Massive power blackout hits millions in Canada and the US

By Peter Symonds
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A systemic power failure yesterday in northeastern America resulted in the largest blackout in history, affecting some 50 million people in major US and Canadian cities, including New York, Cleveland, Detroit, Toronto and Ottawa. US officials rapidly ruled out a terrorist attack. But they are still seeking to identify what triggered a cascade of power plant shutdowns that created havoc throughout the region as transport systems, services and businesses closed down.

In New York City, one of the worst affected areas, thousands of people were trapped in elevators or subway trains when the power system failed at around 4 p.m. Uncertain as to what was taking place, workers flooded out of offices and buildings. Traffic clogged the streets as traffic lights failed. With the subways out of action and many buses not operating, streams of people began walking home in sweltering heatwave conditions. Mobile phone systems failed due to overloading, creating long lines as people queued to use pay phones.

All flights to and from New York’s three airports were grounded, along with those at eight other airports in the US and Canada. With the state having lost 80 percent of its power supplies, New York Governor George Pataki declared a state of emergency. A state of emergency was also declared in neighbouring New Jersey where outages created similar chaos in the north.

A blackout in Canada’s largest city Toronto shut down subways and streetcars. Traffic snarls rapidly developed as traffic lights failed. Police were attempting to direct traffic at several major intersections but in a number of cases volunteers stepped in to try to get vehicles moving. With the Pearson international airport closed, thousands of stranded passengers were attempting to find transport to get home. It’s “total chaos,” one passenger told the media. Officials urged residents to conserve water, because the city’s supply depends on the power system and only had a 24-hour reserve. Ottawa and a string of other Canadian cities and towns were also hit by outages.

In the US Midwest, Detroit, Cleveland and other cities were struck by lengthy power blackouts. Hospitals and other emergency services were able to function with limited backup supplies, but, as one hospital in Cleveland reported, many patients were forced to endure heatwave temperatures. “Everyone is very hot because the airconditioning is off,” one nurse told the press. “Our labouring mums are suffering.” More limited power outages were also registered in the US states of Connecticut, Massachusetts, Maryland, Vermont and Pennsylvania, where the northeastern corner was severely hit.

The human costs of the massive power failure are still being tallied. But the suffering and anxiety faced by millions of ordinary working people stands in stark contrast to the preoccupations of the political elite. After ruling out the possibility of a terrorist attack, New York City Mayor Michael Bloomberg blandly advised those left without transport and caught in traffic to stay calm and go home, open windows and drink plenty of liquids. He was greeted with loud boos from a crowd of pedestrians when he ventured onto the streets, accompanied by security and the media to close off the Brooklyn Bridge.

Ensconced in a hotel in San Diego, President Bush maintained a complete silence for hours before issuing a perfunctory statement, declaring that federal officials were working alongside state and local emergency services to cope with the problems. Claiming that emergency services were “better organised” since September 11, he remarked that it “has been remarkable to watch on TV” how calmly people reacted. Only some time later did Bush feel the need to respond to the implications of this catastrophic infrastructure failure, saying that perhaps the power grid would need to be “modernised”. His staff indicated that the president did not intend to cut short his fund-raising trip to California.

The immediate cause of the blackout has yet to be identified. But officials in Canada and the US have been quick to point the finger at others. A spokesperson for New York Governor Pataki declared that the reason for the outage was “a possible transmission problem from Canada.
to the US”. Canadian officials, on the other hand, thought that a lightning strike on a power plant in the Niagara region--on the US side of the border--had been responsible. In the Niagara area, power station operators denied there had been any problems.

In New York City, Mayor Bloomberg also blamed a power failure in the Niagara Mohawk area--outside his immediate area of responsibility. “It was probably a natural occurrence which disrupted the power system up there and it apparently for reasons we don’t know cascaded down through New York state over into Connecticut, as far south as New Jersey and as far west as Ohio,” he said. He dismissed persistent rumours that a fire in a Manhattan power station had caused the blackout, saying that the smoke had been the result of a controlled shutdown of the plant.

Regardless of what triggered the disastrous blackout, its underlying causes are well known and have been warned about for years. Privatisation, mergers, costcutting and restructuring have resulted in a lack of investment in new plant and maintenance. As a consequence, the various power grids across the US have become increasingly unstable, particularly at times of high demand such as during heat waves. Any fault in one plant or at one point in the transmission system creates a cascading effect as one station after another shuts down automatically to avoid dangerous overloading.

That is precisely what happened in the latest blackout. Citing Genscape, a company that monitors electricity transmissions, CNN reported that, beginning at 4.10 p.m., 21 power plants across the north east, including 10 large nuclear plants, shut down over a three-minute period. The process was similar to the cascading shutdown that led to major blackouts across the same region in 1965, when 30 million people in seven states and two Canadian provinces were left without power.

A number of energy experts have been warning about the instability of the American power grids. Bill Browning from the Rocky Mountain Institute, a thinktank in Colorado, told CBC News Online: “Everyone is pulling power and there’s lots of big stations on the grid. All you need is one tenuous problem and it cascades throughout.” Another energy analyst Gerry Angiovine pointed out: “It’s pretty close to peak demand. If you suddenly get one or two of the big suppliers going down... you may have a situation where you’ve got more being drawn than the system can supply.”

Browning went on to explain: “At one time, the grid system seemed logical. If you have to do maintenance on one plant, then the grid connects everyone so the power keeps up. But that is also a fragility in the system. The system, as we have designed it, is brittle. The only way we can make it resilient is to [have] a mixture so that if a portion of it goes down we can have islands of power still operating.”

What is rational as far as providing a stable electricity supply, however, cuts directly across the interests of corporations that have sought to make big profits by buying and restructuring power plants or, as in the case of Enron, through outright speculation. Costcutting at individual power stations, the failure to build new ones to meet growing demand and the lack of planning and coordination have produced a system that has become distinctly more than brittle.

One of the possible triggers for yesterday’s blackout--the Niagara Mohawk power grid--was the subject of a merger between Niagara Mohawk Holdings and the British-based National Grid Group in 2000. The new company indicated at the time that it planned to achieve annual cost savings of around $90 million across its operations in New England and New York through the destruction of hundreds of jobs. The following year, power rates for corporate users were slashed while those to small businesses and residential customers increased.

Two years ago an article appeared in the Buffalo News warning of the dangers of deregulation. “Instead of the [New York] state having a surplus of power that would last until at least 2005, supplies are getting uncomfortably tight today, especially downstate, and power consumption is expected to keep growing by 1.2 percent to 1.4 percent a year. At the same time, private companies haven’t built any new power plants yet, even though the agency that manages the state’s power grid says New York needs to increase its generating capacity by about 25 percent over the next four years to avoid electricity shortages and higher prices.”

Whether or not the Niagara Mohawk power grid was the immediate cause for yesterday’s massive blackout, the above warning points to the underlying problems that made such a breakdown somewhere in the system inevitable.