The problem with the National Broadband Network was always very simple. The project’s goals were worthy: to provide a new, albeit extremely costly, high-speed network, earn a reasonable return on taxpayers’ investment and charge readily affordable prices.

But as Alex Robson and I showed in a paper released shortly after the project was announced, while achieving any two of those goals might have been possible, achieving all three was not.

There was, in particular, no way the new network could come anywhere near fully recovering its costs while nonetheless setting prices at acceptable levels. In this area, as in others, we could not have our cake and eat it, too — much less also give it to a friend.

Now, that unsurprising fact is coming home to roost. And the form that process is taking is also no surprise.

Reacting to our modelling, Kevin Rudd and his communications minister, Stephen Conroy, promised in June 2009 that entry-level charges on the NBN would be “no higher” than those prevailing when the project was launched. But that commitment seemed inconsistent with recovering the network’s costs.

A complex scheme was therefore devised in which monthly rentals were kept low, but providers of retail services would incur charges for the connection between the “last mile” and the global internet that increased steeply with capacity.

The higher the speeds service providers wanted to offer, the more of that capacity they would have to purchase. Unfortunately, faced with those charges, service providers reacted entirely as Robson and I had predicted: they cut back sharply on the capacity they bought, strangling speeds on the NBN’s eight-lane super-highway down to those on an unpaved country road. As a result, while prices are low, the service those prices buy is often far below that which Telstra’s much-maligned network provided.

Those problems won’t fade away. Rather, they are set to worsen.

In effect, under Labor’s regulatory arrangements, the losses the network incurs are treated as an investment, whose value increases each year by a rate of return that is a mark-up over the commonwealth bond rate.

Those accumulated losses are rising rapidly and are likely to hit $40 billion (in today’s prices) by 2035; even a modest rise in the bond rate above its historically low levels would push that amount towards $50bn.

What recovering those losses implies in terms of NBN Co’s charges going forward is controversial. But it seems reasonable to suppose that even if it imposes a tax on other telecommunications networks (as it intends to do), NBN Co’s revenue per customer must rise by at least 50 per cent during the next decade to meet the company’s financial targets.

However, the retail charges needed to secure that increase risk precipitating a mass exodus of consumers on to mobile networks, as well as a political uproar. It is therefore likely that about $20bn of the NBN’s cost will eventually be written off, reducing the pressure on prices.

The goal of full-cost recovery will consequently be abandoned, with taxpayers funding the network Rudd and Conroy repeatedly claimed “would more than pay for itself”.

Even in this profligate age, $20bn is real money, far exceeding any broader social benefits the network brings. But it would not be entirely wasted had the lessons been learned. Unfortunately, they haven’t.

On the contrary, the errors involved in the NBN are being repeated in energy, and on an even grander scale.

There, too, governments have ignored trade-offs, not recognising that it is simply impossible to have all three of a massive rise in the share of renewables, reliable power supplies and affordable electricity charges.

And there, too, the outcomes are exactly as I (and many others) predicted: network reliability has deteriorated dramatically, with four recent incidents of involuntary load-shedding and many more near misses; as the wholesale market becomes ever more unstable, price spikes are increasingly frequent; the baseload investment needed for network security has withered away; and adjusting for inflation, household electricity bills have risen by more than 60 per cent in a decade, causing widespread hardship.

Fiddling at the edges cannot undo this mess. Rather, what is needed is a drastic change in course. And there is no mystery about the steps that should be taken.

The proponents of renewables claim they are cost-competitive. Fine: now that renewable generators have pocketed $15bn in
subsidies, let them stand on their own two feet.

And while we’re at it, let’s ensure those generators pay the full costs they impose on the network, including in terms of backup generation, rather than hoisting them on to consumers.

Moreover, that requirement should not just apply to new sources of renewable generation, as the Finkel report argues, but to existing ones, too: if they can’t afford those costs, we are better off if they shut down.

As for reducing emissions, if that is the government’s goal, it should pursue it by paying no more for abatement than the price at which it can purchase it overseas, which is a fraction of the amount taxpayers and consumers currently shoulder.

And emissions reductions should be secured wherever their costs are lowest, rather than imposing a disproportionate burden on our power sector.

Merely to list those measures is to highlight how unlikely they are to happen. Indeed, Labor is determined to go in the opposite direction, with its target of 50 per cent renewables by 2030 (which implies quadrupling the share of wind and solar in just 12 years) certain to push the system beyond the point of collapse.

Perhaps that is what Australians want: Third World outcomes with First World costs. But if it isn’t, we need to abandon the illusion that constraints can be ignored and happiness purchased with wishes.

Until we do, the destruction wreaked on energy and telecommunications will be merely a teaser for the disasters that lie ahead.

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