STRATEGY FOR RETURN TO WORK IN ELECTRIC POWER COMPANIES

Energy Division

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I. INTRODUCTION

Although the COVID-19 pandemic has disrupted all economic activities in the world, the electricity sector is being severely affected not only by the obligation to protect its employees and their families but also by the need to continue to provide service safely and reliably. For different reasons, companies in the region are preparing under the current circumstances for a gradual return to work. In this transition phase, the reduction or elimination of government measures restricting the movement of persons has begun in several countries, and this requires companies in the sector to have (i) protocols for safety, protection and hygiene for workers, and (ii) plans and projects for their immediate implementation, so that the reactivation of activities ensures a successful process towards normality.

This document formulates a set of considerations that could be taken into account by companies in designing their strategies for emerging from lockdowns and moving forward to full operational and commercial functioning. It is expected that companies will have to make decisions in two dimensions: on one hand, they must ensure the protection of employees (and consequently, of their families), and on the other, they must guarantee the continuity and reliability of services. The following sections offer considerations within these two dimensions that seek to complement the strategies chosen by each company.

These proposals are in line with the document published by the Inter-American Development Bank (IDB) under the title *"From Lockdown to Reopening: Strategic Considerations for the Restarting of Activities in Latin America and the Caribbean in the Framework for Covid-19"* [1]

[1] From Lockdown to Reopening

II. THE IMPORTANCE OF HEALTH PROTOCOLS AND MEASURES FOR THE PROTECTION OF EMPLOYEES.

1. BASIC SAFETY PROTOCOLS. Considering that during the transition phase, which begins with the gradual return to daily activities, the possibility of contagion will not yet have been eliminated, companies must keep up and strengthen their protocols for the care of essential service employees. In general, the experiences of other industries indicate the need for protocols or guidelines for:

A. TELEWORK, including, for example, specific plans for the next six months, identification of employees and their functions for remote work, provision of necessary resources (computers, bandwidth, access codes), training on care in the event of possible infections in their families, video conference programming, and goals for each employee during the lockdown.

B. WORK IN OFFICES OR CLOSED AREAS, including, among others, safety protocols in the workplace (in accordance with the labor laws of each country), work flexibility strategies (different from work schedules) to reduce the number of employees in offices, training on care in the event of possible contagions within offices, spacing between desks (2 meters), elimination of business events and meetings of more than 10-15 people, continuous monitoring of employees' temperatures, compulsory use of personal protection equipment, and reorganization of the transportation of personnel into low-occupancy vehicles, which must be disinfected on a continuous basis.

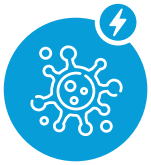
C. WORK IN OPEN AREAS, including rotation of operations personnel to the necessary minimum, completion of essential maintenance tasks, organization of work shifts with specific entry and exit routes, implementation of exit and distancing protocols between employees, provision of disinfection devices in offices and workplaces and enough sinks with soap, compulsory use of personal protective equipment, continuous monitoring of employees' temperatures, and reorganization of transportation of personnel into low-occupancy vehicles, which must be disinfected on a continuous basis. The following chart presents an example of types of security measures for projects in construction, such as the Ituango Hydroelectric Project.[2]

[2] Ituango Hydroelectric Project

Safety Measures at the Hydroituango Construction Site

- Compulsory use of facemasks and social distancing at work.
- Suspension of institutional or large events and recreational and group activities in social areas, kiosks and the auditorium.
- Restrictions on national and international trips and travel for work.
- Restrictions on the access of suppliers, visitors and external persons to EPM and controlled entry of visitors and buses from surrounding areas at the main checkpoint, with temperature checks and identification of respiratory symptoms.
- Extension of hours for all services in the camp dining rooms to reduce the number of people present at the same time.
- Since February, temperatures have been taken and surveys of respiratory symptoms made for all personnel who must travel in transportation to start their work shifts at the construction site. This same protocol applies to those who are transported in other types of vehicles.
- Staff training on how to prevent the virus and how to recognize its symptoms.
- Cleaning and disinfecting of staff transport vehicles in the Villa Luz camp, disinfectant sprays both in process areas and common areas and dining rooms.
- Dissemination of messages about prevention measures using physical and digital bulletin boards. Campaigns are continued to keep workstations and work surfaces clean and neat and to adopt an adequate distance in the different lines [queues] that are formed in daily life inside the camps.
- Identification of prevention measures, especially handwashing.

Source: Press Release of Empresas Públicas de Medellín [EPM], May 12, 2020



2. COVID-19 TESTS Another very important consideration is the undertaking of periodic COVID-19 tests and, in the absence of test kits, the need to increase health status monitoring upon entry to the workplaces (e.g. temperature checks). Likewise, improvements in the companies' health infrastructure (e.g. infirmary, including equipment and trained staff) and the continual purchase of sanitary protection equipment will be necessary.

3. TRANSPORTATION OF PERSONNEL. A specific issue for companies providing public services for the home, such as electricity, concerns the ongoing movement of technical staff to the companies' facilities and infrastructure works and to the homes and establishments of consumers. For this type of transportation, companies should consider the number of people per car (in order to maintain social distance) and the personal protection equipment that must be available in every mode of transport. For the protocols defined for electricity distribution activities, consideration of the differences between concentrated markets (urban areas) and dispersed markets (interconnected or isolated rural areas) is recommended. Factors affecting service in dispersed markets include the distance to urban centers and between users, and the topography of the land. Based on these factors, the number and composition of crews, travel times, interaction with customers, and maintenance and/or repair times may require specific protocols.

4. CUSTOMER SERVICE. Companies must prepare campaigns so that customers will continue using online service channels for processes such as issuing duplicate bills, questions about amounts owed, requests for payment plans, and contact in case of power outs. At the same time, when resuming direct contact with customers, electricity company employees should observe new measures to avoid possible infections from COVID-19, which will still be latent in the population. Contact could occur more directly, for example, while reading meters (in locations where this practice continues), installing new connections, or in customer service centers where payments and claims are normally submitted by customers. To protect both staff and customers, companies need to carry out a detailed review of protocols for interaction (including protective equipment, distancing, and others). Given the possibility of a second wave of COVID-19, companies should consider ways to increase automation and use emerging technology to minimize contact with their customers.

5. INCREASED TRAINING. Similarly, companies must start training in health safety protocols for more employees (technical crews) who must go out to resume maintenance at all the generation plants, high, medium and low voltage lines and substations and control centers.

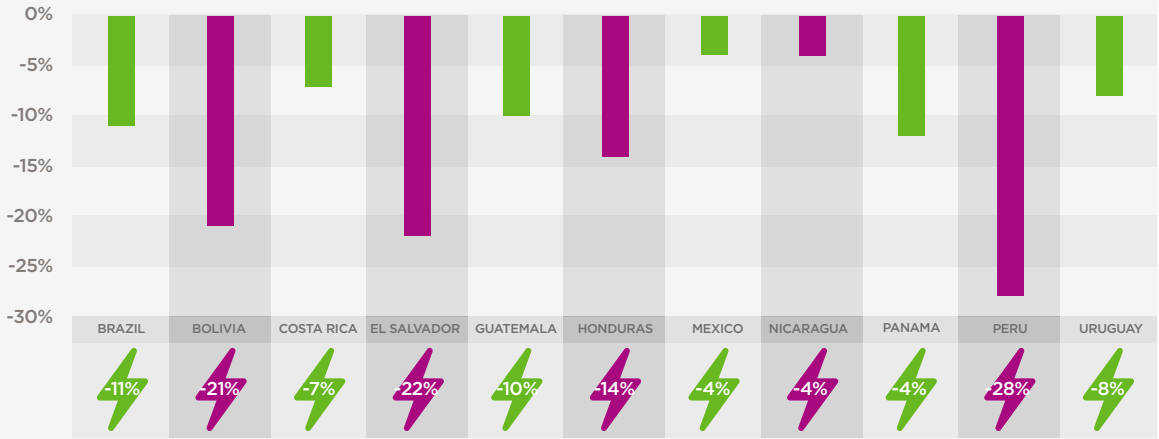
6. RECEIPT OF IMPORTED EQUIPMENT. In most countries, several of the projects under development have been suspended (paralyzed) because they depend on equipment and materials that come from Asia, Europe or the United States. Companies therefore must define sanitary protocols for receiving imported equipment as well as technical staff who accompany its delivery to the site and/or its testing and placement into operation.

7. COMPLIANCE WITH NATIONAL LEGISLATION. Given differences in labor laws in each country, companies must be sure that their health protocols are consistent with legal norms in labor matters, both to ensure that employees are safe in their jobs, and to avoid or mitigate the risks of labor lawsuits.

III. REACTIVATION ACTIVITIES

Companies in the electricity sector have also been affected by the pandemic due to the unexpected reduction in their income, mainly due to (i) reduced demand (especially in the production sector), (ii) deferment of bill payment by the most vulnerable consumers, (iii) greater non-technical losses, (iv) greater expenses for operations and maintenance, and (v) difficulty in implementing rate adjustments.

Fall in demand for electricity, for the same weeks in 2020 and 2019 (reference week March 30 to April 5)



Source: BID/IDB with data ONS(Bra.), CNDC(Bol.), CEN(Chi.), ICE(CR), CENACE(Mex.), CNDC(Nic.), REP(Par.), COES(Per.) and ADME(Uru.) 2020

This situation creates huge financial challenges for companies, which require a strategy for the rapid reactivation of their functions, the prioritization of investments, the restoration of preventive and corrective maintenance, the modernization of commercial systems, and the stabilization of cash flow and financial planning.

1. STANDARDS FOR PROVIDING SERVICES: Service continuity also involves the need to maintain the quality standards required for power systems under normal conditions. In the transition phase, companies need to strengthen the technical capacity of those departments responsible for operations planning with electrical flow simulation models, considering changes in the distribution of current flows due to the change in the demand behavior and its expected growth in Phase 3. The continuous monitoring of the stability of electrical systems will avoid frequency variations and/or voltage fluctuations, which affect service quality indicators.

2. REACTIVATING MAINTENANCE: During the Emergency Phase, some companies may have suspended or reduced various predictive, preventive, and even corrective maintenance activities. In the Transition Phase, companies must start preparing for the various activities needed to resume maintenance of all the electrical infrastructure, to achieve proper technical levels. For this, companies must prepare technical specifications, purchase orders, and vendor identification for the immediate mass acquisition of spare parts, equipment, tools, and materials. Also, many manufacturers and suppliers of electrical equipment (domestic and foreign) reduced their production during the emergency, and thus companies in the sector must update their lists of suppliers to include replacement suppliers in case of possible delays or cancellation of orders. To the extent that spare parts, tools and materials are available, maintenance work must be carried on, beginning with the most critical areas.

3. OPERATIONAL PLANNING: During this transition stage, it will also be important to analyze possible changes in the mid-term demand profile, such as higher residential consumption and lower demand in the production sector. In the production sector, there may be differences depending on the type of business. Therefore some activities, such as tourism, air transport, entertainment (cinemas, parks) for example, may take time to recover, while others, such as logistics centers and telecommunications, will show increased activity. The consumption variations in this Phase necessitate a revision of the investment plans.

4. IMPROVEMENT IN COMMERCIAL SYSTEMS: During the Emergency Phase, many companies enabled electronic systems for paying bills. In many countries, deferred payment of bills was mandated and/or termination of service for non-payment was suspended for the most vulnerable population. In others, payments for lower-income users were simply suspended and/or on-site meter readings were suspended. In the Transition Phase business systems (reading, billing and payment) need to be improved and modernized in order to achieve their complete digitization. To do this, companies must first review the current status of their commercial systems, establish hardware and software needs, and estimate costs and implementation deadlines.

5. ENERGY EFFICIENCY CAMPAIGN: Once the emergency is over, the total amount of the bill will be higher, since the bills will include the partial or total charges of the accumulated debt for certain clients, which will be added on top of increases due to inflation. To help compensate for this monetary effect, companies should begin campaigns to encourage efficient use of energy (including replacement of household appliances, light bulbs, etc.) thus reducing consumption charges for the current period and postponing the need to invest in expansion.

6. PLANS FOR MULTIPLE WORKS: Due to the emergency, distribution companies not only suspended maintenance work, but also paralyzed several plans for network remodeling, transformer changes and minor expansions both at the urban and rural levels. In the Transition Phase, it is proposed that companies resume these plans and prepare projects for multiple works, identifying the most urgent works, their designs and technical specifications, costs and implementation schedules.

7. FINANCIAL PLANNING: Projections of the companies' financial statements will certainly also be affected by the emergency. In this transition stage, a detailed review of the assumptions is needed, particularly for projected income, accounts receivable, operating expenses, levels of debt existing before the emergency, debts acquired during the first phase and new debts to overcome the crisis, and for the new investment plans aimed at reaching Phase 3.

This planning will also identify the financing sources, including, for example, restructuring or reformulation of current loans, co-financing, use of different types of guarantees and the injection of capital flows through fiscal support directly assigned to companies in the electricity sector.

This document was compiled by Leopoldo Montanez, with contributions from the Specialists of the Energy Division of the Infrastructure and Energy Deparment (INE/ENE)