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A parched southern summer may cause an electricity crisis

<http://www.economist.com/news/americas/21596530-parched-southern-summer-may-cause-electricity-crisis-rain-checked>

PRAYING to St Peter is not much of an energy policy. Yet that is what Brazil's government seems to be doing by counting on rain—which, according to folklore, São Pedro dispenses at the pearly gates—to sort out a looming electricity crisis.

Hydropower generates 80% of Brazil's electricity. Typically, reservoirs fill up in the rainy season, from December to March, and are depleted in the dry southern winter. This year St Peter has skimmed. Brazil experienced the second-driest January in 80 years. On February 10th the water levels in the south-east and centre-west, home to 70% of the country's reservoirs and half its people, dipped below 37% of capacity, the lowest since 2001. With no rain in sight, they are set to drop further.

Meanwhile consumption has soared. In January Brazilians used 10% more energy than in the same period in 2013. Peak demand reached an all-time high of 86GW on February 6th.

Weather and wealth help to explain rising consumption: the hottest summer in living memory coupled with higher incomes means more Brazilians are seeking respite from the heat with power-hungry air-conditioners. But government policy is also responsible. In 2012 President Dilma Rousseff pledged to slash energy bills by a fifth. To this end she offered to renew operating concessions that were due to expire in 2015-17 on the condition that utilities cut tariffs and channelled cheap power to households, industry and small firms.

Not all utilities agreed to these terms. But many did. The resulting surge in demand, combined with a crimped hydropower supply, has forced many distributors to buy dearer energy from oil- or gas-fired plants at rising spot-market prices. Fitch, a ratings agency, warned on February 6th of the pressures on some utilities unless the government tides them over, as it is expected to do. That could end up hurting Brazil's own credit rating. In 2013 similar stopgaps cost the treasury 9 billion reais (\$3.7 billion). It has set aside the same amount this year, but on February 11th the National Electrical Energy Agency, which regulates the industry, said an additional 5.6 billion reais would be needed. Either that, or bills must rise by 4.6%.

The energy ministry insists that Brazil enjoys a "structural surplus": its total installed energy capacity of 126.7GW far exceeds demand, which has averaged 66.8GW since the start of the year. But installed capacity is not the same as "assured energy", the minimum amount of energy that will be produced on average, come what may. This number stood at just 63GW in December (see chart). Given the unusual weather, says Arthur Ramos of Booz & Co, a consultancy, "no one knows how much power is really guaranteed." He thinks the government should not rule out rationing—especially with the spike in demand that is likely during the football World Cup later this year.

Brazil's electricity grid is more resilient than it was in 2001, when the government was last forced to ration energy. Fossil fuels and nuclear power now provide a fifth of the energy mix, up from 6% in 2000. Still, analysts now put the risk of brownouts at over 20%, well above the 5% that the national-grid operator thinks tolerable.

The construction of new power lines is beset by delays. Ready plants lie idle for want of connections to the network. With the system operating close to the limit, says **Claudio Sales** of **Instituto Acende Brasil**, a think-tank, any glitch can lead to chaos. On February 4th, 6m people suffered blackouts after an important north-south interconnection failed. Aécio Neves, one of Ms Rousseff's likely rivals in October's presidential election, was quick to point out that things would have been worse but for Brazil's sluggish economy. Industry used just 0.6% more energy in 2013 than in 2012.

Ms Rousseff, who launched her re-election bid on February 10th, is unlikely to renege on her promise and let electricity prices rise. That would curb demand but stoke already-high inflation—as well as voters' wrath. On the other hand, neither does she want a reprise of the 2002 election, when brownouts helped her own Workers' Party boot out the incumbent. Over to you, St Peter.