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Intelligence Series Electric Power

August 2018





Bright Ideas? AMLO's Electric Power Plans

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Introduction

Mexico's president-elect Andrés Manuel López Obrador has given out mixed signals regarding plans for the future of the country's electricity sector, limiting his proposals to a championing of hydroelectricity and community-focused renewable energy projects, while his pick for the head of state utility CFE has provoked surprise.

While expressing hostility during his electoral campaign to the 2013 energy reform, which ushered in auctions for electricity generation projects as well as allowing for foreign investment into the upstream oil and gas sector for the first time since 1938, López Obrador (known by his acronym AMLO) has since moderated his stance, although his plans for the electric power sector remain vague.

Shortly after his landslide election in July, López Obrador (pictured, below) announced plans to move the headquarters of the energy ministry from Mexico City to the oil-producing state of Tabasco, and to move Pemex's central offices to Ciudad del Carmen in neighboring Campeche state, as part of his decentralization plans.





And on August 18, López Obrador made one of his first direct pronouncements regarding renewable energy, highlighting its importance for the future of the country and the planet as a whole, while pledging to invest in science, technology and innovation to promote the development of such power sources.

He described investment in technology and innovation as "the education of the future."

But three months before he takes office, very few concrete and specific plans have been announced regarding how he envisages the development of the electric power sector.

"Very little has been proposed regarding the electric power sector, apart from reinforcing the CFE," Javier López de Obeso, a Mexico-focused energy lawyer at ScottHulse in San Antonio, Texas, told BNamericas.

"We have not heard any plans regarding the relationship between the CFE and natural gas, or about more potentially controversial themes, such as nuclear power," he said.

"López Obrador has not been very clear regarding renewables. During the campaign he bemoaned the fact that wind turbines ruin landscapes, but those comments probably do not reflect the policy he is going to adopt.

"But while he was not the favourite candidate among investors, López Obrador has more recently shown himself to be more perceptive of the importance of the private sector's participation in many sectors, including electric power," he said. "I don't want to talk about uncertainty, but there is a transition phase coming and in which a definition of what is going to happen in the electric power sector is lacking."

Some pollsters had predicted prior to the election that, while he would win the presidency, López Obrador's Morena party would not achieve a majority in congress.



"He won't be able, for example, to reverse the energy reform, because it's a constitutional reform, and in order for him to do that, he'd need to have a two-thirds majority, which he's not going to have," Anna Szterenfeld, Latin America and Caribbean regional manager for the Economist Intelligence Unit, told BNamericas in an interview earlier this year.

"There are fears that he would try and reverse [the reform] or at least slow it down. But on the macroeconomic front, I don't think he's going to try to risk the reputation for stability that Mexico has achieved over recent years," Szterenfeld said.

Morena did win a majority in congress however, as well as the governorships of five of the country's 32 states, including the mayoralty of Mexico City, in addition to mayoralties in nine state capitals. That means that Morena will govern around 56 million Mexicans, or 47% of the total population, according to the national population council (Conapo).

And in what will be a reassuring sign to many regarding the energy sector, US energy secretary Rick Perry said in mid-August after meeting with his incoming Mexican counterpart Rocío Nahle that López Obrador's aim to achieve greater energy self-sufficiency is good news.

"It's a good goal for Mexico. I tip my hat to the president-elect for having that as a goal," Perry was quoted by local media as saying.

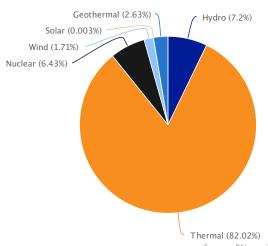
Perry also said that the US is unconcerned about the effect AMLO's proposal would have on US refiners, since other markets, some of which are also in Latin America, would make up for diminished Mexican demand.

Mexico is dependent on natural gas imports from the US for electricity generation and industrial production, as it ramps up its pipeline capacity and converts gasoil-fired power stations to natural gas.

Figure: Mexico Energy Matrix

Mexican Energy Matrix

December 2017 - 18,330.95 Generation (GWh)



Source: BNamericas.com with data from INEGI



A Dream Team?

Within a month of victory, López Obrador <u>named his energy team</u>, confirming nominations he had made during his campaign, but also revealing a surprise.

Rocío Nahle (pictured, below) was named energy minister, an appointment he had mooted during his campaign, during which he touted her experience as a petrochemical engineer. Nahle posted plans for the sector on her Twitter feed as the election loomed, including a video, outlining a strategy to build one or two oil refineries to ramp up gasoline and diesel production and staunch Mexico's rising fuel imports from the US.



"The only concern I've heard raised is about his pick for energy minister," Szterenfeld said, referring to Rocío Nahle, who had served as a lawmaker for López Obrador's Morena party, and which ran in the election as part of a coalition under the slogan "together we'll make history" that also features the Workers' Party (PT) and Social Encounter party (PES).

"Nahle has been critical in the past of Peña Nieto's energy reforms," Szterenfeld pointed out.

Another appointment proved to be more controversial, however, provoking the first murmurs of disapproval regarding López Obrador's future government since his land-slide election victory on July 1, with his naming of Manuel Bartlett as chief executive of the CFE, the state utility that the incoming president has denounced as "corrupt," and which he has pledged to clean up, while repairing its finances.

Since 2012, Bartlett (pictured. below) had been a senator for the PT.





However, Bartlett's trajectory prior to that had resulted in him having been perceived as something of a dark figure in Mexican politics.

Previously a member of the PRI party, which ruled Mexico uninterruptedly between 1929 and 2000, he served as interior minister from 1982-88 before becoming mired in controversy in the 1988 election, when PRI candidate Carlos Salinas de Gortari's victory was viewed by many to be fraudulent following a breakdown of the automated ballot-count system on election night.

Bartlett was head of the then federal electoral commission and was blamed for the collapse of the vote count. He later served as education minister under Salinas until 1992, when he was elected governor of the state of Puebla.

After an unsuccessful attempt to win the PRI's candidacy for the 2000 elections, he was elected senator, holding his seat until 2012, when he left the PRI after having called on the electorate to undertake tactical voting in favor of López Obrador in the 2012 elections. Bartlett was re-elected as a senator for the PT.

Criticism of Bartlett's nomination came from, among others, Gustavo De Hoyos Walther, president of Mexico's employers' association (Coparmex), who called on the president-elect to reconsider his choice of Bartlett, as well as that of proposed Permex CEO Octavio Romero.

"We are calling for him [AMLO] to listen to society," De Hoyos Walther said. "The immense majority of experts and public opinion have said a better profile could be found for these nominations," he added.



López Obrador defended his decision to nominate Bartlett in a press conference on July 30, saying: "[Bartlett] has been defending the electric power sector for at least the last 15 years; there have been moves to dismantle the CFE for several years. Twenty years ago Mexico was self-sufficient in electric power and now the CFE purchases half of the electricity we consume."

"It pains me to say it, but the most corrupt company in Mexico is Pemex, followed by the CFE, and in third place the communications and transport ministry (<u>SCT</u>)," López Obrador said.

"We are acting on a mandate we were given, and which is to end corruption in the country," he said.

According to López Obrador, former directors of the CFE are now members of the board of private power generation companies that sell electricity to the CFE.

Another critic of the nomination of Bartlett was López Obrador's former campaign chief Tatiana Clouthier, who said there were "better options."

López Obrador said however that, during what he called "the neoliberal period," CFE plants were closed down deliberately to purchase electricity from foreign companies at highly inflated prices.

"All of that is going to change, and to do that we need people like Manuel Bartlett. There are officials from the PRI and PAN parties that ended up in private companies in the energy sector after awarding them contracts.

"And so this concubinage is going to end. I have also made the commitment to ensure that the price of electricity and fuels will not rise in real terms," López Obrador added.

Mexican historian Lorenzo Meyer also expressed his surprise at Bartlett's nomination as CFE chief executive.

"I was also astonished about Manuel Bartlett," he told El Universal newspaper on August 4. "On the one hand, Andrés Manuel has been in politics a long time, and on the toughest side, which is the opposition, like a salmon swimming against the current, and he has learned a lot from his failures," Meyer said.

"I don't know what reason he had for nominating Bartlett, and it surprises me, but Bartlett must be bringing something to the job, and AMLO didn't just put him in the post for the sake of it. But what I do acknowledge about Bartlett is his nationalism, he was always against the privatization of the energy sector, he always voiced that from the ranks of the PRI and later the PT, and I think it is his nationalist agenda regarding the energy sector that he is bringing on board."



"It's possibly a payment for his participation in the campaign, but we can't deny that he is an able politician, and Bartlett has said that the reform will continue and that private investment is welcome in the electric power sector," Javier López de Obeso, a Mexico-focused energy lawyer at law firm ScottHulse in San Antonio, Texas, told BNamericas.

López Obrador said it was "natural" for his nominations to be criticized because, for many years in Mexico, politics was carried out without regard for the people. "Now the government will represent everybody, the rich and the poor, there will be a government that will make sure the country's wealth does not just benefit the minority," he said.

Carlos Andrés Morales Mar (pictured, below), who López Obrador has named as deputy director of the CFE, was quoted by local media as saying in August that "healing" the state utility will be the government's first priority, as the company faces several problems that need to be fixed, such as non-technical losses, caused by the theft of electricity, subsidies to low-consumption clients, and the production costs of power generation plants.

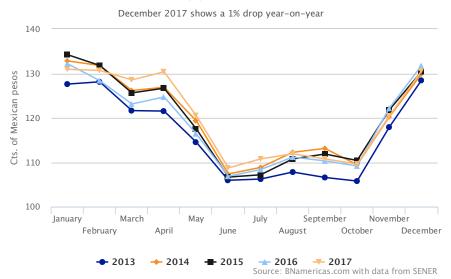


Only once those issues are solved, which Morales Mar estimated would take two to three years, will it be possible to reduce electricity rates, he said.



Figure: Monthly Power Fees





Change or Continuity?

In addition to new initiatives and policies, Mexico's electric power sector under López Obrador will also require continuity, which will be vital to preventing investor uncertainty, particularly regarding projects already awarded at auction, and the pursuance of regulatory changes that will further promote the deployment of renewable projects, both large- and small-scale.

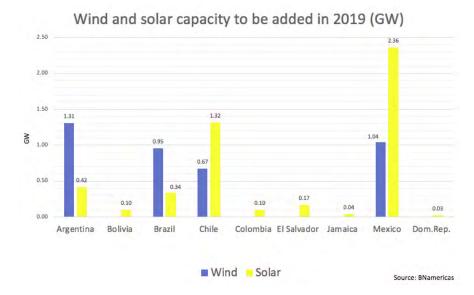
To that end, energy regulatory body <u>CRE</u> is reportedly <u>working on regulations for battery storage</u>, without which investors will be reluctant to disburse funds, while French development agency AFD <u>tendered</u> a study for a regulatory proposal for Mexico's national electricity system in August.

In addition to continuity, López Obrador's stated intention to build "community-based renewable projects" points to a focus on rural communities and off-grid households to bring electrification to the villages that have yet to be connected to the grid, and rural communities in states such as Chiapas, Campeche and Yucatán would be those most likely to benefit from such a community-based plan.

The state-by-state installation of solar and wind farms is expected to continue as projects awarded in the four electric power auctions held so far move into development. Another power auction is planned for November, before López Obrador takes office.

Mexico's solar power association (Asolmex) estimates that the country will add 5GW of solar capacity by 2020, bringing total capacity to above 10GW, and that around 160,000 houses will have fitted solar panels by that date. The national wind power association (Amdee) meanwhile <u>forecasts installed wind capacity to total 12.8GW by 2020</u>, up from the current 4GW.





Close to 7GW of total renewable capacity (5,400MW solar and 2,700MW wind) will be added by 2020 as a result of power auctions, energy minister Pedro Joaquín Coldwell said in March. According to BNamericas data (see graph above), 3.4GW of wind and solar will be added next year, the highest total addition of renewables in the region.

Wind farms currently operate in the states of Baja California, Chiapas, Jalisco, Oaxaca, Puebla, San Luis Potosí, Tamaulipas, Zacatecas and Nuevo León, with projects either under development or forecast to be developed and operational by 2020 in Coahuila, Durango, Guanajuato, Hidalgo, Querétaro, Sonora, Veracruz and Yucatán.





And it is also significant that the Mexico City government will be led by Claudia Sheinbaum, who served as López Obrador's environment secretary when he served as the elected head of the city government from 2000-05.

Sheinbaum (pictured. below), who stood for the Mexico City mayoral post for López Obrador's Morena party, was a joint recipient of the Nobel Peace Prize in 2007 as a member of the Intergovernmental Panel on Climate Change (IPCC) and is a member of the Mexican Academy of Sciences.



In 2013 she co-authored the IPCC's fifth assessment report after contributing a chapter on climate-change mitigation for the panel's fourth assessment report.

Her science background and environmentalist stance may mean that she will push for the introduction of more incentives and initiatives to boost the use of renewable energy and electric vehicles in the city, as well as waste-to-energy projects.

As part of a 12-point environmental program announced via Twitter in June, prior to the election, Sheinbaum pledged to promote the use of renewable energy through the installation of solar panels, but without giving more details of how that plan might be implemented.

However, Sheinbaum has expressed her opposition to two proposed waste-to-energy projects for the city, <u>El Sarape</u> and an anaerobic digestion plant, and which has cast doubt on whether they will go ahead.

El Serape has faced a few setbacks since it was announced at the end of 2016. The 33-year contract to design, build and operate the 11bn-peso (US\$591mn) plant was awarded in April last year to a consortium comprising French resources management firm Veolia and its Mexican subsidiary.



Public and political opinion became divided as critics, including Sheinbaum's left-leaning Morena party, claim that the plant saddles the city with a debt of 109bn pesos over 30 years. But proponents argue the figure represents the service fees the government will pay for the treatment of its solid waste, and that the funds would come from reallocating some of the city's current expenses that are used for treating waste.

The facility will be designed to treat 4,500t/d of solid waste, which will generate 965GWh/y for the city's metro system.

Two appeals <u>filed against the construction</u> of the facility <u>have been rejected by local judges</u>.

In addition, the project to build an anaerobic digestion plant to treat the city's organic waste and produce around 160GWh of electric power per year that would be supplied to water utility Sacmex has also met with obstacles.

The original tender for the 27-year contract to design, build, operate and maintain the facility <u>was called off</u> because aeronautical research firm The Mitre Corporation recommended building the plant at a different location and staying within the premises of the Bordo Poniente landfill.

A new tender for the project <u>was launched</u> in May, but the contract has yet to be awarded.

Figure: Energy Sales



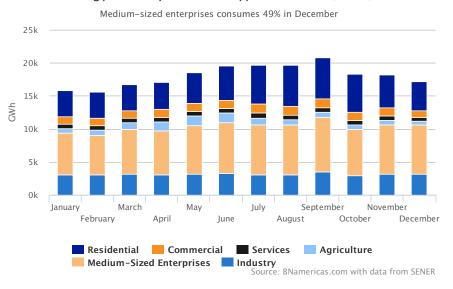
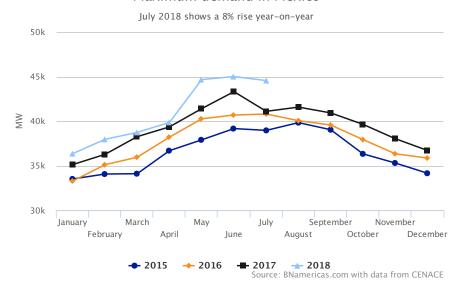




Figure: Maximum Demand

Maximum demand in Mexico



'A Change of Direction'

While the incoming government's plans for the electric power sector remain vague, the general perception, and which coincides with sentiment regarding López Obrador's inentions and capabilities as a whole, are positive.

"A change of direction is coming, compared with what we have seen in previous periods of transition between governments. But the route the country has taken with the energy reform was the correct one, and the incoming government is going to reap the first fruits of that," according to Javier López de Obeso at law firm ScottHulse.

"I am certain that the new government will seek to do things well, even though they may do them in their own way," he told BNamericas.

"They aim to improve the country, so let's hope we see good results," he said.

According to Jorge Melero, general manager at Natura Mexico, the local office of a Spain-based environmental and social advisory company for the renewable energy and infrastructure sectors, "in general, the messages from Morena during the campaign have been positive."

"However, people in the electric power sector are concerned, because the only person who seems to know what is going to happen is López Obrador," he told BNamericas.

"But perhaps the electric power sector is not the sector that concerns Morena most, and it is more focused on the oil and gas sector," he said.

"We are at a stage of pure speculation regarding the electricity sector," he added. "But we are not concerned and we think the renewables market will continue to grow, with more and more competitive companies operating in the sector."



However, López Obrador's socialist leanings, his pledge to help the poor and defend rural communities from encroachment by private companies, may also wade into possible conflicts between landowners, rural inhabitants and indigenous peoples, against large-scale energy project developers that are appearing on the horizon as a result of the auxtions.

Such conflicts have delayed projects, such as <u>wind farms in the state of Oaxaca</u>, while the energy reform obligates developers to carry out environmental and social impact studies in order to receive authorisation to build, as well as carrying out consultations with indigenous communities.

But there other positive signs that renewables growth will be accelerated in the coming years, such as the elimination of the current 15% import tariff on solar panels, which is slated to take place next year, a regulatory change that López Obrador's government will inherit and which it would do well to capitalise on and promote solar power use, albeit among the wealthier residential classes that may not have voted for him but would do well to embrace such technology to achieve savings on their electricity bills.

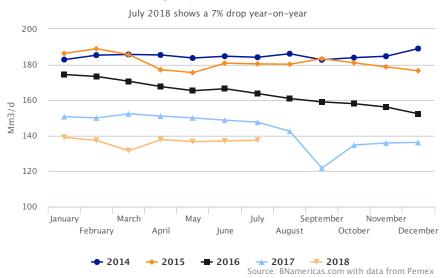


And such consumers may soon be able to sell their surplus energy to the CFE, another financial incentive to convert to solar and make a positive contribution to both the country and the planet.



Figure: Natural Gas Production

Natural gas production in Mexico



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