



Australian Energy Market Commission

THE HITCHHIKER'S GUIDE TO THE NEM: WHAT WAS THE QUESTION AGAIN?

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John Pierce
Chairman

INTRODUCTION

Thank you for the opportunity to speak here today.

When I was a Treasury Secretary, it was not unusual when sitting around with my colleagues from other jurisdictions for the conversation to turn to the relationship with our various Auditor Generals. Similarly when I was an Australian Government Departmental Secretary I attended two days of bi-annual talks between Australian and Canadian Government Department heads from all portfolios. As people were taking their seats on the first day I whispered to an Australian colleague, “Fifty bucks says we don’t get to afternoon tea without a collective whinge about Provinces and States.” We didn’t make it to morning tea.

So it was not surprising when sitting down with a group of Canadian and US utility regulators a few months back that the conversation turned to comparing notes on their relationship with government, consumer and environmental groups and the businesses they regulate. Basically they were discussing the difference in the perceptions and objectives of these groups and the difficulties that these differences posed for them as regulators.

At one point in the conversation I said ...“You should read Plato’s *Republic*”... I was met with blank looks “....You know, the Allegory of the Cave.....” Finally a regulator from Ontario said "Are all Australian regulators so nerdy?" Keen to dispel such notions I replied “.....Well *Hitchhikers Guide to the Galaxy*

then.” There were signs of recognition but still uncertainty as to the relevance to the topic under discussion.

The story goes something like this.....

“A race of hyper-intelligent beings build a super computer called Deep Thought...our energy systems....to find the answer to the Meaning of Life, the Universe and Everything.....the public interest test often given to regulators in North America or the long term interests of consumers in Australia.

When Deep Thought says that the answer is 42, the hyper-intelligent beings can't relate the answer to the question so they build another computer...the Earth... another Inquiry...to find the question that will give meaning to the answer. It seems to me that different people come up with different answers because they are answering different questions. Might be useful if we agree on the question up front, don't you reckon?”

When viewed in an international context Australia's national electricity market – or “NEM” – is rather unique and somewhat enviable. For *most* of its 15 year history, the NEM has performed well against a range of indicators including price, timely investment, reliability, safety and security. More recently, sharply rising retail prices, falling demand, low average but volatile wholesale spot prices, and other developments have caused some to question whether the system is still performing well.

I have heard suggestions that the wholesale *energy only* NEM design should be reconsidered in light of the Renewable Energy Target whose design has more in common with so called *capacity “markets”*, where the quantity of generation investment is determined by a central authority rather than by the balance of demand and supply with its associated risk allocation.

There has been a lot of discussion around the way transmission and distribution networks are regulated in the wake of price increases flowing from past regulatory determinations, and various aspects of the retail sector’s operation.

And of course the gas sector is going through its own series of “questionings”.

Now in pondering further changes to the energy sector or assessing its performance, it is important to recall “what was the question again?” without which we risk getting an answer we don’t want or understand. This includes questions around what we want our energy system to do; the underlying cause of current concerns; whether existing institutional and governance arrangements will develop solutions; and the relationship with broader policy and external regulatory settings and institutions, including for instance those designed to address emission levels.

A series of reviews and other focused investigations have already taken place or are underway. The improvements identified in recently completed work or work underway will help leverage the benefits offered by Australia’s liberalised

electricity sector. This is a program of work that will move towards completing the reform of the electricity sector that was started by creating the wholesale NEM in the first place.

SO WHAT WAS THE QUESTION AGAIN?

The design of the NEM largely began in the early part of the 1990s. This was a period of substantive microeconomic reform across the Australian economy largely in response to Australia's poor relative and absolute economic performance. I hardly need to remind you of this as many of you played a large part in the reforms and we are all old enough to have lived through it.

You will recall that with electricity a vital input to a range of industries, and evidence of the costs of over investment and poor operational performance in generation being passed on to consumers, improving the efficiency of the electricity sector was viewed as a key ingredient in lifting Australia's overall economic performance.

The resulting transformation of the sector can be described in many ways and from different perspectives. However, a fundamental question that was answered then and remains just as relevant in today's discussions is "How do you the want risks to be allocated?"

A different risk allocation is perhaps the defining feature that distinguishes the NEM from the vertically integrated utility industry structure of old and the

capacity “markets” found in some other jurisdictions. In the latter, an “authority” plans investment based on expectations of demand and by necessity the costs are passed onto consumers. And so are the risks. If forecasts turn out to be inaccurate, and as we have seen this tends to be the case, and there is over investment, prices *rise* and consumers pay.

In the wholesale NEM design, generation businesses in competition with one another make these investment (and it must be said dis-investment) decisions. They may be **no** better at forecasting the future than were the utilities, however over investment results in *lower* prices and equity bears the cost of the decision – which is a very different risk allocation and very different incentives for efficiency.

I would suggest that any discussion of how to improve the NEM or how the NEM is affected by policy or regulatory changes needs to explicitly address this question of how risks are allocated...and we need to be comfortable with the answers.

Policy and regulatory decisions should be guided less by forecasts or projections of the future and perhaps more by how you want the resulting risks to be allocated.

STRATEGIC PRIORITIES

In thinking about our particular universe, I have found it useful to divide it into three parts – and it's important to know which part you're in, in any point in time.

- 1) Competitive retail and generation
- 2) Regulated network sector
- 3) Policy interventions from outside the sector that materially impact upon it

The effectiveness of the electricity sector frameworks that make up the first two parts is a topic the Commission has given considerable thought to in our current strategic priorities review. The Commission has proposed three priorities: I will focus today on the two proposed electricity sector priorities, which relate to effective market and regulatory arrangements and empowering consumers.

Our third proposed priority focuses on the implications of major changes in the gas sector on the east coast of Australia with the development of substantial LNG export capacity. The Commission will be releasing a gas market scoping study in the coming months.

IMPROVEMENTS TO THE EXISTING FRAMEWORKS

I want to take a moment though to reflect on our processes. Change will always be a feature of energy markets and policy and regulatory arrangements, but it is important that the manner in which change is managed is transparent, based on clear objectives and relatively predictable.

In managing these changes, Pierce's consistency theorem applies.

The consistency theorem states that, if a change is going to meet its objectives and not set you on a course of putting band aids on band aids, a necessary but not sufficient condition is that the:

- economic or policy implications;
- commercial and financial impacts; and
- technical and operational aspects

need to be aligned or consistent with one another.

There is no point...in fact it could be quite dangerous...addressing an operational problem by a means that creates an unintended or unmanageable financial risk and vice versa.

The rule change and review processes administered by the AEMC are highly transparent, predictable and consultative. Nonetheless, we are always eager to identify process improvements that satisfy the consistency theorem. The

Productivity Commission raised in its recent report concerns that the rule change process can often take too long, and in particular, those that follow from reviews undertaken by the AEMC for SCER. The Commission has also been conscious of this concern through discussions we have had with stakeholders.

The Commission is considering options that might be available to improve timeliness of the rule change process without undermining the features of the rule change process that stakeholders tell us very clearly they value – extensive consultation, an opportunity to scrutinise the detailed rule drafting and a clear explanation by the AEMC of the reasons for our decisions. I am particularly keen to explore how we can move more effectively from the conclusions of our reviews to rule changes that implement the recommendations accepted by SCER.

I would encourage you to talk to us over the coming months with ideas on how we can improve the rule change process. We are very much at the stage of exploring options and ideas, and will be open to discuss any suggestions that can improve the process.

EFFECTIVE MARKET AND REGULATORY ARRANGEMENTS

A recent example of what we mean by effective market and regulatory arrangements are the changes we made last year to the rules governing the economic regulation of networks.

NETWORK REGULATION RULE CHANGE

The new rules better equip the AER to develop methods and processes to achieve robust outcomes when setting revenues and prices for consumers in a number of areas. They focus on the importance of providing regulation that is adaptive to changing circumstances, without losing sight of the objective.

The new regulatory arrangements were the subject of a recent survey of investors by the Royal Bank of Canada. The survey found that the stability of the regulatory regime was the most important aspect of regulation for investors, followed by consistency of decisions and the predictability of outcomes. The same survey found that overwhelmingly investors viewed the changes to the rules as positive with 79 per cent of investors surveyed agreeing that the changes will improve regulation.

The AER is now in the process of developing the guidelines required by the rules on how it intends to apply the new rules in consultation with consumers and industry - the “better regulation” program. These new arrangements will impact on network prices as the next determinations commence. The first businesses in NSW will all have determinations under the new rules with

effect from 1 July 2014. From the following year, 1 July 2015, the new rules will apply to the determinations of Energex and Ergon in Queensland and SA Power Networks in South Australia.

As the AEMC stated at the beginning of the rule change process, enhanced rules may be necessary to increase the ability and incentives to achieve efficient network prices but they are certainly not sufficient. The AER's "better regulation" program and approach are critical. Moreover, how the Australian Competition Tribunal interprets the new rules will also have a bearing on the outcomes for consumers. The SCER recently announced that changes to the limited merits review process that will focus the decisions of the Australian Competition Tribunal on the long term interests of consumers. And of course, the corporate governance of network businesses is an important aspect in determining efficient prices. The outcomes are a function of at least three variables — the legal and regulatory framework, the application of the framework by the regulator, and the corporate governance of the businesses.

CONSUMER PARTICIPATION – NETWORK REGULATION

As consumers ourselves, we have experience voicing demand through our choices. If we don't like a price or service, we go to a competitor. But how do we as consumers demand better price and service outcomes in a monopoly regulated environment? And how do consumers engage in the increasingly complex regulatory process?

The SCER recently agreed to develop a national consumer advocacy body to strengthen the voice of consumers within the process. While there are a number of consumer advocacy organisations in place today, they have differing mandates and resources and generally operate at the state level.

Consumers can also contribute to the regulatory process by participating in the development of the regulated businesses' investment plans. We introduced a change in the rules which explicitly requires the AER to consider how a network business consults with its consumers in reviewing businesses' regulatory proposals. The work of SA Power Networks which has already launched a program which includes consumer workshops and an online survey is an early example of the initiatives being developed by networks.

CONSUMER PARTICIPATION – RETAIL MARKETS

And just as the role of consumers in the regulatory process is changing, so too is the role of consumers in retail energy markets. From both an industry and regulatory perspective, consumers are increasingly becoming more active participants in their energy use as opposed to passive users of a homogenous commodity, as it has traditionally been viewed.

The AEMC's Power of choice review revealed that there are potentially material savings available across the system if consumers are provided with information, charges to reflect the value of using electricity at different times and technology to enable them to change their consumption behaviour.

And we are seeing retailers responding to consumer interest in their energy use by providing customised advice and information directly to customers via platforms, such as web portals and mobile phone applications. This kind of engagement and retailer responsiveness is most readily observed in Victoria, where retail price regulation was removed in 2009. Last year the South Australian government announced the removal of regulated prices. These changes move retail markets closer to the fully competitive retail markets that were envisaged when the NEM was developed.

NSW COMPETITION REVIEW

The Commission is now reviewing competition in the NSW energy retail markets. Its draft report was released in May which found that competition is effective as consumers have a choice of retailer and offer and are increasingly taking advantage of these choices.

Over 60 per cent of consumers have chosen to be on a market contract rather than the regulated price. Market contracts offer a range of discounts off the regulated price as well as choices such as different payment and contract terms or tariff structures.

Our market research found that consumers have a high degree of awareness of the option to choose their retailer – over 90 per cent – and switching rates are also high – 21 per cent of consumers switched suppliers last year.

However, while high switching rates are an indicator of competitive market

activity, it does not necessarily follow that consumers are confident that they are making the right choices.

Indeed, consumers told us that while they were generally satisfied with their electricity supplier and there was a lot of information available – the information was confusing and complex. They also said the information was not the right type or in the right form to help them make a decision about an energy offer that suited them. So as part of the next stage of the NSW review the Commission is talking to consumers to further explore this issue.

DEVELOPING CONSUMER ENGAGEMENT BLUEPRINT

The Commission has agreed with the NSW government to develop a consumer engagement blueprint. The objective is to encourage market outcomes where consumers are confident they have the right information to choose an energy plan that suits their needs.

Different types of consumers, such as high and low consumption consumers, have a diverse set of needs. The essence of the benefits of competitive markets is the availability of products to suit those different needs. However, the proliferation of choice requires consumers to be able to choose which products suit their needs with confidence.

In developing our consumer engagement blueprint the Commission is talking to consumers through qualitative and quantitative research to find out what it

is they need to feel confident making choices. Specifically, we have assembled a number of focus groups as well as an online and telephone survey which can be used as a baseline to measure any changes in future.

We are also undertaking a separate stream of analysis that seeks to identify broad demographic characteristics of those consumers that are still on regulated tariffs. This will enable us to ascertain whether specific engagement or support programs are required.

The Commission will be delivering our final report and recommendations on the effectiveness of competition at the end of September. The consumer engagement blueprint will be delivered at the end of October.

One result arising from our initial research is that engagement is not necessarily just about picking an energy plan. That is, consumers that do not switch may still actively manage their energy use. It may be the case that by simply providing information in an appropriate form consumers will respond by changing their behaviour in a way that results in overall lower bills.

And as we found in Power of choice, enabling technologies such as smart meters and similar services empower consumers to control their energy use, but it also adds to complexity. The results of our research will inform the types of information and communication tools consumers want to aid their engagement within the market, with flow on consequences that support efficient investment decision making and competition.

CONCLUSION

And so in summary, the NEM and the broader sector have performed well over time, but further improvements need to be made and there is a work program in place to achieve this.

The Hitchhikers Guide to the NEM entry would read....

When assessing changes to competitive, regulation or policy sectors of the universe:

- know what the question is that you are trying to answer – so you will know what to do with the answer;
- always take your towel with you with “How are risks allocated?” printed on it;
- manage the change process in a way that takes your fellow travellers with you – or at least have some idea of where you are going;
- always apply the consistency theorem; and
- remember consumers are at the centre of the universe, not waiting in a restaurant at the end of it.

Thank you.