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Mr Sebastian Roberts
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Australian Competition and Consumer Commission
PO Box 1199
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Dear Sebastian

Review of Regulatory Test

The ECCSA and EUCV together represent a significant number of large electricity users operating in Victoria and South Australia. Individually we have made submissions on a number of issues affecting the national electricity market and earlier this year we combined to present our views on the "regulatory test" as it is applied to capital replacement and augmentations in the NEM.

On 28 July 2003, our representative, Mr David Headberry, made a presentation to the ACCC "regulatory test" forum held in Melbourne. This forum was designed to provide some clarity on how the regulatory test should be applied and what were the key aspects that needed to be included in the assessment.

After due consideration, it appears that the main area of contention is whether the economic (welfare) benefits to end users of augmentations should be permitted to be included in the calculation of benefits, or whether they should be disregarded as they are considered a "transfer of wealth" from one party to another. Excluding these from the calculation of "competition benefits" would appear to leave only a relatively small value for the remaining competition benefits. Certainly the rather esoteric discussion at the forum indicated that this might be the case.

We have more fully considered the debate as to whether the "welfare" benefits should be included in the test and have concluded that the argument for eliminating this element has no validity.

Consumers and the regulatory test

To move the debate to an uncontested area of network economics it is worth considering where the "welfare" benefits are captured in the circumstance of a privately funded interconnection. In this case there is no debate or doubt that the provider of the interconnector obtains its only reward for its investment by arbitraging the difference in price between the connected regional wholesale pools. In fact, it is

clearly stated that this is to be the method a market interconnection provider (MNSP) is to obtain a return on its investment.

In the development of a market interconnector, the proponents model the future regional wholesale price differentials to identify whether there is likely to be sufficient revenue arising from its transfer of power from the low priced regional pool to the high priced regional pool (of the two regions it connects). As part of this assessment the model may include for firm contracts for power transfer should there be parties willing to pay for accessing an inter-regional hedge.

The MNSP will identify the capital cost for providing an inter-regional connection, and assesses the revenue raising potential of it, including the assessment of risk under various scenarios. The MNSP will either then proceed with the investment or not, depending on the likelihood of rewards exceeding costs. The risk of the investment is carried by the owner of the market interconnector.

In the case of a monopoly "shared network" where the costs for providing assets to permit inter-regional flows are regulated, the ACCC effectively becomes responsible for assessing whether an interconnector will provide a benefit via the Regulatory Test (RT). Effectively this means that in the negotiations with the network service provider, the ACCC is the representative of the party(s) which will be responsible for providing the revenue needed to support the new investment.

The current RT assumes that there should be no "welfare" benefit as the welfare benefit is seen as a transfer of wealth from one party (the consumers) in the electricity market to another (the generators), effectively creating a zero net market benefit as the two amounts cancel each other. This argument can only apply where the cost of providing the connection between the supplier (generators) and the consumer (end users) is shared equally, ie that the differential ratio is 1 (unity). Where there is an identifiable difference in the contribution to the provision of the interconnection then the "welfare" benefit must be allocated in proportion to the sharing of the cost of the service.

Whilst the true owner of the new interconnection assets will be the regulated entity, it can be accepted that the putative owner of the assets is that party which accepts the liability for contributing the revenue agreed under the regulatory bargain. It is clearly shown on invoices for electricity supplies that the end user is required to pay the charges set by the regulator for those using the network services for delivery of electricity. Thus the consumer (end user) will be the putative owner of the new interconnection assets being considered under the RT. This point is reinforced by the demonstration by TNSP's that the bulk of their revenue arises from payments by electricity distribution companies who levy the transmission costs from retailers who in turn get payments from end users. At the ACCC forum, TransGrid advised that 95% of their revenue comes from end users and only 2% from generators, a differential ratio of 47 – a similar ratio would apply to other regions. In practical terms this means that consumers (end users) are the putative owners of the transmission networks and the augmentations that may be considered.

There is a clear argument that there will be a "welfare" benefit arising from an interconnection. This must be allocated in proportion to the contribution each party makes to the revenue stream supporting the new investment.

Consumers vs generators

Another way of assessing whether the "welfare" benefit should be included in the RT is by examining the implications of such an action. It is generally accepted that generators do have the ability to exercise market power. It is also accepted that greater interconnection will achieve two ends – reduce the market power of generators in a region and enhance the sharing of generator reserves on a wider basis. The import of both of these aims is to reduce the cost of electricity to consumers. This is the whole conceptual basis for the establishment of the National Electricity Market.

If consumers elect to pay a premium for the cost of transferring energy between regions because they can see that there is potential for a cost reduction in the supply of electricity then it is their right to do so. The ACCC must assess what the overall benefit will be to consumers for the provision of the augmentation, including an assessment of the operating benefits such as lower generator prices (and security of supply) in one or other of the regions to be interconnected.

We noted that there was significant discussion about how future regional prices could be modelled so as to provide an indication of the "before and after" regional pricing. We would point out that as a starting point it would appear that the new regional pricing of both regions appears to approach the pricing in the lower priced region. It is accepted that this approach is a simplification of the complexities faced in reaching an economically sustainable forecast, it is clear that such a simple calculation is much closer to being correct than excluding the benefit as is the current practice.

We did observe at the forum there are economic models being developed which go some way to forecasting future wholesale pricing outcomes (predicting generator behaviour under varying scenarios) and we would recommend that these be examined by the ACCC to assess the ability to more accurately predict future trends. In the interim we recommend that the simple (and valid) approach suggested above be used, even if it includes a discounting factor to recognise the inherent imperfections associated with its simplicity.

Consumer vs consumer

An argument has been put that by increasing interconnection that the consumers in the low priced region will suffer a price increase (a penalty) whilst the consumers in the high priced region will receive a price reduction (a benefit). (This presupposes that there are no two-way flows, which is not realistic). If the price penalty and price benefit are equal then the transfer of wealth argument again applies, that is there will be a transfer of wealth between two classes of consumers. However if the penalty to one party is less than the benefit to another, then there is still a residual "welfare" benefit which must be included into the RT.

Where there is one way transfer of electricity there is some basis for this argument, but it is clear that most (if not all) of the interconnections now operating do so on a two way transfer basis. The very presence of an interconnector places constraints on generator behaviour.

However, the myth that there will be an imbalance in the transfer of wealth from one class of consumer to another is not supported by experience. The example of the introduction of QNI quite clearly shows that the introduction of QNI dramatically reduced the wholesale price in Queensland and the average annual price in NSW from year 2000 to year 2001 also fell.

Whilst the supposed interconnector benefit of QNI was assumed to provide lower prices to Queensland consumers to the detriment of NSW consumers, subsequently we have seen a significant southward flow on QNI at times when NSW generators have exercised market power opportunities. This southward flow has been enhanced by the introduction of new low cost generators in Queensland (Millmerran and Tarong North) which have since caused a net electricity flow southwards since QNI began operation. Thus the benefit of QNI has been to reduce Queensland wholesale prices and subsequently provide low cost power to NSW consumers. This can be empirically observed.

Analysis of the flows and regional prices on the regulated Victoria to SA (Heywood) interconnection also provides an interesting insight into the myth that there is an interconnector disadvantage between consumers in the interconnected regions. The Heywood interconnector was originally built to provide a supply of low cost power from Victoria's low cost brown coal fired generators to the SA region predominantly supplied by higher cost oil and gas fired generation[1].

The early days of the NEM show that this trend continued. However, in more recent times, the Heywood interconnector is constrained less flowing towards SA and the negative flows (towards Victoria) have increased, particularly applying at times of high Victorian regional prices. At most times of flows to SA, the Victorian demand has been modest, indicating the Victorian pool price is low and Victorian consumers are not being disadvantaged. Conversely, the maximum negative flows (SA to Victoria) have occurred at times of high Victorian pool prices, giving a distinct advantage to Victorian consumers. Overall the so-called "transfer of wealth" assumed to apply from Victorian consumers to SA consumers is very modest, if there is one.

An examination of the flows, demands and prices between NSW and Victoria shows a similar pattern, demonstrating that the NSW-Snowy-Victoria interconnection provides a significant benefit to consumers in both the NSW and Victorian regions, with apparent little bias in favour of consumers of one region over the other.

An analysis of the realities of interconnection clearly debunks the myth that interconnection will disadvantage consumers in one region to the benefit of another.

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[1] This decision was further supported by the need for the brown coal fired generators to maintain a minimum output to maintain firing stability – a loss of flame results in a significant and expensive delay in restarting brown coal boilers after a flame-out.

Conclusions

There is demonstrably a transfer of wealth from consumers to generators as a result of inadequate interconnection between regions. Generators are able to actively exercise market power, to the detriment of consumer interests. The establishment of the NEM was intended to minimise those problems. There is a most a very modest transfer of wealth from one group of consumers to another as a result of interconnection, but this transfer would appear to change in direction at different times, possibly cancelling out any net transfer over the life of an interconnection asset.

The regulatory test should recognise and include the very clear and readily identifiable benefits consumers will get by the reduction of market power of generators and the minimisation of inter-regional constraints so clearly demonstrated by work by Bardak and Pareto referred to at the RT forum. It is quite clear that consumers, who provide the funding for interconnection, should receive the so-called "welfare" benefit that comes as a direct result of the strengthening of inter-regional connections. This can only come about by the ACCC recognising this benefit as part of the regulatory test calculation.

Whilst we accept that there may be some modest transfer of wealth between consumers, the market has shown these to be minor amounts which can and do change in direction over the life of the interconnection.

We are therefore strongly of the view that the ACCC cannot allow the regulatory test to continue to exclude the economic (welfare) benefits to consumers who are the parties required to pay the economic penalty of associated with expansion of the network. Further delays in implementing the inclusion of the "welfare" benefits of interconnection will continue to delay needed augmentation of the national electricity grid. It negates the whole notion of the NEM, which is to create a truly competitive and efficient national market in electricity.

Inclusion of these benefits may even overcome the continuing and unnecessary delays to the commitment to building the SA-NSW Interconnection.

Yours sincerely

John Pike Chairman, EUCV	Rod Davidson Chairman, ECCSA