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Heat waves and blackouts: Here's the fix

What we're missing is a disciplined approach to planned investments to modernize Ontario's power delivery system

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This week's heat wave and major power outage in Toronto – coincident with the tantalizing possibility of a candlelight dinner with the Queen – has brought to light, yet again, the vulnerability of a critical infrastructure and the important role that the electricity system plays in our lives. The infrastructure is aging, parts of the system are well past their “best before” date and the need for a reliable system is an ever-fixed mark. What is the problem, and is there a fix?

Time is upon us to bring into alignment several key factors: the need for sustained investments, a clear understanding of the value of electricity to society – distinct from its cost – and the institutional arrangements that provide policy stability for coherence in decision-making.

Recognition of the fact that renewal of this aging infrastructure is necessary is but one side of the coin. The idea that a well-functioning, reliable electricity system is the bedrock of our economic performance, social well-being and quality of life is another. The governance of how we achieve this requires closer scrutiny, but what we are missing is a disciplined approach to planned investments to modernize Ontario's power delivery system and acceptance of the view that this will not come for free.

We have been here before – the 2003 Northeast blackout and the crisis atmosphere in Ontario's electricity sector during the summer – and may well end up there unwittingly. As the inconvenience of a power outage during this heat wave diminishes, the tendency to retreat into a somnambulistic stand is ever-present. This would be unfortunate.

There is a strong public-interest rationale for consistent investments as part of a long-term plan to build a system with enhanced redundancy, self-healing properties and the intelligence to accommodate diverse sources of generation. In addition to sufficient generation resources, the power delivery system should strive to be largely congestion free – for economic and reliability reasons. The investment costs are real but not a significant factor when viewed in relation to the value the investment delivers.

The Integrated Power System Plan developed by the Ontario Power Authority in 2007 identified investment in the system that would translate into a cost increase of 15 per cent to 20 per cent over 20 years, about 1 per cent per year in real terms. The plan, filed for approval with the Ontario Energy Board, was an effort to provide a template for coherence and a long-term goal to address the issue of needed investments. It was a response to the 2003 crisis atmosphere in the sector. The plan remains in abeyance, and ad hoc decisions have become the order of the day.

What is the cost, and what is the value of electricity? I recognize value when I see it. My total electricity bill with debt costs included are in the order of \$4 a day – this for a five-bedroom house with as many occupants and all the amenities such as hot water, air conditioning, lights, cooking, fridge, washer, dryer, entertainment, grass cutting and computers that double as work and entertainment – with exhortations for frugality consistently ignored by junior members of the household. The incremental cost of the investment on this level of consumption envisaged in the OPA plan amounts to less than a tip on the purchase of two cups of coffee.

And yet, we vigorously debate the price of electricity in front of our regulatory agencies as they deliberate on investment proposals from utilities. I accept that the goal of minimizing cost to consumers has to be the primary consideration of the regulator. What concerns me is the lack of any meaningful debate on the value to society of a reliable electricity service and, furthermore, how and under what conditions may we promote innovation in the sector to help reduce long-run costs and improve performance of the utilities.

To acknowledge, however grudgingly, the value of electricity service only when it is not available – on either hot and muggy days or cold and freezing nights – is a poor substitute for rational decisions required for funding future investments in the sector. Cost is, indeed, central and important. But when judged against value delivered, electricity is by far the runaway winner in the race to deliver a good quality of life and economic productivity. Its provision deserves better treatment by our politicians and the public.

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