9 October 2015

Mr John Pierce
Chair
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Reference: EMO0030
Submitted via online lodgement facility

Dear Mr Pierce

Comments on Strategic Priorities Discussion Paper

It is appropriate and timely for the Australian Energy Market Commission (AEMC) to seek input into the strategic priorities for energy markets.

The National Electricity Market (NEM), in particular, faces a moment of truth, a moment in desperate need of some bold vision and brutally frank policy critique.

No doubt the AEMC is aware the Expert Panel conducting a Review of Governance Arrangements for Australian Energy Markets recently observed that the "pace of change in the energy sector has accelerated to a level that is arguably unprecedented" and that there "has emerged a 'strategic policy deficit' which has led to tendencies towards fragmentation, diminished clarity and focus in roles, particularly in determining priorities, and a diminished sense of common purpose".

As outlined in my submission responding to its draft report, it was extremely disappointing the Expert Panel shied away from an honest and open consideration of how all this came to be. Absent a proper diagnosis of the cause of the problems that beset the NEM, there's little value in recommending particular changes. As with so many other reviews and consultations, the Panel seemed content to merely re-arrange the deckchairs.

That is, it failed to apprehend that it too suffers a "strategic policy deficit".

Unfortunately, the AEMC's Discussion Paper is further evidence of the same affliction.

In Tempore Advisory Pty Ltd
PO Box 3477
SOUTH BRISBANE QLD 4101

In November 2014, you made the following remarks to a Business Council of Australia (BCA) forum:

> But it seems to me we are at an intersection, or a crossroads, in terms of energy market development, where depending on the decisions we make collectively – government, market institutions, industry and consumer groups – we will end up going down one of two paths.
>
> The first path is one where the future development of the sector – the major investment decisions and disinvestment decisions – is effectively made by government.
>
> This is essentially where we were before we had a National Electricity Market.
>
> Of course, this calls into question whether you've actually got a market at all if major investment decisions only happen if the government is there to direct and support them.

I think this is absolutely true. Yet the compelling words are not matched by a consistent follow-through from the energy sector's peak strategic body.

Valid concern at the pervasiveness of government involvement in electricity does not adequately inform the strategic priorities nominated by the AEMC. Where is the "big picture" narrative sufficient to convince governments to let go and trust the market? Instead, having initially cited the problem, the AEMC surrenders meekly to the prevailing groupthink, perpetuated by empty rhetoric that has little regard for history, the economic and technical risk profile of the NEM, and the fact regulation acts as a platform for general government interference.

Efficiency is Integrated, Qualitative

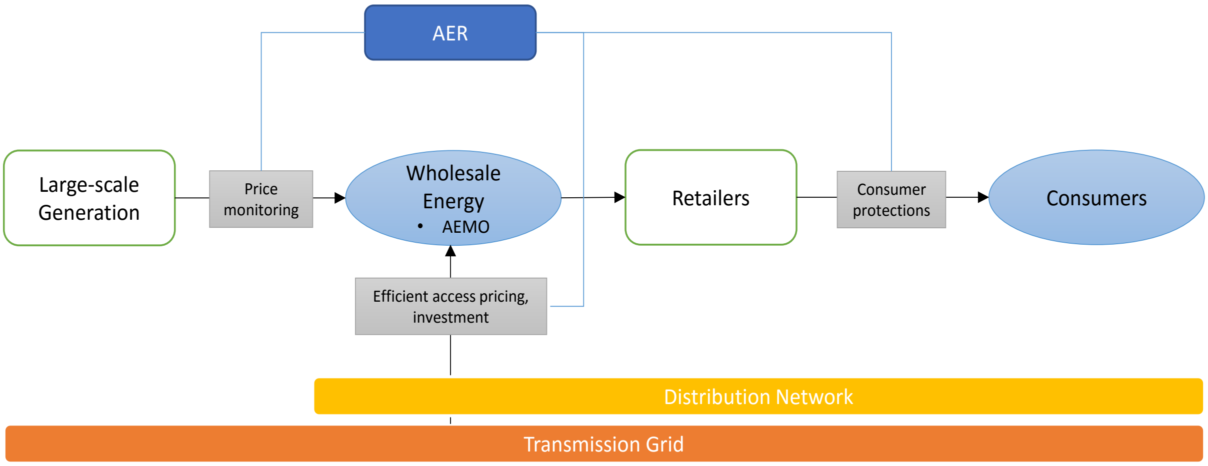
Prior to the National Competition Policy (NCP) reforms of the 1990s, electricity generation and network were vertically integrated and publicly owned. While useful for achieving broader policy objectives (eg regional development, managed employment levels), the essential purpose of this set-up was the pursuit of efficiency.

Large-scale generation and transmission are entirely co-dependent. A power station sitting atop a cheap fuel source is worthless if the output cannot be transported cost-effectively to load centres, and vice versa. Having this primary connection under common ownership fostered co-operation and collaboration using informal norms and processes designed to support the expert engineering judgements needed to assess complex operational and investment trade-offs. Basically, it delivered integrated outcomes for the whole (regional) industry.

But there was also a downside. As you know, the structure was non-transparent. Shielding the industry from scrutiny meant the subjective technical aspects of the "art" of efficiency could also be used to mask uneconomic decision-making, with the cost picked up by taxpayers and selected large users.

Though not admitted to at the time (to do so would have undermined the momentum for reform), a profound policy trade-off was made when restructuring the electricity industry. In exchange for procuring the economic gains associated with developing competitive wholesale and retail energy markets, the "intimate" energy-network interface was separated out, formalised and made subject to the well-intended musings of an independent third party. Indeed, as shown in Figure 1, regulation has penetrated all the key relationships within the supply chain – consumer-retailer, retailer-generator, wholesale energy-network – always for the purpose of "protecting" consumers.

Figure 1: Key regulatory oversight, NEM



NCP assumed away a difficult dilemma. Direct competition and its proxy for natural monopolies (ie a regime of regulatory rules and procedures), are only ever a means to an efficiency end. Policy can't be about competition and regulation for its own sake. For electricity, however, like other utilities, realising the efficiency goal requires those involved in energy production and its distribution to act as a seamless whole. The pre-conditions for such oneness – the informal, trust-generating features of the industry's historical, engineering culture – can obviously be at odds with much of the regulatory architecture developed for NCP.

At some stage, if the National Electricity Objective is to be attained, these attributes need to be re-established across the industry. And this will be challenging, as they involve a step change with an entirely different emphasis.

Limitations of Regulation

The intrusiveness of regulation has subtle psychological effects, principally because it assumes the worst of those being oversighted. Despite claims suggesting otherwise, suspicion and cynicism are necessary attributes for an entity like the Australian Energy Regulator (AER). This translates into a clunky, over-exacting approach to compliance that presumes efficient pricing and network investment, for example, to be purely quantitative and formulaic. It has to, for there is very little scope, in terms of actual behaviour, to concede the qualitative element of efficiency or allow some give-and-take when stakeholders – especially the public – expect guaranteed, black-and-white results.[1]

1 In 2006, the National Competition Council (though not technically a regulator, an entity within the regulatory scene) passed judgement on claims from BHP Billiton and Rio Tinto that enforced third party access to their vertically-integrated Pilbara railways would have "inestimable and unforeseen" costs: "While it acknowledges that congestion, delays and flexibility issues may result in costs, such costs are theoretical and unforeseen at this time and therefore impossible to quantify. It is therefore impossible to conclude any correlation between these diseconomies of scope [of having multi-users of infrastructure] and lost revenue." BHP Billiton responded: "The NCC said it lacks the tool kit to regulate facilities like the iron ore business and to get around this problem we will assume the costs that we can't quantify don't exist."

To compensate for the divide-and-conquer effects of regulation, regulated entities are often asked to overlook the micro-management and vain over-reach, to rise above the legalistic bureaucracy and practice innovation, consumer-centric value add and work together to overcome the disconnectedness (caused by NCP). This is usually accompanied by undertakings to "cut back on red tape" and to pursue "better, smarter" regulation that is "fit for purpose" and "sufficiently flexible" to cope with the "challenges" of a modern vibrant economy.

The sentiment here is beyond naïve, as is the following from the Discussion Paper (p. 26):

> Regulatory frameworks need to be at once resilient and flexible. They must allow innovation and business evolution, both of which create value for consumers. They must also be resilient – being able to accommodate change while still achieving their regulatory objectives, and providing sufficient stability that investors are willing to make the significant sunk costs that are often involved in energy systems.

There is no conceivable regulatory framework for the NEM that is "at once resilient and flexible". Such wish-thinking has no regard for the blurring of accountabilities and the behavioural impacts of using a formal, rules-based system to achieve a goal that requires trust and an unconditional acceptance that efficiency and innovation encompass much more than what can be measured and controlled.[2] Philosopher Onora O'Neill has reflected on the dangers of objectification:[3]

> The illusionary quest for objective and quantitative methods of measuring all performance and for total transparency provides no more than spurious precision and an illusion of accountability.
>
> Recording performance by requiring ticks in boxes may be neither cheap, nor objective, nor transparent. A car is well serviced only when the mechanic does an expert job, whether or not he ticks all the boxes. The tick in the box may be objective enough: but what counts is whether it accurately represents an expert underlying performance. Management by performance indicators, and checking success by ticking boxes to represent scores on these indicators, makes expertise redundant. The price for doing so is often loss of objectivity.

The autonomy associated with appropriate risk-taking, exercising professional judgements and owning the consequences, is anathema to regulation, which is based on mistrust.[4] Strip away the rhetoric and the proposition is very simple: the more discretion a regulated business needs to cope with uncertain market conditions, the less likely a regulator will accept its limitations and the more likely it will demand more power and involvement. It's borderline certifiable to claim regulation facilitates electricity networks being innovative and responsive, when the AER sets the amount of revenue these organisations can earn, mediates demand risk on their behalf and approves major investments, all the while requiring a level of financial and technical detail that would make a Soviet central-planner blush.

Fragmentation, an aversion to commercial risk, confused roles and responsibilities and a diminished sense of common purpose are all unavoidable side-effects of economic regulation. It's just that in most

2 It is noteworthy the terms of reference for the Review of Governance Arrangements for Australian Energy Markets asked the Panel to consider "whether it is possible to incorporate less formal processes [in the NEM] to achieve policy objectives".
3 Baroness O'Neill has published extensively on ethics and political philosophy, and delivered the 2002 BBC Reith Lectures, A Question of Trust. This is an extract from an unpublished working paper.
4 In 2003, Roger Corbett, then CEO of Woolworths, told a Senate Committee inquiring into the Effectiveness of the *Trade Practice Act 1974* in protecting small business: "The previous chairman [of the ACCC] said: 'We should have a far more cooperative attitude. You should tell us what your problems are, and we should work with you on trying to get compliance.' But when we did that we found many of the officers really wanted to know the facts only to see if you had committed a breach."

instances, the cost of such interference – whether active or latent – remains manageable in political terms, given Australia's cautious economic culture is content to go on believing government intervention is a net positive. The paternalism persists even where regulatory models are overwhelmed by dynamism (eg financial sector) or radical changes in product offerings and market structure (eg taxis, media).

The NEM, however, is on another level again. Its real economy product is invisible, perfectly fungible, consumed in real time and not readily storable. To achieve scale economies, the flow of electricity must be centrally co-ordinated over a dedicated transport network consisting of fixed, long-lived assets. Its unit wholesale price can potentially vary from $30 to $10,000 in a 30 minute period, necessitating support from a sophisticated financial contracts market.

It was always fanciful to believe the AER could keep the lid on things once the NEM developed its wholesale market and retail customers began to have options. Complexity and risk led policy-makers to acquiesce on attempting to control the interface between generation and retail, with big energy corporates eventually given permission to own assets in both segments. Alas, jurisdictional governments and an out-of-its-depth regulator have continued to manhandle networks. Second-guessing forecast demand and the value consumers place on reliability, meant networks could not be held accountable for the dramatic increase in charges, beginning circa 2007-08, that drove numerous consumers to solar self-generation and off-grid alternatives.[5] Surprise, surprise – this has now been parlayed by politically expedient, largely arbitrary cuts to the revenues earned by networks.

Which is not to say, reductions of some magnitude are unwarranted. The crucial strategic issue – the issue the AEMC and so many others appear happy to ignore – is <u>how</u> such adjustments are arrived at. If networks are to support the NEM and be customer focussed, the revenue they receive must be linked to commercial reality, which is something that has to be negotiated with wholesale energy market participants as part of a we're-in-this-together, functioning relationship. The current process, performed within a regulatory bubble isolated from market risk and related technicalities, has credibility only with those directly involved or who feed off the inherent conflict (eg consultants, academics, lawyers).[6]

NEM and supra-NEM

Regulation is inconsistent with the National Electricity Objective because it rejects the notion true efficiency has an integrated, qualitative nature. Of course, acknowledging such a defining limitation is prone to then call into question its ultimate worth. The upshot is stakeholders partake of a widespread pretence that nurtures a highly conservative culture of compliance. The broader consequence of this is seen in the readiness of jurisdictional governments to track down the path of command and control.

This is where strategic leadership and policy analysis go missing in action.

---

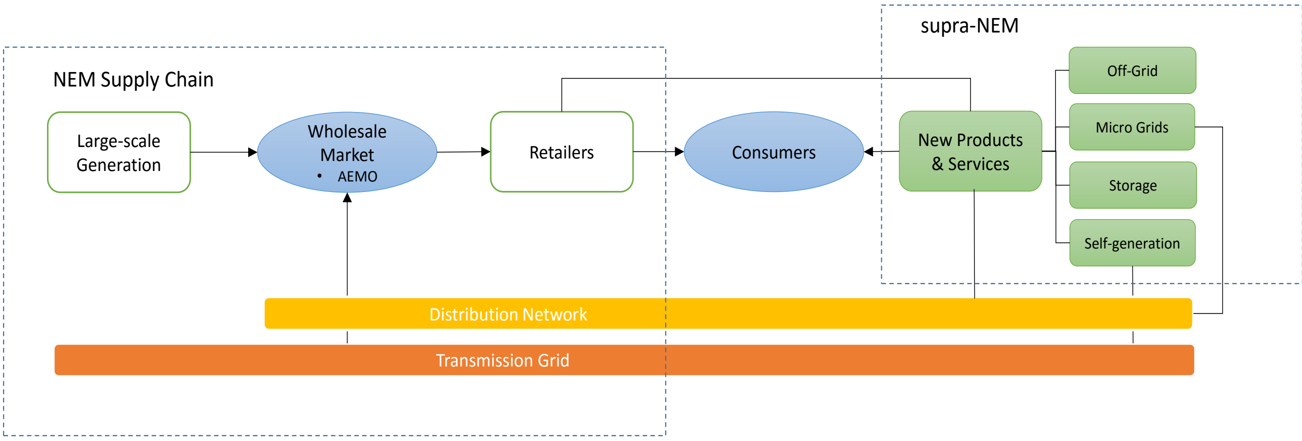
5 If one had any doubt over who is ultimately responsible for network outcomes, consider this recent testimony from Michelle Groves, CEO of the AER, to the Senate Committee inquiring into the Performance and management of electricity network companies: "We did not accept the network businesses' demand forecasts. We put in our own demand forecasts and they were based on the information we had available to us at the time, including from other stakeholders, independent consultants and other sources of information. Subsequently, due to a range of factors, average demand has decreased significantly. Peak demand has decreased slightly. The anticipated rate of growth in peak demand did not turn out to be the case. At the time, based on the information we had before us and based on what had been a fairly strong trend in both average demand and peak demand growth at that time, we settled the forecast that we thought were the appropriate ones."

6 Consultants, lawyers and the like should continue to be a vital resource for the NEM, just in a different way.

Given the uniqueness of Australia's NEM structure, an attempt to regulate its key relationships is so much more than a policy challenge; it's an outright suicide mission.

As shown in Figure 2, electricity supply can be viewed as consisting of the NEM and a supra-NEM, incorporating new products and services, some of which compete with the NEM and others that complement. Consumers are now would-be "prosumers". The intense competition facilitated by disruptive technology and the Power of Choice reforms is channelling tranches of unpredictable and at times obscure risk – demand and technical/operational – into the traditional supply chain.[7] An industry rendered disjointed and rigid by ubiquitous regulation and a muddled, highly defensive policy elite, means this uncertainty is not being managed in a coherent, holistic manner, with the supra-NEM potentially precipitating a catastrophic, lose-lose result by cannibalising and/or destabilising its host.

Figure 2: NEM Supply Chain and "supra-NEM"



Amidst the extraordinary chaos, market participants attempt to transform their business models using a best guess view of how things might unfold. Retailers and distributors are moving outside their conventional patches, creating opportunities and threats. Retailers are concerned at the ability of networks to leverage off their regulated asset bases, while the development of micro grids will sorely test working relations between distribution and transmission. Meanwhile, coal-fired generation and the transmission grid face premature obsolescence, something that would be to the detriment of all stakeholders (including governments, who may eventually have to find public subsidies to redress the situation).

Faced with mounting complications and less-than-courageous advice from within policy circles and commissioned reviews, the natural (political) response of governments is to expand their delegated powers in the hope of controlling the whole shebang. This represents, as you allude to, a return to the past. The regressive trend is, rather perversely, justified on the basis emancipated consumers still need protection from continued market power abuse and their own poor decision-making. In further evidence

7 An array of technical issues relating to the unprecedented pace of industry change continue to fall through the cracks because they are simply too difficult for an economic regulator to get its head around. It is far easier to dismiss engineering-based concerns on the grounds incumbents are attempting to stymie competition from new products and services.

of pre-NCP diktat, some parties have begun to drag out the old chestnut that electricity is an "essential service" too important to be left to market forces.

A great irony goes unacknowledged here.

The rising risk and complexity that generates the populist fear is, to a point, a hallmark of policy success, risk and complexity being the raw materials for a truly effective market. It is a marker for a government withdrawal, secure in the knowledge the intensifying circumstances are a manifestation of consumer choice. Moreover, and much more importantly, comfort can and should be taken from the realisation the supra-NEM will continue to put immense pressure on the traditional NEM to perform. This means each segment of the supply chain now has a profound incentive to do the right thing by end users and work together as a whole to provide the best possible service at the lowest possible cost. Observed Andrew Reeves, a former AER Chair:[8]

> The next decade will see even greater consumer participation. Consumers' decisions on self-generation, storage, sharing and use will force suppliers, including monopoly services, to be responsive to demand. This will be a challenge for policy makers and the AER.

Yes, the AER can give up its damaging quest to be the saviour of consumers because consumers can save themselves.[9] It can cease to mediate on what level of risk networks should face and allow them to be exposed to their fair share by reconnecting with the wholesale energy market. Two decades after the formalising and separating effects of NCP, industry can make the step change back toward true efficiency.

But when is this great "challenge" going to be confronted, you rightly ask? Well, probably when the NEM is broken and on its knees, hamstrung by "flexible yet robust" regulation. Until then, the policy sleepwalk is likely to go on and on.

Consumer Engagement: An Elaborate Avoidance Strategy

The NEM is indeed at a crossroads (and has been for some time). However, the common sense alternative to the well-travelled, government-can-fix-things path, does not include, as you informed the BCA, a scenario where "the networks sector operates within a regulatory framework that people can have confidence in".

Public confidence in regulation is <u>the problem</u>, not the solution. It is the fundamental lure of what is now the wrong path.

According to its 2014-15 Annual Report (p. 26), the number one strategic priority for the AER is "delivering better network regulation". Consumer engagement is a key sub-program:

> The Better Regulation reforms increase consumer involvement throughout the regulatory process. Prior to submitting its proposal, a network business must undertake extensive and genuine community consultation. When we assess a proposal, we consider the quality of this consultation. Our consumer engagement

8 Australian Energy Regulator (2015), AER Annual Report 2014-15, September, p. 9
9 Hardship and welfare issues are not efficiently dealt with via complex economic regulation.

guideline helps businesses develop strategies and approaches, and assists them in preparing spending proposals that reflect consumers' long term interests.

> The [Consumer Challenge Panel] challenges us on how we approach issues and identifies gaps when we analyse businesses' proposals. Members meet with businesses and attend consumer group meetings to hear consumers' key concerns. In particular, the panel may challenge whether proposed network services are acceptable to, valued by, and in the long term interests of consumers; and how the business' engagement with consumers informs, and is reflected in, the proposal.

In a similar vein, the AEMC's Discussion Paper (p. 15) states:

> It is important for all types of consumers to be represented in the regulatory process, and more work could be done in this regard. For instance, if these preferences were explicitly considered in setting reliability standards, consumers would experience better outcomes in energy markets, since reliability would reflect what consumers' value.

More disturbingly naïve reasoning. Isn't part of the all-or-nothing commitment to the market about freeing stakeholders from the need to convene forums aimed at eliciting consumer preferences? Why build a consultative bureaucracy when consumers now have the potential to express what they value through the decisions they make?[10]

There is consumer engagement designed to inform, and there is engagement designed to influence how a business operates. The AER is thoroughly absorbed in the latter, and the effect is to encourage both consumer and network owner to unwittingly direct their energies toward influencing regulatory outcomes, rather than exercising choice or commercial judgement or pursuing innovation out in <u>the real world</u>. Yet without participatory depth and breadth, the NEM will struggle to develop sufficiently and, as a consequence, be unable to manage risk, old and new.[11]

"Energy retail markets are rapidly evolving from a model in which consumers were seen as passive recipients of gas and electricity, to one in which emerging technologies give consumers choice over how and when they consume energy and manage their bills," notes the current AER Chair, at page 2 of the Annual Report. So, tell me: why do consumers require a special opportunity to vent their concerns and the AER a group of do-gooders tasked with analysing business proposals, if consumers have options? Isn't hedging of this type a source of confusion? Won't it promote mixed messages about responsibility and empowerment?

Instead of the supply chain working together to gain a shared understanding of what consumers want and how best to respond, the current NEM arrangements, crafted by NCP acolytes preoccupied with rules and transparency, give primary importance to abstract, box-ticking accounts of what constitutes customer care and economic efficiency. The growing regulatory obsession with public engagement is akin to demanding the owner of Sydney airport determine its capital planning requirements using surveys and mini-workshops conducted with air travellers from its terminals and frequent flyer lounges. Forget collaborating and risk-sharing with the airlines who already have a direct relationship and extensive

10 "Flexible, responsive markets are characterised by market participants that have the information, tools and exposure to price signals which enable them to adjust. So that consumers, rather than regulators, are in a position to decide if the value to them of what they are being offered is greater than the costs to the system of providing it." Pierce, J. (2015), "Towards Smart Regulation: Efficient market outcomes in periods of transition", Speech to World Forum on Energy Regulation, 28 May.

11 This will, of course, be used to then argue for further enhancements to the down-the-rabbit-hole bureaucracy.

market intelligence. Let's instead labour away to fathom future demand and willingness to pay, one step removed, and then have it vetted by a cynical regulator and its enlightened committees.

Add to the mix a unique NEM complication: the consumer you're requesting information from is also a nimble, opportunistic competitor, able to send energy back into the grid.

It's only in a rarefied culture distorted by the false hopes of regulation that a network owner would ever be willing to believe it somehow sensible to largely ignore those parts of the industry reliant on its service offering (ie transportation of electricity) and seek instead to align its business with the tortured views of third parties who have absolutely no commercial skin in the game.

The biggest hurdle to the final stage of market development – an industry-driven reconstituting of NEM oneness – is the failure of the government-dominated establishment to strategically prepare for the practical and in-house cultural consequences of its very own reforms. It figured, wrongly, the limitations of regulation would never be tested in such a profound fashion. It assumed, wrongly, well-crafted Rules would miraculously create a sufficiently adaptive and innovative industry. It believed, wrongly, that giving the market institutions a "public interest" mandate would actually be in the long-term interests of consumers. Now in a flap and/or trance, much of the current "debate", policy development and implementation, serves to distract us from confronting questions about strategic leadership and the efficacy of the NEM institutions, as presently configured.

The lamentable "rampant incrementalism" of the Expert Panel is a case in point.

Routine efforts directed towards more transparency, consultation and competition, and Better Regulation, along with a host of industry reviews, are principally concerned with upholding the status quo. But unlike the 1990s, when vested interests within the state electricity monoliths were justly exposed and taken to task, it's not that easy today to find an audience sympathetic to the type of change that is desperately needed.

Separate Roles, Common Purpose

Far-and-away the most important strategic priority for Australian energy markets is having governance arrangements that provide the NEM with the best possible prospects of survival.

This objective is not about protecting generators or networks from market forces. Or retailers from new products and services. It's about halting unnecessary value destruction caused by outdated policy settings.

We are presently heading down a path that will not – because it cannot – realise the National Electricity Objective. The third party regulatory model that shapes industry and the attitudes of government will only struggle more and more, especially as an under-threat NEM searches for productivity gains. Apart from restricting commercial flexibility, the AER does not value the qualitative aspect of the technical expertise that will be crucial for squeezing the most from existing assets and infrastructure.

Perhaps many within government and industry sense it is the wrong path but press on regardless, drawing on the institutional and "intellectual" momentum to overlook a common sense step change based on logical conclusions, like the fact networks are no longer monopolies and perpetuating the view they are, is counter-productive for all involved. Or that the vast NCP-inspired bureaucracy that got us this far is no longer fit for purpose, since the NEM now has a profound incentive to pursue a shared efficiency goal by acting as a separate-but-integrated whole. If the different segments of the supply chain do not respond individually and collectively to their shifting environment, they will all suffer serious commercial consequences (and the supra-NEM offers no long-term refuge).

This threshold principle is sufficient to guide an overhaul of institutional governance so that the NEM recaptures the upsides of the pre-NCP period (eg greater trust, co-operation and emphasis on informal processes) without giving up the competitive gains of the initial structural reforms. Government must vacate the space in favour of industry, thus allowing the key NEM relationships to embody actual market and operational risk, and be driven by commercial frameworks that are "at once resilient and flexible" because they aren't administered by a suspicious third party bound to formalities that make decision-making too slow and cumbersome.

And it is essential networks be accountable, but accountable to those who share their fate.

If structured correctly, drastically reduced government involvement in NEM institutions would not facilitate collusion or amount to re-integration.[12] It would support a truly federated model, with collaborative planning and operational forums capable of maximising the NEM's survival chances, an outcome that is in the long-term interests of consumers, and start-ups within the supra-NEM.

There is obviously much detail to work through here, including managing tensions within the NEM and between it and the supra-NEM. But the step-change imperative remains, and will not retreat. What path do we choose: continue on the government-driven path or map out a new one that is industry-driven? And note: there is no middle-ground option.

I hope the AEMC finds these high-level thoughts constructive and other than gratuitously blunt. As someone who has worked within government and the reform space, I understand how difficult it can be. Nonetheless, the time has come (well, actually, it's probably already passed) for some straight-talking and radical thinking on electricity policy.

Yours sincerely

Mark Christensen
Director

✉: mark@intempore.com.au

12 Members of the supply chain would obviously still be subject to the general anti-competitive provisions of the *Consumer and Competition Act 2010.*