



14 June 2002

Mr Michael Rawstron
General Manager
Regulatory Affairs - Electricity
ACCC
PO Box 1199
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Dear Mr Rawstron

Review of the Regulatory Test– Issues Paper May 2002

Loy Yang Power (LYP) is pleased to have the opportunity to provide input to this important review of the regulatory test. Our concern as a participant in the competitive energy market is that regulated investment does not distort or impact this market in a manner that would discourage private capital investment in electricity and gas assets.

One of the COAG national energy policy objectives is to encourage efficient provision of reliable competitively priced energy services. To achieve this objective Governments developed a competitive market for electricity. This policy has been adopted in the belief that competition will drive economic efficiency, which will result in electricity prices that benefit consumers and the economy. That this belief is well founded is demonstrated by the benefits to the economy that have been identified by the Productivity Commission.

The object of the reform has been to promote economic efficiency and the means to achieve this has been competition.

The focus of the reform has been on the energy component of the electricity price and the market has been structured to introduce competition in this sector. The other major component of the cost of electricity is the transport component (transmission & distribution). The market has not been specifically designed to support competition in this sector because it was originally considered to be a natural monopoly. However the structure of the energy market provides regional price signals and it has been demonstrated (with one MNSP in service and another under construction) that it is possible to have competition in the provision of inter-regional transmission services.

As the ACCC notes “Unless the network pricing arrangements provide price signals that encourage network investment the market will continue to require regulatory approval for new investment. All authorities agree that no matter how well-meaning and well-resourced the regulatory agency, it is a poor substitute for market decisions actuated by pursuit of profit through consumer satisfaction.

With a regulated investment in transportation we have an interaction of a market component with another component that might be competitive or complementary. In any event, transmission has a track record of economic inefficiency compared to the post-corporatisation generation (and retail) sector which is clearly market-driven. This and the inherent imperfections of regulations in successfully mimicking a market outcome counsels for an approach which minimises the “synthetic” market decisions required of regulatory agencies..

We note that the two key principles that the ACCC relied upon in developing the regulatory test are

- economic efficiency, which is the objective of competition, and
- competitive neutrality to avoid the distortion of the competitive market caused by regulated investment.

LYP agrees that these principles are a sound basis for the test and that they are consistent with government policy. We would not support any change to the test that would undermine these principles. We believe however that the test does not properly address the competitive neutrality issues particularly in the case of regulated inter-connector development. The test in its current form overstates the benefits of a regulated inter-connector. Because the analysis is not followed through from the wholesale pool market to the contract market it does not fully account for the risks inherent in the hedging product offered by a regulated inter-connector when assessing the benefits.

The following attachment provides our responses to the questions in the issues paper and also includes a more detailed explanation of the problems we have identified and some proposed solutions.

If you require clarification on matters raised in this submission, please contact Mr Roger Oakley, Manager Regulation & Risk on 03 9612 2211. I look forward to further participation and meaningful dialogue on this review.

Yours sincerely,

Roger Oakley
Manager Regulation and Risk

Loy Yang Power submission to the ACCC - Review of the Regulatory Test– Issues Paper May 2002

Our comments on the issues paper follow the format of the headings and questions in the Issues paper.

Maximising net benefits

Is the current maximising market benefits test a hurdle that is too high?

No, this hurdle is required so that it can be demonstrated that there is a reasonable probability that the investment chosen is the most economically efficient option. The hurdle has a time element as well in that the investment must also be timed to maximise benefits.

Should the test simply refer to a nominated Net Present Value hurdle?

No, this is an arbitrary approach, nominating a hurdle is unlikely to ensure that the investment chosen is the most economically efficient option and may exclude viable projects.

If so, what should the nominated hurdle be?

See above, no hurdle should be specified.

If adopted, how should the industry/users be protected from inefficient investment options ie high cost/low benefit solutions?

We do not support the proposals. It must be demonstrated by a proper cost benefit analysis over a range of options that the investment is economically efficient.

What other alternatives should be considered?

The introduction of a competitive market for provision of transmission services as a component of the energy market. The design must incorporate property rights to ensure proper development of a competitive market.

Does the *regulatory test* need to differentiate between TNSPs and DNSPs?

The principle of economic efficiency and competitive neutrality should apply to both distribution and transmission investment. Both segments can be subject to competition and interface with competitive market developments (generation and transmission). There may be some need to differentiate between the sectors.

If so, should different approaches apply to each?

The current nature of the regulatory test appears to have sufficient flexibility to adopt different approaches to each sector if necessary. As natural monopolies, distribution businesses require latitude to make augmentations within their territories at the returns established by the jurisdictional regulator. It would be impracticable for them to be required to justify each augmentation on every occasion. Distribution businesses should not, of course, be immune from competition in the sense that they enjoy a territorial exclusivity.

Is the current test dealing with reliability driven augmentations appropriate?

We assume that this question relates to reliability augmentations being assessed on a least cost basis. If that is the case then we believe that the test is appropriate provided that it is competitively neutral between transmission, generation or MNSP options.

Should reliability driven augmentations be required to follow a similar process to market driven augmentation?

See above.

Competitive impacts of network investment

Should the test be altered to reflect greater competition in a region from the introduction of network investment?

The objective of the test is to maximise the economic efficiency of a regulated investment. The objective is not to encourage regulated investment to increase competition to drive economic efficiency.

The argument that regulated investment will always lead to more competition is spurious and raises the question compared to what, ie what is the counterfactual against which to base this assessment.

In the case of an inter-regional inter-connector the most common case is that an increase in an existing asset is justified because there is surplus capacity in one region and a potential shortfall in an adjacent region. Alternatively or in addition there is diversity in demand between the regions and capacity can be shared to meet the peak demands. The deferred capital cost of generating plant generally accounts for 85% of the benefits of an inter-connector. The remaining benefits are primarily fuel savings and some savings in ancillary services.

The test evaluates a base case with no inter-connector and a generation program is developed based on committed projects, new market driven generation and reliability driven generation. This program is then compared to a generation development program with the proposed inter-connector in place. In this scenario less generation development occurs.

Both options (with and without the inter-connector) have the potential to increase competition, the nature of this competition will depend on the number and size of the generation developments and the ownership or control of these developments and the relationship with existing participants. It could be argued that an option with a regulated inter-connector is less likely to increase competition because it limits the potential for new market entrants, ie the inter-connector only accesses existing capacity and market participants.

To determine the future impact of an inter-connector on the competitive market structure and whether or not it increases competition compared to the no inter-connector case is at the best highly subjective and open to dispute, but most probably an impossible task.

If participants want to increase competition then the MNSP model should be adopted for transmission. This provides an additional competitive market participant rather than risking the distortion of the competitive market by a regulated investment.

If so, how should the benefits of greater competition be captured by the test?

Incorporation of competition benefits even if they could be quantified is not practical. A number of methods to determine the level of competitiveness in a market are proposed by economists, these appear to be a semi quantitative analysis of markets based on experience and or rely on subjective inputs. Eg the Lerner Index (proposed by ABARE to assess competitiveness) which gives highly dubious results or the HHI index. Alternatively the increase in the number of participants could be counted. The results of these analyses are subjective and unreliable and would be extremely difficult to incorporate in any cost benefit analysis. They should be used only as a guide for policy.

It is unclear whether there are competition benefits in inter-connector proposals that are not already accounted for in the test and if there were it is not clear as to how they could be reliably quantified or incorporated in the test.

If a proposed network investment is marginal, should a competition test be included that allows the proposal to pass the test?

No special dispensation should be made for marginal projects. The evaluation must be based on quantifiable benefits not intangibles.

If so, what form should the competition test take?

A competition test should not be applied.

Should the benefits associated with additional capacity to meet peak demands in a region be included in the assessment of a new inter-connector?

It is our understanding that this is what the test assesses but it must be on a competitively neutral basis. It is not clear that this is the case in the evaluations that have been carried out.

The deferred capital cost of new generation development to meet peak demands appears to be the major benefit derived by an inter-connector in the tests carried out to date.

The current modelling is carried out based on ensuring the NEMMCO reserve level is met at the 90% probability of exceedance demand level. This results in the modelling predicting a small amount of market driven new generation and a considerable amount of reliability driven generation. This also assumes the continuation of the NEMMCO reserve trader system, which currently has a sunset clause. This result is inconsistent with recent experience (NEMMCO has not had to contract for reserve plant) which suggests that either the modelling is not representative of the market (or that the market will not work without reserve trader intervention).

This appears to result in an overstatement of the benefits that would be obtained by an inter-connector.

It would be more appropriate in the modelling to assume the reserve is established on the basis of the 0.002% USE reliability level. This assumes that the competitive market will work. Based on this assumption less reliability driven plant would be required and the benefits to regulated inter-connectors would be assessed on a more conservative basis.

This would reduce the sovereign risk to the energy market by caused by the possibility of excessive regulated inter-connector development which will discourage private investment in the market. The reasons why a conservative approach should be taken to regulated inter-connector development is outlined in the responses to the subsequent questions.

The assumption in this latter scenario is that the market is allowed to work. If then the price signals do not encourage sufficient capacity to meet the NEMMCO reserve in practice a change to the market design would be necessary. Such a change could be that reserve capacity would be contracted by NEMMCO and held outside the market only to operate at VoLL to prevent load shedding.

If so, what form should this benefit take and should any limitations apply?

Please refer to the previous answer and to the answer to a following question regarding the treatment of benefits for regulated and unregulated inter-connectors.

If a new interconnector results in lower prices in one or more regions (eg importing regions), should the benefits of lower prices be included in the test?

If prices are to be included then both lower and higher prices should be included and the two would logically offset each other. The art is to raid a surplus, lower priced market, for supply to a higher priced market so that there is a net benefit. This is difficult to estimate in advance and really requires an entrepreneurial rather than regulatory approach. Perhaps as a result, it does not appear to be practical to include prices as they give widely diverging results and do not represent competitive outcomes.

Similarly, if a new interconnector results in higher prices in one or more regions (eg exporting regions), should the costs of the higher prices be included in the test?

Please refer to the previous answer.

How will taking into account competition benefits interact with who pays for the augmentation?

Competition benefits should not be included and therefore there is no need to relate them to who pays.

Should the test ensure an alignment between the beneficiaries of the investment with those who pay for it?

The test is a cost benefit test carried out to provide some degree of assurance that that when regulated investments are made they will be the most economically efficient option. This means that consumers who are paying for these assets will benefit from an economically efficient market development.

The alignment of those who pay for the investment and those who benefit from it occurs naturally in the market. There appears to be little point in trying to force some other alignment (ie customers in the region where price has decreased) based on a prediction of what might happen in the future.

If so what approach should be adopted?

See above

Should regulated and unregulated network alternatives be treated in the same way in terms of the benefits (or detriments) associated with them?

It is assumed that this question means, “should regulated network alternatives be assigned benefits in the test that are not available to unregulated alternatives?”.

Currently unregulated network alternatives are not assessed in a competitively neutral way in terms of benefits, in that the analysis of benefits assigns equal value to the capacity of a generator and an inter-connector. The reason why this is not competitively neutral is described below.

The real value in an inter-connector to consumers is in the nature of the contract available to consumers.

Generators in the NEM are provided “non firm” access to the network (no guaranteed performance) however generators provide long term “firm” prices to retailers and therefore manage the risk of

- their own plant performance,
- network planning and performance

in converting from non-firm access to firm prices.

Generators have the incentive to manage these risks and offer “firm” contracts because they operate in a competitive market.

In the importing region the regulated interconnector is a pseudo generator however because their revenue is guaranteed by the consumer there is no incentive for them to manage their plant or operational risks and provide “firm” contracts.

Regulated inter-connectors do not;

- offer a guarantee on technical performance,
- attempt to manage the impact of system conditions and the actions of others on their capability
- consider risk issues associated with redundancy (number of circuits) and circuit capacity and the impact of the value of VoLL.

Regulated Inter-connectors will only provide “non firm” access into adjacent regions.

The costs associated with converting “non firm” access to “firm” prices for customers is transferred to consumers but no adjustment is made for this in assessing the benefits.

For example as inter-connectors increase in capacity, a 2.5 circuit 2500MW inter-connector is proposed between NSW and Vic, the failure of a circuit reducing capacity by 1000MW could have a significant impact on pool price and the capacity of the contract provided. A customer may still need a generator within the region to provide protection especially with the current value of VoLL.

Unless the regulated inter-connector is prepared to provide firm contracts the capacity of the link should be reduced to the n-1 value. This means that in the evaluation an interconnector with two circuits would be reduced by 50% and one with 4 circuits to 75%. This would produce a more competitively neutral result.

In addition regulated investments should not be ascribed benefits that a MNSP could not achieve in the market. Wider benefits which could be generated should not be counted for a regulated interconnector otherwise private investment will be discouraged.

Network and distributed resources code change package

Should the *regulatory test* be more prescriptive?

Only in relation to the changes proposed above to ensure competitive neutrality.

Should the test define which costs and benefits should be taken into account?

The current broad high level description of the costs and benefits is appropriate.

If so, what should those costs and benefits be?

Please refer to the answer to the previous question.

Should the test include a glossary of definitions?

A glossary of terms may be helpful providing it is a high level consistent with the costs and benefits.

If so, which terms should be defined?

We have no view as to the terms to be defined at this stage.

Should a market test period, in which unregulated alternatives to network investment are given a specified time to respond to constraints identified by the network, be introduced into the test?

Yes, but this would need to be combined with measures to address the current information asymmetry in relation to network technical information as this is also a factor which impacts competitive neutrality because the MNSP proponent does not have ready access to the data.

What special provisions should be introduced for DNSPs to assist them and the market to ensure that the most appropriate investment option is pursued?

Not to our knowledge.

Timing delays

Have the problems of time delays been sufficiently addressed in the network and distributed resources code change package?

The issues with time delays have been addressed more than adequately and probably even unnecessarily. Even before the changes made in the network and distributed resources code change package the SNOVIC approval process took approximately 6 months.

In our view, apart from the delay due to problems with the initial regulatory test, the delays in the SNI approval process which is often quoted as an example demonstrating problems with the approval process and test were primarily due to the formulation of the project and the alternative options by the proponent and the fact the proposal was probably always economically marginal.

If not, how can the test be modified to overcome future delays while still ensuring that only appropriate investment proposals go forward?

No change is required.

Other issues for consideration

Should the Commission clarify its optimisation of network investment that has been assessed in accordance with in the *regulatory test*?

Yes, It should be quite clear as to how the TNSP network will be optimised so that the risk in the investment can be assessed up front. This will help in application of the optimisation.

Should the test address the weighting of outcomes? If so, how can this be achieved?

Weighting of outcomes is arbitrary and subject to manipulation and is unlikely to be helpful.

Is the choice of discount rate, being the rate appropriate for the analysis of a private enterprise investment in the electricity sector, still appropriate?

Providing the investment is subject to optimisation and the capacity is discounted because of non-firmness as discussed above, the discount rate for private enterprise investment is probably appropriate.

Should there be specific requirements for competitive tendering that could form the basis of a safe harbour provision?

Not to our knowledge.