

POWER TRANSMISSION SYSTEM RELIABILITY, FLEXIBILITY AND SUSTAINABILITY

Why is this important?

Electrical energy is presently the development and operation engine for industries, services and households in today's society. A guaranteed power supply is becoming more and more critical. There are consequently many stakeholders who must operate power generation, transmission and distribution systems in a reliable and efficient manner. Transelec plays a very important role in this chain: power transmission. We have had to adapt to more demanding consumers, end users and society in general over the last few years.

Regulatory context

In 2017, the Ministry of Energy, by means of the National Energy Commission (CNE), continued to formulate technical standards and regulations in accordance with the provisions of the new General Electricity Services Law (LGSE). Transelec actively participated in working tables and consultative committees created by the CNE in order to discuss and identify the best alternatives for this new regulation. Supply Unavailability Compensation Regulations were then published and submitted to the National Electricity System Operation and Coordination (SEN) Comptrollership and Complementary Services (CS) Regulations.

With regard to technical standards, in 2017 the NEC established Technical Service Quality Standards for Distribution Systems, which amended acceptable power supply quality standards for end customers due to power supply interruptions stemming from distribution facility outages or disconnections. New amendments were made for aspects such as facility design, complementary services according to the new law, Small Distributed Generation Facilities (PMGD) connections, Low-voltage Power Generation and Medium-sized Systems, among others in 2018.

Transelec is participating at working tables with the NEC and SEC to determine events classified as force majeure. The formulation and/or amendment process for new power supply quality standards at transmission/generation levels is expected to take place in 2018. This will be essential for the application of unavailable supply compensation determined by the new Law N° 20,936.



Editorial ARTICLE

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Digital Transformation For Power Transmission

The power industry is going through breakneck changes and our country is no exception to the rule. We must understand these changes as the result of different technologies coming together to make radical changes to the business model used by so-called utilities.

A good way to look at these changes is to use the three dimensions of energy, starting with the dimension of carbonization, which means the irruption of renewable energy for power production. Fossil fuels are on the way out and several countries and companies are making concrete commitments in this regard. Discussion regarding the contribution of fossil fuels specifically focuses on how long it will take us to complete the renewal process.

The second dimension refers to energy centralization, in which the model featuring dependent customers is becoming an increasingly more contestable market. Demand aggregators and block chain technology empower consumers, while DERs complete the equation.

Finally, these specific energy trends are accompanied by the dimension of digitalization, in which the Internet of Things (IoT) and big data analysis capacities applied to asset digitization enable companies to strengthen situational awareness of their status, thus enabling predictive maintenance and improved asset health.

TRANSELEC has addressed the challenge posed by these trends, aiming to provide increasingly more intelligent power transmission. The path toward asset digitization we have started along will be of crucial importance in terms of collaborating with the articulation of these markets and reaching service quality objectives required for this new scenario, in which improved systematic performance in recent years must be reproduced and surpassed.