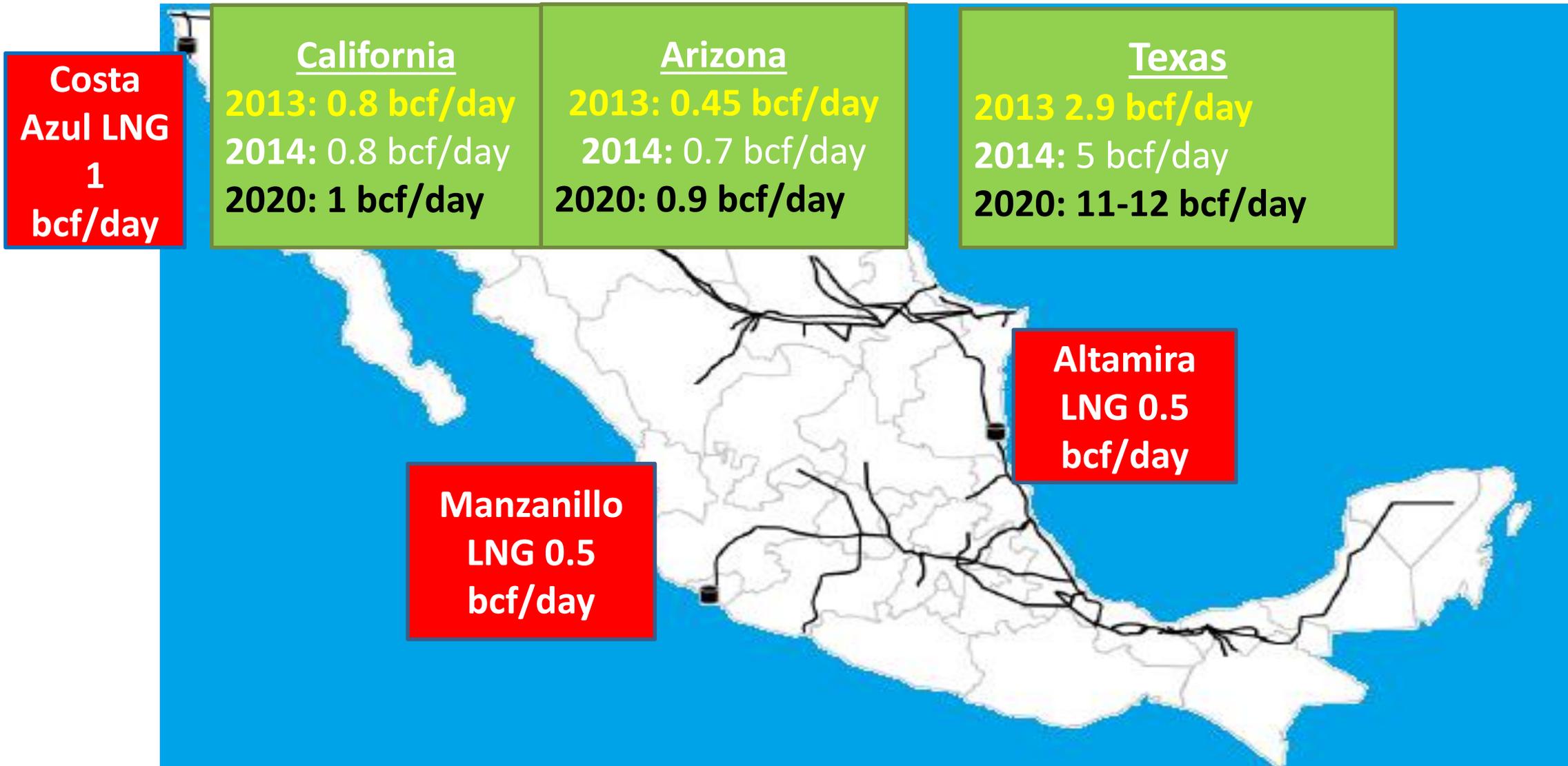
The last quarter of the year will also see the launch of auctions for the newly-created wholesale spot market, which is set to go live on 1 January 2016.

Short-term spot tenders will be launched in December 2015 for real-time and day-ahead demand needs. Through the auction process, CFE will compete against the private sector to supply to both regulated consumers, such as the residential and commercial sectors, and so-called unregulated customers. These will include registered users with capacity in excess of 3MW, which are now able to secure 10

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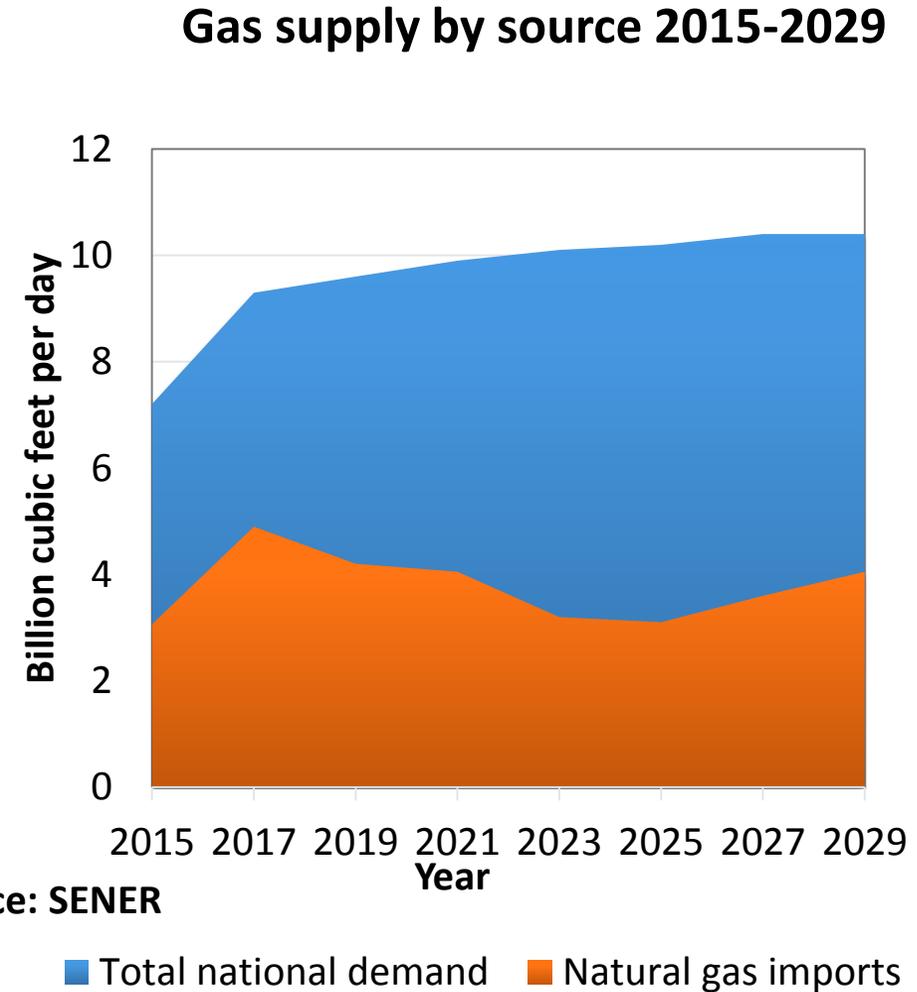
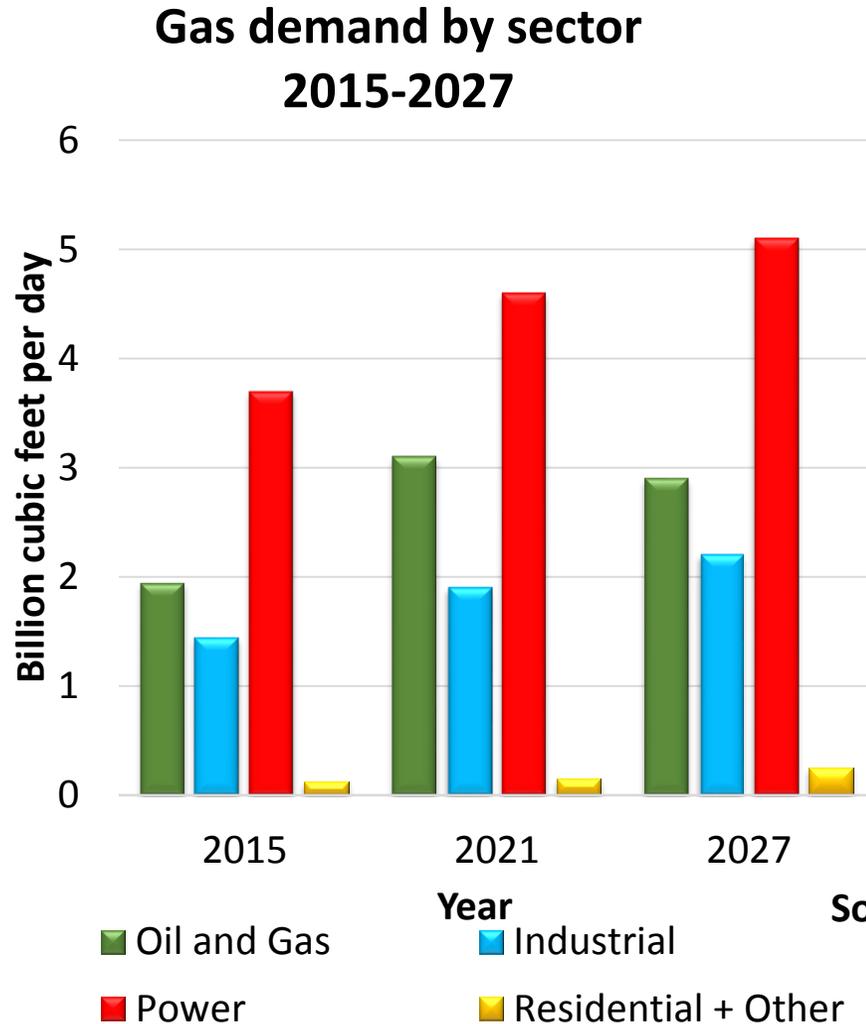
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New supplies to Mexico: pipeline imports



Source: EIA, ICIS

Demand and imports set to continue growing



Thank you!

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