

Competition as a means to promote the generation of clean electrical energy



Comisión
Federal de
Competencia
Económica

Climate change is one of the main challenges faced by humankind.^a Therefore, Mexico, like many other countries, has committed in international agreements — such as the Paris Agreement — to reduce Greenhouse Gases emission and increase the percentage of electricity generation from clean sources.^b

In 2013, the Mexican constitutional and legal framework was modified, among other things, to incorporate instruments aimed at promoting the installation of the missing clean generation capacity to meet the committed goals. The main mechanism to achieve this consisted of introducing a dynamic of competition in the generation and commercialization links, thereby motivating the supply of electricity in the most efficient was in monetary and environmental term.

Thus, concerning electricity generation, the objectives of environmental and competition policy converge, since competition through the reduction of generation costs encourages the installation of more efficient generation projects, that coincidentally, end to be those based on clean sources. Specifically, the Mexican legal framework contemplated Clean Energy Certificates (CEL, per their initials in Spanish) as a mechanism to recognize the social value of clean electrical energy.^{c,d}

As mandate of the Energy Transition Law (LTE), in May, the Commission published the document *Transición hacia mercados competidos de energía: Los Certificados de Energías Limpias en la industria eléctrica mexicana* [Transition towards competed

a. United Nations Trust Fund for Human Security (2017), p.1. Available at: : <https://www.un.org/humansecurity/wp-content/uploads/2017/10/Human-Security-and-Climate-Change-Policy-Brief-1.pdf>

b. *México se suma al acuerdo aprobado en París sobre Cambio Climático* [Mexico adheres to the agreement approved in Paris on Climate Change], Mexican Ministry of Foreign Affairs]. Available at: <https://www.gob.mx/sre/fr/prensa/mexico-se-suma-al-acuerdo-aprobado-en-paris-sobre-cambio-climatico>

c. This competition, broadly, is motivated by the “economic dispatch” mechanism which implies that the least costly electricity is the one that is taken first in the electric system.

d. Article 121 of the Electricity Industry Law (LIE, per its initials in Spanish).

energy markets: *The Clean Energy Certificates in the Mexican electric industry*], that contains an assessment from the perspective of competition of the CEL market and its related markets.^{e,f,g}

Based on the analysis conducted, it is possible to conclude that Mexico will not reach the 35% percentage of clean generation committed for 2024, it is estimated that it will barely achieve the 29.8%.^{h,i} That is, Mexico will not meet its committed 2024 clean generation target by 5.2 percentage points. This is mainly due to the drastic change in the secondary regulation issued for the sector and its implementation since the beginning of President López Obrador's term. It should be noted that this analysis was conducted before the approval and publication of the *Decreto por el que se reforman y adicionan diversas disposiciones de la Ley de la Industria Eléctrica [Decree by which several provisions of the Electric Industry Law are reformed and added]* (Reform to the LIE) which would de facto eliminate competition in the electricity generation and supply links, therefore it is possible to anticipate that the non-compliance gap will be even more pronounced.

1.The lack of celerity in the implementation of the regulatory framework derived from the 2013 regulatory changes hindered competition in different markets of the electricity industry

First, the methodology for calculating the final Basic Supply tariffs offered by CFE Suministrador de Servicios Básicos (CFE SSB) and which are regulated has undergone constant modifications since its first publication in 2017 and, according to historical data, it is not clear whether the evolution of the price paid by final users reflects variations in input or generation costs. Thus, the tariff is not traceable and does not provide signals for new suppliers to enter the market. Therefore, the Energy Regulatory Commission (CRE, per its initials in Spanish) must issue a definitive methodology for calculating and adjusting the final Basic Supply tariffs based solely on the recovery of efficient supply costs.

Second, while self-supply permit holders tend to the already existing demand, suppliers must indirectly compete with them, in addition to CFE SSB. In this regard,

some characteristics of the regime of these permits, that respond to the context in which they were granted, might imply advantages for said permit holders, in comparison to those who operate under the LIE, for example, interconnection fees that were lower.^j In this sense, the CRE should review compliance with the conditions of these permit holders to determine the validity of their continuity or, rather, encourage their migration to the market.

Third, the implementation of the legal, accounting, operational and functional separation of the Federal Electricity Commission (CFE per its acronym in Spanish) had not been strictly implemented. Although the CRE published the *Términos de Estricta Separación Legal de CFE [Terms of Strict Legal Separation of CFE]* (TESL, per its initials in Spanish) in 2014, it has not published the terms for its accounting, operational and functional separation. This reduces the incentives for the different CFE companies to be more efficient and productive, while at the same time that allowing them to finance losses among themselves, making it difficult for other competitors to enter and remain. Moreover, as it is explained below, in 2019, the TESL were modified, relaxing the horizontal and vertical separation of CFE. In this regard,

the Superior Auditor of the Federation (ASF, per its initials in Spanish) noted that for the 2018 fiscal year there were transfers from CFE Transmission to CFE SSB in the amount of 1 thousand 978 million Mexican pesos to cover for losses in the electricity supply.^k To avoid this type of practices, and to promote the efficiency of the companies of CFE, the CRE must issue terms that establish its strict accounting, operational and functional separation, as well as to oversee the strict separation of said company.

Fourth, the CRE never issued a methodology for calculating Transmission Fees, so they will continue to be updated according to inflation. This could have allowed CFE to charge a higher fee for this service in the past; situation that could also happen going forward. Therefore, the CRE must issue and make transparent the methodology and provisions for the calculation and adjustment of the regulated transmission fees as mandated by the LIE, respecting the principles of competition and free market access.^l

In addition, the implementation of Long-Term Auctions (SLP, per their initials in Spanish) could have been improved. For example, 33 of the 90 contracts established

e. Last paragraph of the Transitory Article Twenty-second of the LTE, that establishes "Two years after the entry into force of the obligations on matters of Clean Energy Certificates, the Federal Economic Competition Commission, within its powers, will conduct an assessment of the competitiveness of CEL market, and will issue recommendations with the aim of improving its performance".

f. Available in Spanish at: <https://www.cofece.mx/transicion-hacia-mercados-competidos-de-energia-los-certificados-de-energias-limpias-en-la-industria-electrica-mexicana/>

g. Transitory Article Twenty-second of the LTE.

h. The LTE and the General Law of Climate Change (LGCC, per its initials in Spanish) mandate, for 2024, a minimum participation of 35% of clean energies in the country's electricity generation and increasing it to a 50% in 2050, starting from the 20.9% that existed in 2014, year in which the LIE came into force.

i. The preliminary version of the document is available in Spanish at: <https://www.cofece.mx/wp-content/uploads/2021/02/CEL-CONSULTA-2.pdf>

j. Examples of advantages are: i) conveyance fees; ii) fixed programs offers; and iii) energy bank. In accordance with page 13 of the *Guía Práctica de Trámites y Permisos para proyectos de cogeneración de Energía Eléctrica en México [Practical guide of Procedures and Permits for co-generation of Electric Energy in Mexico]*. Available at: <https://www.gob.mx/cms/uploads/attachment/file/200257/cogeneracion.pdf>

k. *Revisión de Desempeño de la Empresa Productiva Subsidiaria CFE Transmisión [Performance Review of the Subsidiary Productive Company CFE Transmisión]*. Available at: <https://www.asf.gob.mx/Trans/Informes/IR2018b/simplificados/499-DE.pdf>

l. Article 138 of the LIE.

by CFE SSB through the SLP conducted between 2015 and 2017, report delays due to extraordinary events or unforeseen cases. Nevertheless, these mechanisms allowed basic services suppliers, mainly CFE SSB, to acquire electricity and Associated Products (CEL and Power) which had obtained favorable results in terms of the average price assigned per Megawatt/hour (MWh) — which went from 31 USD in the 2015 auction to 13.22 USD in the 2017 auction.^m Therefore, it was necessary to review the implementation of said auctions and consider, for example, the relevance of establishing more demanding prequalification requirements with the aim that the projects awarded through these procedures present a minimum level of development. However, as it is explained further below, the SLP were suspended in 2019.

Finally, there are several expansion projects for the transmission network established in the National Electricity System Development Programs (PRODESEN, per their acronym in Spanish) that report delays or that have been cancelled. The lack of implementation of the mechanisms foreseen in the regulation hinders the interconnection of new projects, especially those located far from consumption centers. In this sense, it is essential to

implement monitoring and surveillance mechanisms to ensure the execution of the works authorized in the PRODESEN.

Among other things, these delays in the implementation of the legal framework in force since 2013 had as a result that CFE SSB supplies 81% of the total demand of the National Electricity System (SEN).

2. Recent changes in the electricity industry regulations and their implementation discourage the installation and operation of new projects of more efficient generation

As of 2019, the regulation issued for the electricity industry and its implementation show a drastic change that strays from the model of competition in the generation and supply of electricity, which could delay and discourage the installation of more efficient electric energy generation projects, especially those based on clean sources. This paradigm shift culminated with the publication of the Reform to the LIE in the Federal Official Gazette (DOF, per its initials in Spanish) on March 9, 2021, which is currently being reviewed by the Judicial Power of the Federation (PJF, per its initials in Spanish).^{n,ñ,o}

In March 2019, the CRE modified the TESL of CFE opening the possibility for said company to restructure its generation companies, which could prevent them from becoming more efficient and productive, and compromising their vertical separation, which could allow, among other things, the application of cross subsidies between the companies of CFE.^{p,q}

Later, on October 28, 2019, the Ministry of Energy (SENER, per its acronym in Spanish) modified the criteria to grant CEL, allowing electricity plants already accounted for in the base of electricity generation through clean sources to be able to obtain them.^r The foregoing implies that the CEL requirements would be met without necessarily installing more clean generation capacity in the country; that is to say, the effectiveness of the CEL mechanism would be disarticulated. For the time being, this modification has remained without legal effects until the definitive resolution of diverse *amparo* trials. However, the Reform to the LIE foresees a modification in this same sense.

Subsequently, in June 2020, the CFE — based on a resolution by the CRE — updated the charges for the electric energy transmission service incurred by holders of self-supply and co-generation permits.^s In addition, in October 2020, the CRE eliminated the possibility of modifying these permits to register new load centers as partners. Although, as noted, these permit holders could have certain advantages in comparison to generators protected under the LIE, it is essential to establish a level-playing field among all market participant without affecting the rights previously granted. In this regard, the Reform to the LIE empowers the CRE to revoke self-supply permits granted under the prior regulation.^t

Even more importantly, the SLP were cancelled on December 11, 2019, despite that these ensured the purchase of energy and Associated Products at competitive prices for basic services suppliers, and for generators they provided certainty on their projects' financing and profitability.^u The cancellation of the SLP will cause CFE SSB to not be able to contract energy and Associated Products at stable and competitive prices.

m. Primera Subasta de Largo Plazo 2017 (SLP 1/2017). CENACE. Available at: <https://www.cenace.gob.mx/Paginas/SIM/SubastasLP12017.aspx>

n. See for example, OPN-006-2020: <https://www.cofece.mx/CFCResoluciones/docs/Opiniones/V132/28/5125826.pdf>; Constitutional controversy against the issuance of the Policy for reliability, security, continuity and quality in the National Electricity System: <https://www.cofece.mx/cofece-interpone-controversia-constitucional-contra-la-emision-de-la-politica-de-confiabilidad-seguridad-continuidad-y-calidad-en-el-sistema-electrico-nacional/>; COFECE's comments to the Draft Resolution CRE Modification RES/390/2017: <https://cofemersimir.gob.mx/expediente/24002/recibido/64794/B000203472>; OPN-001-2021: <https://resoluciones.cofece.mx/CFCResoluciones/docs/Opiniones/V173/9/5363212.pdf>

ñ. Decree available in Spanish at: http://dof.gob.mx/nota_detalle.php?codigo=5613245&fecha=09/03/2021

o. *Acuerdo por el que se suspenden todos los efectos y consecuencias derivados del "Decreto por el que se reforman y adicionan diversas disposiciones de la Ley de la Industria Eléctrica"* [Agreement that suspends all the effects and consequences derived from the "Decree by which several provisions of the Electric Industry Law are reformed and supplemented"], published in the DOF on March 24, 2021. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5614425&fecha=24/03/2021

p. On March 25, 2019, the *Acuerdo por el que se modifican los Términos para la estricta separación legal de la CFE, publicados el 11 de enero de 2016* [Agreement to modify the Terms for the strict legal separation of CFE, published in the DOF on January 11, 2016] was published in the DOF: https://www.dof.gob.mx/nota_detalle.php?codigo=5555005&fecha=25/03/2019

q. OPN-003-2019. Available at: <https://www.cofece.mx/CFCResoluciones/docs/Opiniones/V112/4/4791684.pdf>

r. *Acuerdo por el que se modifican los Lineamientos que establecen los criterios para el otorgamiento de CEL y los requisitos para su adquisición* [Agreement which modifies the Guidelines that establish the criteria for granting CEL and the requirements for their acquisition], published on October 31, 2014, available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5576691&fecha=28/10/2019

s. Source: http://www.dof.gob.mx/nota_detalle.php?codigo=5594800&fecha=10/06/2020 not yet published in the DOF. Available at. Disponible en: <https://drive.cre.gob.mx/Drive/ObtenerResolucion/?id=ZTM3YjE4ZjMtOTI3ZCO0NDU2LTlwNDIzLTBkZDgxMmZmMDJkOA==>

t. *Resolución de la CRE por la que se modifican las Disposiciones administrativas de carácter general que establecen los términos para solicitar la autorización para la modificación o transferencia de permisos de generación de energía o suministro eléctrico, contenidas en la resolución número RES/390/2017* [Resolution by the CRE that modifies the general nature administrative Provisions that establish the terms to request the authorization to modify or transfer energy generation or electricity supply permits, contained in resolution number RES/390/2017]. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5602136&fecha=07/10/2020

u. *Acuerdo de suspensión de la Subasta de Largo Plazo SLP-1/2018* [Agreement of suspension of the Long-Term Auction SLP-1/2018]. Available at: https://www.cenace.gob.mx/Docs/MercadoOperacion/Subastas/2018/39_Acuerdo%20de%20suspensi%C3%B3n%20de%20la%20SLP%20No.1%202018%20v03%2012%202018.pdf

In this same sense, the Reform to the LIE allows basic service suppliers to purchase electricity without resorting to the SLP, thus CFE SSB will contract electricity, CEL and Power without obtaining them through a competitive method which allows to ensure that it comes from whoever offers the best conditions. This could result in an increase in the Final Basic Supply Fees or to the subsidy granted by the Mexican Government to them.

On May 15, 2020, the SENER published the *Acuerdo por el que se emite la Política de Confiabilidad, Seguridad, Continuidad, y Calidad en el Sistema Eléctrico Nacional* [Agreement that issues the Policy for Reliability, Security, Continuity and Quality in the National Electricity System] (Reliability Policy), which prevented access under equal opportunities to the transmission and distribution networks and eliminated the economic dispatch mechanism, arguing that intermittent clean energies affected the SEN's reliability and stability.^v In this regard, COFECE filed a Constitutional Controversy against the Reliability Policy for considering it contrary to what it is set forth on constitutional articles 16, 28 and

133, which establish a competition regime for electricity generation and supply.^w As a consequence, on February 3, 2021, the SCJN invalidated several provisions in it. In compliance with the resolution of the SCJN, SENER left without effects the Reliability Policy.^x However, the Reform to the LIE takes up several provisions contained in the Reliability Policy that were invalidated by the SCJN.

The Reform to the LIE: a) eliminates the economic dispatch and, hence, competition in the generation of electrical energy through the reduction of costs; b) violates the open access guarantee to the National Transmission Network and to General Distribution Networks; and c) allows CFE SSB to acquire electricity without resorting to competitive mechanisms that guarantee the best prices. For the foregoing, this Commission issued an opinion about the Draft Reform to the LIE.^y Subsequent to its approval and publication in the DOF, COFECE filed a new Constitutional Controversy that is pending resolution at the SCJN.^z

Competition is not an end in itself. In the case of the electricity industry, it is a means

to achieve lower fees and environmental impact. The recent modifications to the legal framework and, above all, the Reform to the LIE imply a paradigm shift from the model that considered competition in the electricity generation and supply as the mechanism to promote cost reduction and efficiency within the industry, without substituting it with another that motivates the transition towards its environmental and economic sustainability. Therefore, an increase in social costs of generation (both environmental and monetary) is foreseeable, affecting the environment and in a direct

manner the pockets of Mexicans through more expensive payments for electricity or indirectly, through and increase to the subsidy of electricity fees by the Federal Government.

The analysis and recommendations contained in the document published by COFECE serves as a starting point in case the Mexican State decides to restore the path towards competed electricity generation and supply markets, while resuming the energy transition.

v. Agreement available at: https://dof.gob.mx/nota_detalle.php?codigo=5593425&fecha=15/05/2020

w. COFECE files a constitutional controversy against the issuance of the Policy for reliability, security, continuity and quality in the National Electric System. Available at: <https://www.cofece.mx/wp-content/uploads/2020/06/COFECE-023-2020-Eng.pdf>

x. *Acuerdo por el que se deja insubsistente el Acuerdo por el que se emite la Política de Confiabilidad, Seguridad, Continuidad y Calidad en el Sistema Eléctrico Nacional, publicado en el DOF el quince de mayo de dos mil veinte* [Agreement by which the Agreement that issues the Policy for Reliability, Security, Continuity and Quality in the National Electricity System is rendered void]. Available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5612716&fecha=04/03/2021

y. OPN-001-2021. Available at: <https://www.cofece.mx/CFCResoluciones/docs/Opiniones/V173/9/5363212.pdf>

z. COFECE files a constitutional controversy against the issuance of the Policy for reliability, security, continuity and quality in the National Electric System. Available at: <https://www.cofece.mx/wp-content/uploads/2020/06/COFECE-023-2020-Eng.pdf>