

OPTIMISM SOUTH OF THE BORDER

WHILE THE COMMODITY PRICE ENVIRONMENT HAS BEEN EXTREMELY CHALLENGING IN 2015, WITH PRICES FOR BRENT CRUDE OIL DROPPING BELOW US\$40/BARREL FOR THE FIRST TIME SINCE 2009, A LOOK SOUTH OF THE BORDER PROVIDES SOME OPTIMISM FOR PROJECT DEVELOPMENT AND FINANCE IN THE YEARS AHEAD. BY **STEVEN P OTILLAR**, PARTNER, AND **EDUARDO CANALES**, ASSOCIATE, **AKIN GUMP STRAUSS HAUER & FELD**.

Groundbreaking changes have taken place in Mexico in 2015, with the entire fabric of the energy industry being torn apart. The Pemex monopoly is gone, the CFE is to become a “productive enterprise”, and market participants have to contend with an alphabet soup of new agencies and ministries as they sort out which opportunities to pursue.

The upstream oil and gas sector grabbed much of the spotlight in 2015, due to the completion of the first three phases of Round One, with several oil and gas blocks being awarded to international oil and gas companies and consortia. While results from shallow water, mature field, and onshore auctions have been mixed, undeniably the ship of energy reform has sailed, and the international community is beginning to respond.

As developers, explorers and producers get comfortable with the country risk, there are substantial opportunities on the horizon. When complete, Round One will have licensed 28,500km² of land for exploration and production activities.

The aforementioned oil and gas auctions are supposed to bring in more than US\$8.5bn of foreign direct investment per year for the next several years, and the government plans to auction over 235,000km² for exploration and development in four rounds over the next four years.

The government has also announced plans to expand its current gas pipeline network of 9,000km by an additional 5,150km by 2019. Further, the power sector is developing an independent system operator, and is deregulating and unbundling power projects to foster greater competition.

In 2016, while the upstream oil and gas auctions will continue with the eagerly awaited deep-water phase of Round One, the midstream, downstream and power sectors will continue their equally transformative changes – perhaps without the same level of attention.

This optimism in the Mexican market regarding the implementation of energy reforms is contrasted by the difficult changes that lie ahead for the previous state monopoly, Pemex. Already heavily burdened by pension, tax, and other financial obligations, Pemex has announced that it intends to increase its public debt by a

further US\$21bn in 2016, on top of the existing US\$87bn.

Pemex was able to solve a substantial portion of its pension obligations in 2015, and it is expected that it will aggressively look at partnerships and joint ventures as a means to increase production and profitability in 2016.

In this article, we will analyse what happened in the Mexican upstream and midstream oil and gas industry in 2015, attempt to provide some clarity regarding the new players and agencies, and provide a preview what is to be expected in 2016.

Upstream

In December 2013, Mexico’s Congress approved historic changes to the Mexican Constitution that redefined the strategic industrial areas and activities reserved exclusively for the state, allowing for private participation on the hydrocarbon sector. Less than year later, in August 2014, Congress enacted a series of new laws and made substantial revisions to existing legislation to implement the energy reforms made possible by the 2013 Constitutional amendments.

These “Leyes Secundarias” or Secondary Laws serve as the foundation for all energy-related activities in Mexico. In 2015, various governmental agencies produced the underlying regulations to implement reforms, providing much of the detail and rules required by private industry to effectively analyse the risks associated with investing and operating in the Mexican energy market.

While many of these regulations are in place and are becoming effective in 2016, questions remain on how so many changes can be implemented in such a compressed timeframe, especially when trying to create competitive,

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TABLE 1 – PEMEX AWARDS

Type	Volume Awarded (MMboe)	Awarded/Requested (%)	Awarded Surface (km ²)
Reserves			
2P	20,589	100	17,010
Prospective Resources			
Conventional	18,222	71	64,489
Unconventional	5,225	59	8,408

market-driven systems to replace monopolistic, state owned and operated entities.

The following sections provide highlights of Mexico's major accomplishments over the past year in the upstream sector, and ideas on where things may be headed in 2016.

Pemex

As the Constitutional amendments effectively ended the monopoly of Petroleos Mexicanos (Pemex), one of the first actions in 2015 was to provide Pemex with an asset base that it would own to move forward and endeavour to become a "productive enterprise". The process of determining and assigning assets to Pemex is known as Round Zero.

In Round Zero, Pemex requested a variety of 1P, 2P and 3P areas to retain and develop. Ultimately, Pemex was awarded most of what it requested as shown in the table 1, and it now has rights called "asignaciones" to 489 contract areas to continue exploration and production (108 areas for exploration and 381 areas for production). Based on current oil and gas production, Pemex was provided with assets that would enable it to produce for the next 15.5 years without reserve replacement.

In addition to the asignaciones, the new legislation provides a process for Pemex to enter into joint ventures or farm-out transactions with respect to certain areas awarded in Round Zero. That process is ongoing and has been substantially delayed due to the progress of the public bidding rounds described below, as well as significant internal restructuring within Pemex itself.

Further, Pemex has identified 17 fields where it desires to enter into joint ventures with international oil and gas companies to develop. Pemex expects the expected investment for the production of P2 reserves in these identified areas to exceed US\$59.2bn.

On September 23 2015, the National Hydrocarbon Commission (CNH) approved Pemex's request to establish joint ventures for the first eight areas. Some of the contract areas requested by Pemex include: Ek Balam, Sinan, Bolontikú, Ogarrio, Wheeler, Cardenas Mora, Ayatsil, Tekel and Utsil. The process to approve such joint ventures requires the approval of SENER, a public auction for the counterparty conducted by CNH, with fiscal terms provided by the Ministry of Finance (Hacienda).

Last, in 2015, Pemex began the process of converting 22 existing integrated service contracts with foreign partners into exploration and

extraction contracts under the new legislation.

The announced expected private investment in these contract areas is approximately US\$33.2bn. The process for migrating these contracts is prescribed under law, and the counterparties may elect to remain under the existing regime. It was announced that the conversion of these contracts would commence in October 2015, but as yet they are still pending.

Round One, First Tender

The First Tender, initially published on December 11 2014, contained 14 exploration blocks located in shallow waters in the Gulf of Mexico. The Mexican government, through the Ministry of Energy (SENER) elected to use a production-sharing contract model as the means to contract with private investors and grant exclusive rights to explore and produce hydrocarbons within the contract areas.

The initial contract model published by the CNH produced substantial negative feedback from the industry, including complaints that the legal and fiscal terms were not competitive with international alternatives. Notwithstanding initial industry feedback and plummeting oil prices, almost 50 international oil companies (IOCs) participated in the process.

Several revisions were made to the legal and fiscal terms that substantially improved the attractiveness of the blocks, and nine bidders attended the bidding ceremony on July 15 2015. Two of the 14 exploration contract areas were awarded to a consortium formed by Talos Energy, Premium Oil and Sierra Oil & Gas.

Despite the results, Round One should not be considered a failure. This historic event marked the official reopening of the Mexican energy industry to global participants after more than 70 years of a state controlled monopoly.

It is of utmost importance to understand the underlying process that was required to reach this point. Historic constitutional, regulatory and administrative changes necessary to accomplish the reopening of the Mexican energy sector were implemented at an unprecedented pace. Further, the willingness of SENER, CNH and the Hacienda to change legal and fiscal terms to improve the overall attractiveness of the blocks is a very important sign for the future of the oil and gas industry in Mexico.

Round One, Second Tender

The Second Tender, published on February 27 2015, contained five mature contract areas located in shallow waters off the Gulf of Mexico coastlines of Veracruz, Tabasco and Campeche. Even though the number of qualified bidders was lower in comparison with the First Tender, the Mexican government made several legal, contractual, procedural and fiscal changes to increase competitiveness with other countries.

Despite facing important challenges such as low commodity prices and media pressure after the perceived failure of the First Tender, the

Mexican government remained constant in its transparency and open-door policy, listening to industry comments and adjusting the process, bidding guidelines and the model contract to reflect the investment environment in the energy sector.

The Second Tender included more flexible rules regarding the formation of consortia for bidding, lower financial guarantees, and more flexibility in the qualification and bidding process. In addition, unlike the First Tender, the minimum financial bids were disclosed in advance of the actual bid date. If this had happened in the First Tender, it is possible that two to four other blocks could have successfully been awarded.

These modifications had a concrete impact on the bids presented by several IOCs at the September 30 2015 bidding ceremony, where three out of the five contract areas were awarded. Successful bidders included ENID (Area 1), a consortium formed by Pan American Energy and ESP; Hidrocarburos (Area 2); and a consortium formed by Fieldwood Energy and Petrobal (Area 4).

It is important to highlight that all these companies presented bids that far exceeded the minimum bid and work programme requirements. It is expected that these three contracts alone could lead to increased production of over 90,000 barrels per day. Overall, government officials and industry experts considered the Second Tender a success.

Round One, Third Tender

The Third Tender, published on May 12 2015, contained 25 mature onshore contract areas distributed across four states, Chiapas, Nuevo Leon, Tabasco and Tamaulipas. It is estimated that these contract areas have 2.5bn barrels of oil equivalent (boe) distributed in oil and gas fields that range in size from 16km² to 135km².

The Mexican government divided the blocks into Type-1 and Type-2, depending on their size and decided to use a licence model contract to facilitate the entry of domestic participants and smaller IOCs. The CNH published the final bidding guidelines and model contract on November 20 2015 and the opening and presentation of bid proposals ceremony will be held on December 15 2015.

This bidding process has been unique given the particular characteristics of the contract areas and the companies the government targeted for participation. Almost 100 different companies expressed formal interest in taking part in the process and 71 companies (36 individual companies and 16 consortia) prequalified to present bids by December 1 2015.

As it did during the Second Tender, the government published its minimum requirements ahead of the bid deadline. Despite

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changes in the model contract and the bidding process, the percentage of pre-tax profits, along with a minimum work commitment, remain the key variables that will drive interest and determine licence winners.

2016 and beyond

The crown jewels of Mexico's upstream energy reform are the deep-water and ultra deep-water exploration contracts. Even though the publication of the Fourth Tender has been postponed, it is expected that contracts areas, bidding guidelines and the model contract will be announced before the end of 2015.

The Fourth Tender would include deep and ultra deep-water blocks, shallow-water extra-heavy prospects and the first farm-outs from Pemex described above. Based on the Five-Year Plan published by SENER, the Fourth Tender may contain anywhere between 12 to 16 contract areas and up to 654 MMboe in approximately 9,584 km².

After some of the successful discoveries in the US side of the Gulf of Mexico, major IOCs have been waiting for the opportunity to fully explore known trends. Pemex has already begin to pursue opportunities within its areas awarded in Round Zero.

Recently, Pemex announced that it will drill a deep-water well less than 4.8km from the US maritime border. This latest push into the Perdido Gap could test the recently ratified Transboundary Agreement between the US and Mexico, establishing an international framework for managing transboundary resources.

The inclusion of deep-water, heavy oil and extra-heavy oil contract areas in the Third Tender, responds to Mexico's strategic need to attract foreign direct investment and promote technology transfers while stimulating overall economic activity.

Midstream

Although the upstream sector has received substantial media attention in 2015, principally around the three bidding rounds, the reforms impact the entire energy industry from well-head to burner tip. In this portion of the article, we will examine the impact and developments of energy reform on the midstream sector.

TABLE 2 – ROUND ONE, FIRST TENDER AWARDS

Contract Area	Winner	Minimum Government Profit Share	Government Profit Share Offered	Minimum Work Program Increase
2	Sierra Oil & Gas, Talos Energy and Premier Oil	40%	55.99%	10%
7	Sierra Oil & Gas, Talos Energy and Premier Oil	40%	68.99%	10%

TABLE 3 – ROUND ONE, SECOND TENDER AWARDS

Contract Area	Winner	Minimum Government Profit Share	Government Profit Share Offered	Minimum Work Program Increase
1	ENI International	34.80%	83.75%	33%
2	Pan American Energy and E&P Hidrocarburos	35.90%	70%	100%
4	Fieldwood and Petrobal	33.70%	74%	0%

The reforms empowered the Comisión Reguladora de Energía (CRE) and established a new regulator, Centro Nacional de Control del Gas Natural (CENEGAS), to centralise the regulation of midstream activities in a new agency apart from Pemex that had historically controlled much of the midstream sector.

On November 4 2015, the CRE published its “Disposiciones Administrativas de Carácter General aplicables a la Prestación de los Servicios de Transporte por Ducto y Almacenamiento de Hidrocarburos” (Midstream Regulations).

Overall, the Midstream Regulations provide the CRE with vast authority to regulate the Mexican midstream sector to complete the transition from a state-owned and monopolised transportation and storage system to an open market model similar to the one in the US.

The main tenets of the Midstream Regulations are intended: (i) to provide open, non-discriminatory access to existing transportation and storage infrastructure and (ii) to establish a legal framework that will promote the development of a competitive midstream market and increase overall investment in the sector. These rules will apply equally to all new or existing pipeline and storage facility operators, regardless whether they are state-owned or private companies, foreign or Mexican.

The Midstream Regulations make a clear distinction between transportation and storage rules. Transportation activities are limited to the (i) reception of petroleum and petrochemicals (P&P) at a designated entry point; (ii) their shipment through pipelines; (iii) measurement and analysis of the quantity and quality of P&P; and (iv) delivery at a designated exit point.

Meanwhile, storage activities include (i) reception of P&P at a designated point for storage or depository purposes; (ii) measurement and analysis of the quantity and quality of P&P; (iii) any processing and mixing necessary to meet necessary pressure or quality standards; and (iv) delivery at a designated point.

Operators of transportation and storage facilities must obtain a permit from the CRE and must include in their application the terms and conditions for the particular system or facilities they will operate – similar to rules tariffs in the US – and must provide firm commitment services and open access to all shippers.

Thereafter, the CRE will determine, based on the existing market conditions for a particular transportation system or storage facility, whether to establish a maximum rate/tariff. The CRE will evaluate the midstream companies’ rates/tariffs based on: operating expenses, sunk costs and recoverable costs; likely shippers’ characteristics;

current market conditions; operating efficiency; reasonable risk allocations between shippers and midstream operators; and adequate profitability, among others.

In addition to the Midstream Regulations, the Mexican government published an ambitious Five-Year Plan for the development of natural gas pipeline infrastructure. As mentioned above, this plan contemplates building over 5,150km of natural gas pipelines in the next four years, increasing the current capacity by more than 50%.

The following map shows the main pipeline projects for the next five years. The most interesting projects include a marine pipeline connecting south Texas to Tuxpan, Veracruz in the Gulf of Mexico, and a trans-isthmian pipeline connecting Jaltipan, Veracruz (Gulf of Mexico) with Salina Cruz, Oaxaca (Pacific).

The Texas–Tuxpan pipeline is an ambitious venture that will include 800km of 42, 20 and 16 inch pipelines that are intended to allow Mexico to benefit from the natural gas boom in the US. The proposed pipelines could become an integral part of the overall global natural gas market. When coupled with announced liquefied natural gas projects, it would enable Mexico to allow shippers from North America to access the Mexican market and to service customers in Asia without having to go through the Panama Canal.

Conclusion

As oil prices continue to decline, long term trends still show positive growth in demand in the coming years. Developments in Mexico occurring now will not only help Mexico satisfy its substantial demands, but should allow it to be a net energy exporter. In late 2016, the Fourth Tender is expected to take place that will focus on unconventional resources. This vast potential has yet to be tapped, and could provide a similar increase in production to what has occurred in the US. There are certainly many challenges ahead.

The experience in Venezuela and Brazil demonstrates that energy reforms and the opening of markets can also be retrenched, or face internal struggles that can derail progress. However, the opportunities in Mexico are significant, and regulators have proven themselves to be responsive under existing regulatory constraints.

As systems continue to develop in 2016 and beyond, we can expect to see a surge in project development and finance in the midstream and power sectors, continued growth in wind and solar projects, and the expansion of Mexico as an energy hub in Latin America. ■