

Q and A: Is Venezuela Facing Another Electricity Crisis?

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On April 7, a fire damaged a power line in Venezuela and caused the country's worst blackout since 2009. Top government officials were adamant that Venezuela is now better equipped than in 2009-10 when electricity shortages crimped the economy during a severe drought. However, the recent outage came amid a series of power shortages since March that industry analysts and business owners claim are hampering production. Does the Venezuelan government have the situation under control or is the electricity crisis likely to repeat itself? What steps should be taken to fix the electricity grid? Will the country be able to hit its ambitious economic growth target if the power shortages continue?

A: Gustavo Coronel, former member of the board of directors of PDVSA:

"The origin of the electricity crisis in Venezuela dates back to the early 2000s, when investments in the sector ceased almost completely, in spite of the experts' warnings. The 2009 drought brought it into the open and about 20 percent of the demand went unsatisfied. In 2010, the government hit the panic button and tried to solve it by installing medium-sized diesel plants throughout the country, at a cost of some \$1.5 billion. Today only 25 percent of these plants remain in operation due to lack of maintenance, diesel or both. As expert Victor Poleo has claimed, this is an institutional crisis, due to the ineptitude of Alí Rodríguez, the electricity czar, and Rafael Ramírez, the head of state-owned petroleum company PDVSA. They have turned the energy sector into an ideological market, inviting Cuban and Chinese advisors lacking modern technology. The Cubans, in particular, have been the brokers in the acquisition of the diesel turbines, a totally unnecessary and costly intermediation. Most of the money required for this emergency expenditure has been borrowed from the Inter-American Development Bank and the Andean Development Corporation, adding to an already hefty national debt. There is little doubt that the crisis will continue to develop. There is no miracle solution other than a well-designed and well-executed investment plan, but there is no professional management that can make it happen."

A: José Manuel Aller, professor at Simón Bolívar University in Caracas:

"The national electricity system is not actually in better condition than in 2009-2010, we merely have more power in the hydroelectric system. But the unavailability of thermal units

(machinery and fuel) is alarming (greater than 55 percent) and the transmission capacity has not increased since the 1990s. System operation in unstable conditions, transmitting 1,070 MW over the limit of transitory stability (7,900 MW) from Guri to the center of the country, caused a blackout on March 7, losing 65 percent of its load. The generation deficiencies are evident when observing that, in 2009, we could handle 17,800 MW of peak demand with some difficulty but currently demand is less than 16,000 MW and we cannot handle it. Excuses such as the growth in demand, fire or sabotage are intended to cover up a structural problem of major proportions that is difficult to resolve in the medium term. At the present time, the government doesn't have control of the situation and, despite its intention to hide the reality, this has become visible to all citizens. Being forced to ration in order not to continue operating unstably will affect all of the sectors, especially industry and commerce. It is impossible that a country without a secure electric system, where more than 40 percent of energy is lost and electricity prices have been kept frozen for the past nine years, can have stable and sustainable growth. On the contrary, the possibility of an economic recession is very high."

A: Daniel Hellinger, professor of political science at Webster University in St. Louis:

"There is no simple solution, nor simple diagnosis behind the electricity shortages— a 20 percent fall in supply. The political cost to Chávez is heavier because the crisis repeats similar problems experienced less than a year ago. There are three underlying causes, none susceptible to a 'quick fix.' One problem, which the political opposition prefers to devalue, is the record low water levels at the Guri Dam, which supplies 70 percent of Venezuela's electricity—equivalent to the power generated by 300,000 barrels of oil per day. Not only vital to the domestic economy, the economic plan was to increase exports of power from Guri to Brazil. A combination of rising sedimentation, forest fires and record low rainfalls have afflicted Guri. A second cause, say its critics, is the Chávez administration's decision years before to cancel expansion of Guri and instead develop 42 new sources of renewable energy. Although welcomed by environmentalists and indigenous activists, the planned growth of power production from 24 gigawatts per year to 30 has not materialized, and Guri seems to have been ill maintained in the meantime. The most daunting task is curbing Venezuelans' voracious appetite for electricity, the highest per capita in Latin America. Rationing seems unavoidable until the seasonal rains—increasingly unreliable—arrive in May. GDP may rise because of high oil prices, but additional earnings may have to go toward imports to compensate for production cuts at home. The opposition blames the government; the government blames the weather. They are both right."

A: Boris Segura, economist at Nomura Securities International Inc.:

"The electricity blackouts last year were the direct result of a severe drought that affected the water level at the Guri dam, the main hydroelectric generation facility in the country. However, beyond the natural effects of weather, the situation that the electricity sector presents also reflects a lack of investment by the government since the early 2000s. Electricity rates have not been adjusted since 2002, which has led to underinvestment in the electricity sector's infrastructure. Given excessive rains last December, the Guri dam water level is adequate; thus, we should not expect another crisis a-la- 2010. However, several turbines at Guri suffered damage due to lack of maintenance (excessive use) during the 2010 crisis and have been off-line this year. As a result of underinvestment in the sector, I anticipate potential weak links in the

transmission and distribution segments. More recently, Venezuelan authorities have made major investments in thermal generation with financing from Fonden and PDVSA. There are reasonable doubts as to whether this investment strategy was well-planned and executed. However, there is no doubt that there is an immediate need for investments in transmission and distribution to fix the electricity sector in Venezuela. We expect the economy to grow by an inauspicious 1.5 percent this year. However, recent signals that authorities are to expand fiscal spending more forcefully and much earlier than expected pose an upside risk to our forecast. As long as power shortages do not worsen relative to 2010, we expect contained fallout from them."

A: Gustavo Roosen, president of the board of Instituto de Estudios Superiores de Administración in Caracas:

"Venezuela's energy crisis never ended. It was in remission and has returned more aggressively in 2011. Reality has caught up with government officials. Recent outages have doubled since March 2011, exposing that the country is worse off than in 2010. The reason: authorities' inability to make good on their ambitious plans of 15,500 new MW by 2015. Current backlog delays stand in excess of 7,000 MW and the deteriorating infrastructure of existing plans struggle to stay on line amid overdue maintenance, especially in the thermal fleet, where close to 6,000 MW out of 10,295 MW installed capacity is unavailable and where the hydro fleet has another 3,500 MW of unavailable generation. Venezuela has around 25,000 MW installed capacity with 14,600 MW of hydro capacity. The government claims that it has 18,000 MW available. Minister Alí Rodríguez's recent public recognition of management failures in the energy sector may be a first step in the direction of a profound change of management without which Venezuela, flooded with petrodollars, will continue in this agony. Demand, so far, has not exceeded 16,800 MW. So if the government claims 18,000 MW available, what is the problem? The problem is that, in fact, only 15,500 MW are available on average. The crisis continues to escalate and hit hard the quality of life and the productive apparatus of the nation. The challenge of how to bring about change is a very tall order for the silenced majority of a country where one must fight a formidable array of WMDs—weapons of mass deception— which are effective at making lemonade out of sour lemons."

The Energy Advisor welcomes responses to the Q&A above. Readers can write editor Gene Kuleta at kuleta@thedialogue.org with comments.