

The Importance Of Infrastructure Investment to Achieving Consumer Outcomes

Energy Minister David Parker speech to 2006 Vector Winter Lecture Series

Thank you for inviting me to the third and final session of the 2006 Vector Winter Lecture Series.

Given the events of the last three months in my portfolio area, particularly in the electricity sector, tonight's subject is certainly topical.

I thought I would start by looking on our history, which lead to the infrastructure shortcomings that have become very apparent since 2000.

That history begins when the Rt Hon Robert Muldoon was defeated in 1984. His government left New Zealand's economy in tatters. Government debt was the highest in the OECD. It equated to an unsustainable 60 percent of GDP. Interest costs had ballooned. One dollar in five of taxes was consumed in interest. Debt and interest were compounding ever higher, ever faster. Interest was projected to climb to one dollar in four of taxes in short order if economic policy was not radically changed.

And so, the Lange Labour government did modernise and de-regulate our economy. The currency was floated, tariffs were cut, supplementary minimum prices paid to farmers were abolished, tax rates were flattened and GST was introduced.

The economic restructuring caused pain to many. The government of the day had to pay unemployment benefits to increasing number of beneficiaries who, through no fault of their own, were casualties of change. Government still had to pay nurses, doctors, teachers and the police, as well as interest on that enormous debt. Faced with the need to improve the government's balance sheet, fiscal prudence required expenditure to be cut where it could - notably capital expenditure on infrastructure. This was true in roading, and hospitals, and schools and in electricity.

What began as a necessity became a habit. By the mid 1990s, after a decade of prudent fiscal management, the crown's balance sheet was much improved. But still the tap for infrastructure spending was closed tightly off. Sadly, there was not even adequate advanced planning for what were by then looming infrastructural deficits. Having shaken off the economic malaise of decades of under-performance, the economy began growing strongly. Infrastructure constraints became even more pressing. This was most visible in the roading network, where billions of dollars are now being spent to catch up. Although less obvious to the eye, infrastructure constraints in electricity also grew more pressing. Security margins in transmission and generation eroded.

Of course the electricity sector was itself restructured. Again, a quick look at our history casts light on our existing situation. I will focus my comments on lines businesses.

Until the major restructuring in the late 1990s, there were different but effective controls on local lines companies. They had as their motive, delivery of secure lines services to consumers at the lowest sustainable costs. The system was not perfect - there were issues about cross-subsidies between classes of consumer - but there was also a social contract. The beneficial owners of the lines were also the consumers and their elected representatives were rated on their performance

by comparing prices between areas.

Then, lines companies began expanding into new geographic areas. The close match between consumers and their owners changed. The motivation of many lines companies changed from pursuing the lowest sustainable cost, to profit maximisation. When take-overs occurred, there was an expectation on the part of the purchasers that when high prices were paid for lines business, service prices could just be ratcheted up to return a profit on the price paid. There was no external check on whether appropriate levels of capital investment in grid upgrades were being made, even when the increased prices paid by consumers provided ample revenue to do so. Despite lines companies being monopolies, their prices were constrained only by the general provisions of the Commerce Act.

Some of the energy trusts and their companies were also beset by the own internal politics and by take-over manoeuvres.

In the case of Transpower - owner of a critical component of the electricity infrastructure - its role for some years was largely limited to operation of the grid, general maintenance and the occasional upgrade to meet localised loading issues.

Transpower's problems included uncertainty as to whether it could recover the cost of upgrades in the absence of the agreement by the generators and lines companies that provided services to. This reflected the then government policy statement, which was, in my view, naive.

The 1998 Government Policy Statement on Electricity Transmission Grid Security stated that the changes were intended to:

" - enable Transpower's customers to make tradeoffs between alternative grid security standards and Transpower's prices for each level of service, which are to be consistent with the Government's section 26 policy statement on electricity transmission; and

- ensure that the consequences of poor decisions in determining grid security standards rest with Transpower's customers."

"Transpower is required to provide services (including grid security) at a level and quality determined by its customers, rather than Transpower determining the form of transmission services that are provided."

Of course, history shows those agreements could not be reached, which goes some way to explaining why Transpower did not invest much in upgrading the grid. I'm also told that during the same period there was a belief within Transpower that distributed generation was just around the corner, and that this would avoid the need for most major upgrades of the transmission grid.

While distributed generation will, in time, have a worthwhile part to play, I do not see it as a panacea for shortcomings in the configuration and capacity of our national grid.

Few transmission upgrades were built for many years, but we've now got them rolling.

I am firmly of the view that a strong grid is a fundamental prerequisite for competition in generation and retail, where the majority of electricity costs arise.

In addition to competition benefits, a strong grid is needed to provide the resilience we expect from our system. It achieves this by enabling power to be brought in from a distance or via a different route when local generation sources are unavailable or transmission faults mean an alternative route is required to

maintain supply.

A strong grid will become even more important as a consequence of the climate change driven imperative of reducing our energy-related greenhouse gas emissions. Low CO2 emission sources are more often located at a distance from load. Add to that the very real and exciting prospect of electric cars - plug-in hybrids - and we will need increases in both electricity generation and transmission. Increases in efficiency, while very important, do not avoid this reality.

It seems clear to me - and the International Energy Agency in its recent report on New Zealand agreed - that a higher degree of regulation than was provided for in 1998 was, and always will be, necessary for lines companies and Transpower. Indeed, I'm told we were the last developed country in the world with a comparable electricity system to reach this view.

We do need to ensure that there is some control on prices of monopoly services, and that there are some constraints on over-engineering of or under-investment in the transmission grid and distribution lines.

This is intended to encourage appropriate investment in electricity transmission and distribution infrastructure.

At the same time, we should be permitting lines companies to earn a competitive rate of return and to invest in other areas - for example, telecommunications - where their existing infrastructure is suited to providing additional services.

We need to take care that those additional services do not impose extra costs on electricity consumers nor introduce unfair cross-subsidised competition for existing providers.

Regulation of monopolies does lead to tensions between the regulator charged with monitoring prices and the regulated entity trying to maximise profits. We've seen recent examples of this.

All of these factors were taken into account in the draft amendments to the Government Policy Statement to the electricity commission and the statement of the Commerce Act to the Commerce Commission, which we announced a few weeks ago.

Taken together, these are intended to encourage investment in electricity transmission and distribution infrastructure.

They recognize the importance of supply diversity for major load centres to reduce the frequency and extent of interruptions and to speed restoration of supply.

They should facilitate generation and retail competition by minimizing transmission constraints.

And - they should support the use of renewable energy forms that are typically located remote from markets.

On the matter of regulation of lines companies, I can announce tonight that the government will be reviewing that part of the Commerce Act related to electricity supply provisions.

We had already announced a review of Parts 4 and 5 of the Act - it makes sense to me to include 4a as well - given that the review may have implications for 4a. As you may know, Part 4A allows for individual electricity lines businesses to be placed under regulatory control, if they breach thresholds set by the Commerce Commission.

On the subject of the Electricity Commission - you may have caught up with the news that the chair Roy Hemmingway is not going to be re-appointment, now that his term has expired. He has reacted badly to that decision in the media. I will repeat what I said in the House today:

The Commissioner has served his full three-year term in accordance with the terms of his appointment. Neither Mr Hemmingway nor anyone else in his position has an automatic right to appointment for a second term. Mr Hemmingway has competently overseen a complex and heavy workload at the Commission, for which I thank him.

Nevertheless, a dysfunctional relationship between the Electricity Commission and Transpower has developed which the government has moved to resolve through changes on both sides of the divide. We have done so for the benefit of the electricity system as a whole and consumers throughout New Zealand.

Turning briefly to generation, many would agree that we have been a bit thin on generation margins this year. Fortunately the situation going forward, at least in the short term, looks more encouraging.

With the expected commissioning of the Southdown expansion by the end of this year, the Huntly e3p project by the middle of next year, and 100 megawatts of extra wind capacity in the Manawatu, it looks as though security margins should recover to a healthier level for the winter of 2007.

We've had confirmation that, at least in the short to medium term, New Zealand has enough gas - although there is still a question mark over assured longer-term supply.

It seems unlikely that we will have a lot of new large scale hydro development. The easiest, cheapest schemes have been done. There is increasing competition for water, and the relative environmental values of our undammed rivers are high. This is not a criticism of the RMA.

Other renewables, such as geothermal and wind, will play a more significant role, in part because they don't produce the same level of greenhouse gas emissions.

The "New Zealand Energy Outlook to 2030", published recently by the Ministry of Economic Development, sets out a base case projection of New Zealand's future greenhouse gas emissions if we proceed with business as usual. That shows energy-related greenhouse gas emissions increasing 30 percent over the next 25 years, with the greatest increase coming from transport.

Whichever of the future energy scenarios eventuates, it is a reality that, for most energy projects of any significant size, it takes from four to six years from concept to commissioning. Again, this is not a criticism of the RMA. Most of that period is not RMA-related. I am advised and accept this time period is similar to the experience of other developed countries, and this needs to be factored into all projects.

The electricity sector is and always will be complex, because so many links in the

supply chain are critical to security of supply, and decisions have real time consequences many years after they were or were not taken.

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