DIRECTLINK JOINT VENTURE

Emmlink Pty Limited
ACN 085 123 486
HQI Australia Limited Partnership
ACN 086 210 488

PO Box 5118, Port Macquarie NSW 2444
p. (02) 6589-8777 f. (02) 6589-8658 e. dennis.stanley@countryenergy.com.au

24 August 2004

Mr Sebastian Roberts
General Manager, Regulatory Affairs - Electricity
Australian Competition and Consumer Commission
GPO Box 520J
Melbourne VIC 3001

Dear Mr Roberts

Application for Conversion to a Prescribed Service and a Maximum Allowable Revenue for 2005-14

Please find enclosed the Directlink Joint Venturers' response to issues raised by stakeholders in June 2004 with regard to the Directlink conversion application of 6 May 2004.

We have advised the Commission that the Directlink Joint Venturers will be providing to the Commission a supplementary document that clarifies Directlink's network augmentation deferral benefits.

However, all the issues raised by stakeholders in June remain relevant to the Directlink conversion application going forward, and the Directlink Joint Venturers have prepared this response with the supplementary document in mind.

Yours sincerely

Dennis Stanley
Directlink Joint Venture Manager

Encl.

DIRECTLINK JOINT VENTURE

Emmlink Pty Limited
ACN 085 123 486
HQI Australia Limited Partnership
ACN 086 210 488

PO Box 5118, Port Macquarie NSW 2444
p. (02) 6589-8777 f. (02) 6589-8658 e. dennis.stanley@countryenergy.com.au

24 August 2004

Prepared for the purpose of informing the ACCC on matters associated with the Directlink Joint Venturers' application of 6 May 2004[1].

RESPONSES TO STAKEHOLDER ISSUES

The Commission has received submission from the following parties in response to the Directlink conversion application:

- Energy Users Association of Australia
- Powerlink Queensland
- NEMMCO
- TransGrid
- TXU

This document provides that Directlink Joint Venturers' responses to the 20 issues raised by these stakeholders. These issues are addressed in the following categories, which correspond to chapters in the application:

- Directlink's network service;
- conversion;
- application of the Regulatory Test;
- corporate finance and taxation; and
- revenue determination.

[1] Directlink Joint Venturers, *Application for Conversion to a Prescribed Service and a Maximum Allowable Revenue for 2005-2014* ('**Directlink conversion application'**), 6 May 2004.

DIRECTLINK'S NETWORK SERVICE

1. Directlink defined as transmission

Issue:

Stakeholders have indicated some confusion as to whether Directlink is a transmission network because they believe Directlink is embedded in a distribution network.

Response:

Since Directlink commenced operation, it appears that NEMMCO and other Code participants assumed that the 132 kV circuits between Mullumbimby and Lismore, Directlink, and the 110 kV circuits between Terranora and Mudgeeraba up to the Queensland border were part of a distribution network. This was because the assets are owned wholly or partially by Country Energy and the 132 kV and 110 kV assets are regulated by the Independent Pricing and Regulatory Tribunal under Parts D and E of the National Electricity Code ('**Code'**).

However, for these reasons set out below, Directlink is a transmission network as defined in the Code.

The Code definition of a transmission network is:

> A network within any participating jurisdiction operating at nominal voltages of 220 kV and above plus:
>
> (a) any part of a network operating at nominal voltages between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage transmission network;
>
> (b) any part of a network operating at nominal voltages between 66 kV and 220 kV that does not operate in parallel to and provide support to the higher voltage transmission network but is deemed by the Regulator to be part of the transmission network.

Directlink operates at 80 kV DC—which is between 66 kV and 220 kV.[2]

The circuit path created by the 132 kV circuits between Mullumbimby and Lismore, Directlink, and the 110 kV circuits between Terranora and Mudgeeraba operates in parallel with QNI and can provide support to the transmission network.

When Directlink is flowing north, it supports voltage in the Gold Coast and alleviates load on the 275 kV Swanbank to Mudgeeraba lines. When Directlink is flowing south, it supports voltage in the far north coast area of New South Wales and alleviates load on the 330 kV Armidale to Lismore line and the 132 kV system. Flows across Directlink can influence spot prices in the Queensland and New South Wales market.

[2] The Code makes no distinction between DC and AC voltages.

Directlink clearly satisfies the Code definition of transmission network.

The Directlink Joint Venturers understands that Country Energy also recognises that the 132 kV circuits between Mullumbimby and Lismore and its proportion of the 110 kV circuits between Terranora and Mudgeeraba are transmission. Country Energy is seeking to have NEMMCO recognise this by formally establishing transmission connection and metering points at Terranora, Dunoon, Mullumbimby and Lismore.

CONVERSION

2. Public benefit of conversion

Issue:

A stakeholder has suggested that Directlink's conversion should not be based on the assumption that a transmission network service provider ('**TNSP'**) is entitled to convert. Further, the stakeholder has suggested that Directlink conversion should be assessed on whether it provides a public benefit.

Response:

The public is benefited by the Commission employing sound decision making principles for conversion, as it did for the Murraylink decision, and ensuring reasonable certainty and consistency of regulatory processes over time, as required by the Code[3].

The Directlink Joint Venturers have anticipated that the Commission will apply to the Directlink application the same criterion for the conversion of Directlink that it applied in the Murraylink decision.

This criterion is whether Directlink's network service would be a prescribed service—as defined by the Code—when it ceases to be classified as a market network service.[4] That is, does Directlink exhibit characteristics that are consistent with the definition of a prescribed service?

The Commission has taken the view that this criterion is appropriate for four reasons[5]:

- the NECA Working Group intended to provide a right for a market network service provider to apply to convert to ensure that investment was not inefficiently inhibited;
- the Commission had stated previously that it would consider each conversion application on a case-by-case basis[6];

[3] Clauses 6.2.2(j) of the National Electricity Code.

[4] Australian Competition and Consumer Commission, *Decision: Murraylink Transmission Company Application for Conversion and Maximum Allowable Revenue* ('**Murraylink decision**'), 1 October 2003, pp. 14-5.

[5] ibid., pp. 15-6.

- the Commission's approach to asset valuation for a converting asset would ensure that the Regulatory Test is not bypassed and transmission customers do not bear the costs of inefficient investment; and

- the conversion option enables market network services providers to reduce the risks of their investment by having the option to apply for the determination of a regulated revenue, and, by reducing the risks, the opportunity for conversion encourages efficient transmission investment.

The Commission placed weight on The Allen Consulting Group's argument (submitted by Murraylink Transmission Company[7]) that conversion of Murraylink could provide economic efficiency benefits from a more certain planning environment and better use of existing network capacity.

The circumstances that surrounded the Murraylink Transmission Company's application remain unchanged. The rationale that the Commission applied in that case is just as valid for Directlink. Given that the Commission has a Code obligation to ensure reasonable certainty and consistency of regulatory outcomes, the Directlink Joint Venturers again submit that, when determining whether Directlink's network service may be classified as a prescribed service, the Commission should seek to be satisfied on the same points.

3. Change in market conditions

Issue:

A stakeholder has suggested that the Directlink Joint Venturers should be required to show that there have been changes in market conditions from the time they began operations as a market network service provider ('**MNSP**').

Response:

It is clear from the Safe Harbour Provisions, the Commission's previous statements[8] and the Murraylink decision that the Directlink Joint Venturers may apply for conversion at any time and no separate justification is required. In light of the comments made by a stakeholder, it is important to restate the relevant part of the Safe Harbour Provisions[9]. Doing so establishes that the recommendation made was:

---

[6] Australian Competition and Consumer Commission, *Applications for Authorisation: late Amendments to the National Electricity Code – Network pricing and Market Network Service Providers,* 21 September 2001, p. 137.

[7] The Allen Consulting Group, *Application for Conversion of Murraylink to a Prescribed Service, Commentary on economic issues*, April 2003, submitted by Murraylink Transmission Company to the Commission on 8 April 2003, p. 5.

[8] For example in Australian Competition and Consumer Commission, *Applications for Authorisation: late Amendments to the National Electricity Code – Network pricing and Market Network Service Providers,* 21 September 2001, p. 137.

[9] NECA Working Group, *Entrepreneurial Interconnectors: Safe Harbour Provisions* ("**Safe Harbour Provisions**"), November 1998, p. 9.

> *Option to convert to regulated status.* The interconnector owner can apply to convert to regulated status at any time. The revenue entitlement will be assessed at that time.

Furthermore, whilst the Safe Harbour Provisions note that the right to apply for regulated status may help to ensure that investment is not inefficiently inhibited by non-commercial market design risks, nowhere does it indicate that establishing changes in market design is a pre-condition to the right to apply for conversion. Neither is it suggested that the Commission must only have regard to matters that were not foreseeable at the time of the initial investment. To the contrary, it is the "somewhat experimental" nature of non-regulated interconnectors that is noted, the experimental nature of the concept not being limited to market design issues.

For this reason, the Commission has applied a threshold for conversion that is no lower than the NECA Working Group contemplated.

4. Switching back to a market network service

Issue:

A stakeholder is concerned by the Commissions 'silence' in the Murraylink decision on the implications of allowing discretion for 'switching' between regulated and unregulated transmission service provision because this leaves scope for providers to maximise revenue flows as market conditions change.

Response:

The National Electricity Code prohibits a prescribed service switching to a market network service. Once a network service has been a prescribed service, clause 2.5.2(a)(3) of the Code would operate to preclude it from being reclassified as a market network service.

5. Coordinating the conversion process with NEMMCO

Issue:

NEMMCO has highlighted the need for the Directlink Joint Venturers and the Commission to recognise NEMMCO's tasks to practically implement Directlink's conversion.

Response:

The Directlink Joint Venturers have confirmed with NEMMCO that the process for Directlink becoming regulated will be (for all intents and purposes) the same as for Murraylink, as anticipated in NEMMCO's submission. In the case of Directlink, the process would be:

- The Directlink Joint Venturers lodge their application with the ACCC (6 May 2004);

- The Directlink Joint Venturers have had discussions with NEMMCO as to the practical implementation of conversion, and NEMMCO and the Directlink Joint Venturers will initiate any plans and actions necessary;

- At an appropriate time, the Directlink Joint Venturers and NEMMCO will confirm with the Commission the earliest date upon which conversion may occur;

- After public consultation, the Commission will publish its draft decision;

- The Directlink Joint Venturers and NEMMCO reconfirm with the Commission the earliest date upon which conversion may occur, in case the date is revised;

- The Commission will publish its final decision, which would be worded to take effect upon the Directlink Joint Venturers notifying NEMMCO that Directlink is to cease to be classified as a market network service;

- Subject to the ACCC's final decision, Directlink Joint Venturers will notify NEMMCO (by an agreed form of National Electricity Code clause 2.10.1 letter) that Directlink is to cease to be classified as a market network service effective from 24:00 on the day before the conversion date; and

- Conversion and NEMMCO's system changes will be effective from 00:00 on the conversion date.

Over recent months, the Directlink Joint Venturers have provided NEMMCO with information necessary for NEMMCO to make modifications to its interconnector loss model. The Directlink Joint Venturers are continuing to work with NEMMCO in relation to the termination of the NCAS[10] contract between NEMMCO and the Directlink Joint Venturers and to achieve the formal recognition of transmission connection and metering points at Terranora, Dunoon, Mullumbimby and Lismore at the appropriate time. NEMMCO now has matters in hand to clarify the location of the regional boundary in the vicinity of Directlink and to modify the settlement residue auction process.

The Directlink Joint Venturers and NEMMCO will keep the Commission informed as to their progress.

[10] Network control ancillary services.

APPLICATION OF THE REGULATORY TEST

6. Asset valuation methodology inconsistent with Chapter 6

Issue:

While a stakeholder believes that the Directlink Joint Venturers have legitimate concerns that the methodology applied to determine Murraylink Transmission Company's regulatory asset base does not reconcile with Chapter 6 of the Code, these concerns are secondary to the principles of ensuring competitive neutrality and ensuring the Regulatory Test is applied in the spirit it was intended.

Response:

The Directlink Joint Venturers have applied an analytical framework and asset valuation methodology in this Application that reflects the Commission's Murraylink decision approach.[11] However, as the stakeholder suggests, the Directlink Joint Venturers does have legitimate concerns about that Commission's analytical framework and asset valuation methodology in the Murraylink decision because this approach could produce anomalous and arbitrary results for Directlink that would be inconsistent with Chapter 6 of the Code.

Clause 2.5.2(c) of the Code provides the Commission will substantial discretion as to how it may determine that an existing network (that has ceased to be a market network service) to be a prescribed service. However, clause 2.5.2(c) provides much less discretion as to how the Commission must determine the revenue for the prescribed service. It states:

> If an existing network service ceases to be classified as a market network service it may at the discretion of the Regulator or Jurisdictional Regulator (whichever is relevant) be determined to be a prescribed service or prescribed distribution service in which case the revenue cap or price cap of the relevant Network Service Provider may be adjusted in accordance with Chapter 6 to include to an appropriate extent the relevant network elements which provided those network services. [emphasis added]

The Code indicates that Chapter 6 is the basis upon which the Commission would determine Directlink Joint Venturers' revenue. The Code does not state that the Commission must have regard to any other matter.

If the Commission is to have regard to competitive neutrality, competitive neutrality between network services that are initially developed as prescribed services, and network services that are initially developed as market network services, is appropriately achieved by ensuring that both types of network services are valued using consistent principles and methodologies. The Directlink Joint Venturers acknowledge that network services that are initially developed as prescribed services are selected and valued in accordance with principles set down in clauses 5.6 and 6.2 of the Code.

[11] Murraylink decision, pp. xiv, 52.

However, the Commission's Regulatory Test valuation methodology—as applied in the Murraylink decision—does not fully reflect the principles contained in clauses 5.6 and 6.2 because it does not take sufficient account of the level of gross market benefits an existing assets provides. The Commission's Regulatory Test valuation methodology has the potential to value an existing asset as the cost of a theoretical alternative that might have costs and benefits much greater or much less than the existing asset. This potential does not exist for network services that are initially developed as prescribed services.

National Economic Research Associates ('**NERA**') supported this position during consultation on the Murraylink decision when it argued that[12]:

> Where gross market benefit[s] of alternative project differ, focusing only on the costs of alternative projects means that the approach does not result in the same RAV that would have applied in the processes under Section 5 of the Code had been followed.

For this reason, the Directlink Joint Venturers have reserved their position in the Directlink conversion application as to the appropriateness of the Commission's current Regulatory Test asset valuation methodology.

The Directlink Joint Venturers submit that the Commission can apply an asset methodology to achieve competitive neutrality and to apply the Regulatory Test in the spirit it was intended. However, the Commission's current Regulatory Test methodology is not the correct one. The correct methodology would be to value Directlink with regard to the gross economic benefit that it can provide, and the net market benefits of its alternative projects.

7. RAV of Directlink reduced by net benefit of alternative project

Issue:

A stakeholder has suggested that 'to the extent that alternative projects have a positive net benefit, this should reduce the RAV derived for Directlink'.

Response:

The stakeholder has questioned the manner in which the Commission applied the Regulatory Test as the basis of its asset valuation methodology for Murraylink. The stakeholder has referred indirectly to a more conceptually correct approach that had already been forward to the Commission by The Allen Consulting Group and NERA.

In its expert advice to Murraylink Transmission Company in April 2003, The Allen Consulting Group derived a formula for a 'service adjusted-DORC' to calculate the value of an existing asset with regard for the net market benefits of an optimal

[12] NERA, *Comments on the ACCC's Preliminary View in Relation to Murraylink's Application for Regulated Status*, July 2003, submitted by TransGrid to the Commission on 18 July 2003, p. 11.

alternative project[13]. In July 2003, The Allen Consulting Group refined this formula to take account of differences in timing between the existing and optimal alternative project and the gross market benefits of the existing asset[14]:

$$\text{Regulatory Cost}^{\text{Actual}} = GMB^{Actual} - \frac{NMB^{Optimal}}{(1+r)^{T}}$$

Where:

$\text{Regulatory Costs}^{\text{Actual}}$ is the actual asset's regulatory asset value and the present value of its life-cycle operating and maintenance costs;

$\text{GMB}^{\text{Actual}}$ is the gross market benefits of the actual asset;

$\text{NMB}^{\text{Optimal}}$ is the net market benefits of the optimal asset;

T is the period of the optimal timing of the optional asset; and

r is the discount rate.

At the same time, NERA drew a very similar conclusion that[15]:

> In order to ensure that an MNSP does not accrue a material advantage (or disadvantage) from bypassing the provisions of Chapter 5 of the Code, the regulatory cost for an MNSP which converts to regulated status would need to be set at the gross market benefits of the MNSP minus the highest net market benefit associated with an alternative project.

Further, NERA stated:

> In this context, applying the 'service-adjusted DORC' valuation to MNSPs converting to regulated status is simply bringing the valuation approach applied to the MNSP in line with the process applying to regulated assets, and ensuring consistency between the two types of assets.

The choice of the correct asset methodology for Directlink will be much more important than the choice for Murraylink. In the Murraylink decision, the Commission accepted as reasonable a set of alternative projects that all provided a similar level of gross market benefits as Murraylink. However, Directlink's alternative projects include some projects with much higher and much lower gross benefits (and costs), as well as some projects with similar gross benefits.

---

[13] The Allen Consulting Group, *Application for Conversion of Murraylink to a Prescribed Service, Commentary on economic issues*, April 2003, submitted by Murraylink Transmission Company to the Commission on 8 April 2003, p. 14-5.

[14] The Allen Consulting Group, *Application for Conversion of Murraylink to a Prescribed Service, Commentary on the ACCC Preliminary View*, July 2003, submitted by Murraylink Transmission Company to the Commission on 18 July 2003, pp. 15-7.

[15] NERA, *Comments on the ACCC's Preliminary View in Relation to Murraylink's Application for Regulated Status*, July 2003, submitted by TransGrid to the Commission on 18 July 2003, p. 16.

The Directlink Joint Venturers concur with the stakeholder, The Allen Consulting Group and NERA and submit that the Commission should give serious consideration to an asset valuation methodology for Directlink that recognises the gross economic benefit that it can provide as well as the net market benefits of its alternative projects.

8. 'Incremental benefits' approach

Issue:

A stakeholder has suggested that the Commission should consider NERA's original suggestion that for Murraylink that[16]:

> The maximum regulated cost that could be set for Murraylink would be the lowest of the capex cost plus life-cycle opex costs for Murraylink; or the expected revenue for Murraylink if it continued to act as an MNSP plus the net benefit of the market of Murraylink changing its status from an MNSP to a regulated interconnector.

Response:

During the course of consultation for the Murraylink decision, several stakeholders suggested the incremental benefits approach. However, the Commission correctly concluded that this approach was not appropriate because it did not align with the Regulatory Test. The Directlink Joint Venturers submit that the Commission's reasoning remains valid for Directlink and that the incremental benefits approach continues to be inappropriate.

The Allen Consulting Group explained the considerable shortcomings of the incremental benefits approach suggested by NERA and others in the early stages of Murraylink case[17]:

> Accordingly, an implication of the 'incremental benefits' methodology is that the regulatory cost for Murraylink would be set at the ODV, *minus* the benefits that Murraylink creates as an MNSP that it is unable to capture (as revenue). That is, the ODV would be adjusted downwards by the amount of benefits created by Murraylink as an MNSP that other market participants are able to enjoy at no cost (that is, the benefits that they are able to 'free ride' upon).
>
> When expressed in this way, it is difficult to argue that the 'incremental benefits' valuation methodology that is advanced in the submissions results in a regulatory cost for Murraylink that could be considered reasonable.
>
> The justification for an 'escape clause' for an MNSP stems from the fact that the rules for the national electricity market and their administration have a profound effect on the capacity of MNSP to capture the benefits that they create. The purpose of the 'escape clause' is to provide the ability to convert to a regulated interconnector should

[16] NERA, *Comments on the Murraylink's Application for Regulated Status*, January 2003, submitted by TransGrid to the Commission, p. ii.

[17] The Allen Consulting Group, *Application for Conversion of Murraylink to a Prescribed Service, Commentary on economic issues*, April 2003, submitted by Murraylink Transmission Company to the Commission on 8 April 2003, p. 11.

> either the rules – or the administration of the rules – change or fail to change as expected and so affect the extent to which the benefits created can be captured.
>
> Against this background, it would appear counter-intuitive to set a regulatory value for a converting MNSP which had the effect of compensating it for *all* of the market benefits it creates *except* for those it was unable to capture as an MNSP.
>
> More generally, the 'incremental benefits' valuation methodology has the effect of giving market participants a right to continue to receive for free benefits that technically they are 'free-riding' upon.[18] While the parties (and their representatives) who receive benefits at no cost would be expected to support the continuation of such a situation, there is no strong economic or public policy reason for preserving the status quo. Rather, the appropriate response in the face of a market failure such as 'free-riding' is to seek to correct that market failure – or to apply any rules that were put in place to address such a market failure should it arise. Clause 5.2.5 of the National Electricity Code and the Commission's statements in the draft Statement of Regulatory Principles were designed to deal with this potential for free-riding, and should be applied.

The Directlink Joint Venturers strongly concurs with these points.

The Commission considered and rejected the 'incremental benefits' approach in its Preliminary View and its final Murraylink decision for good reason.[19]

> The Commission also notes the concerns raised by interested parties that the option to apply for conversion enables MNSPs to effectively bypass the requirements of clause 5.6.6 of the code and obtain regulated status more easily. However, the Commission does not believe that the incremental benefits approach is the appropriate method for achieving symmetry between the processes used by MNSPs who apply for conversion and transmission augmentations proposals made under Chapter 5 of the code. The Commission considers that as the conversion option has been included in the code, a measurement of the market benefits of an interconnector should be aligned to the intention of the regulatory test as closely as possible.
>
> Therefore, the Commission considers that it should determine the market benefits that result from having Murraylink operate as a prescribed service in the NEM. If the regulatory test is applied robustly, then the test should capture the impact of the operation of Murraylink as a prescribed service on a forward looking basis.

The Directlink Joint Venturers notes that after the Commission expressed such views in its Preliminary View, NERA put forward its alternative valuation approach as described in the Directlink Joint Venturers' response to issue 7.

---

[18] 'Free riding' refers to the situation whereby agents cannot be excluded from consuming the relevant good or service (referred to as non-excludable) and so are able to receive the good or service without paying for it (insert ref). Goods or services from which agents cannot be excluded (such as national defence) are unlikely to be provided (or provided in optimal quantities) in a market, and some form of government intervention may be justified.

[19] Australian Competition and Consumer Commission, *Preliminary View - Murraylink Transmission Company Application for Conversion and Maximum Allowed Revenue*, 14 May 2003, p. 23 and Murraylink decision, p. 24.

9. Recognition that Directlink is a 'sunk' asset

Issue:

A stakeholder has suggested that the Commission should recognise that Directlink is a 'sunk' asset, its value is somewhere between its scrap value and the replacement cost of the least cost alternative, and that Directlink would presumably remain in operation, even if its application is rejected, so long as it covered its losses and operating expenditure.

Response:

The stakeholder's observation that Directlink is a 'sunk' asset is equally as valid for all transmission network assets. The Commission taking an opportunistic view to transmission regulation would have an extremely adverse effect upon the confidence of transmission investors. Specifically, if the Commission contemplated in any way setting the revenue of transmission assets at a level sufficient only to cover their marginal operating costs (presumably excluding their financing costs), the Commission would be contemplating the possibility that transmission investments made in good faith would become instantly uneconomic.

The Directlink Joint Venturers recognise that the Commission understands its Code obligations to have regard for the balance of interests of transmission users and TNSPs and for the capital intensive nature of the transmission sector, and to determine transmission revenue in accordance with economic principles set down chapter 6 of the Code. For this reason, Directlink Joint Venturers trust that the Commission would give no consideration to setting the revenue for Directlink or any other transmission asset at a level that is commercially unsustainable.

10. Real pre-tax discount rate of 9.25%

Issue:

A stakeholder has suggested that the Directlink Joint Venturers should apply a discount rate that is consistent with a rate applied to other unregulated assets in the National Electricity Market ('**NEM**') to ensure competitive neutrality. In particular, the stakeholder believes that the equity beta used to determine the commercial discount rate is inappropriate.

Another stakeholder suggests that the discount rate that the Directlink Joint Venturers has used is lower than other applications of the Regulatory Test.

Response:

In applying the Regulatory Test, the Directlink Joint Venturers proposed to use a commercial discount rate that has been estimated with reference to capital market information, following a methodology similar to that the Commission accepted in the Murraylink decision[20]. As judgement is required in interpreting market evidence, the

[20] Murraylink decision, p. 84-5.

Directlink Joint Venturers have also had regard to the discount rates adopted in other applications of the Regulatory Test.

In determining the appropriate commercial discount rate, the Directlink Joint Venturers recognised that most of the inputs to a commercial discount rate are industry-wide parameters, that is, parameters that would be the same across regulated and non-regulated activities and which cannot easily be observed from market evidence (and hence tend not to be updated mechanistically).[21] For these parameters, the Directlink Joint Venturers applied the same input values that were adopted in the estimation of their regulatory cost of capital, that is:

- nominal and real risk free rates of 5.68 per cent and 3.38 per cent, respectively, and an implied inflation forecast of 2.22 per cent;
- market risk premium of 6 per cent; and
- value of imputation credits ('gamma') of 0.50.

On the other hand, there are input parameters that are dependent on the specific nature of a particular activity. These are:

- the financing assumptions (namely, the assumed gearing level and cost of debt);
- the beta; and
- the effective tax rate.

In their conversion application, the Directlink Joint Venturers discussed assumptions adopted for these inputs in turn.

The Directlink Joint Venturers proposed a commercial discount rate that assumes a benchmark gearing ratio of 40 per cent debt-to-assets for the unregulated activities in the electricity supply industry, and that an unregulated entity with this credit rating could maintain a credit rating of BBB+. This gearing level is substantially lower than the 60 per cent gearing level assumed for the Directlink's regulated activities. The difference reflects the likelihood that the greater variance in cash flows for the unregulated activities may not permit the same level of debt financing as that of the regulated activities. With reference to the long term average of the yields predicted by the CBASpectrum service for 10 year, BBB+ rated debt, the Directlink Joint Venturers gleaned a benchmark debt margin of 1.50 per cent, implying a cost of debt of 7.18 per cent.

The Directlink Joint Venturers derived an equity beta proxy by taking the simple average of the observed equity betas for the firms listed on the Australian Stock Exchange whose primary activities were in the unregulated activities in the Australian electricity market, which implied a relevered equity beta of 1.13 for the assumed gearing level of 40 per cent debt to assets. The relevered equity beta that would be consistent with a target gearing level of 60 per cent debt to assets would be 1.70.

[21] Directlink conversion application, pp. 27-31.

This equity beta compares to the equity beta of 1.13 that was assumed for Directlink's regulated activities, implying that it has been assumed that the unregulated activities in the Australian electricity supply industry have a substantially higher level of risk than the regulated activities.

The Directlink Joint Venturers calculated a real pre-tax discount rate using the forward-transformation, that is, grossing-up the 'Officer' version of the post-tax nominal WACC for taxation, and then deducting inflation (using the Fisher transformation). Accordingly, it has been assumed that the effective tax rate is equal to the statutory tax rate.

The Directlink Joint Venturers' base case commercial discount rate of 9% is consistent with the discount rate accepted by the Commission in its Murraylink decision and falls within the range of discount rates applied in previous applications of the Regulatory Test:

- the discount rate applied by NEMMCO in its SNI analysis was a real pre-tax discount rate of 11 per cent[22];
- VENCorp in its Latrobe to Melbourne study applied a real pre-tax discount rate of 8 per cent[23]; and
- Powerlink Queensland in its application for a proposed new network asset (Darling Downs Area) used a commercial discount rate of 10 per cent[24].

11. Value of unserved energy

Issue:

A stakeholder believes that the Directlink Joint Venturers should apply a value of unserved energy of $10,000 per MWh in accordance with the provision of the Code in calculating the net market benefit of an investment to ensure competitive neutrality.

Response:

With consideration for the issues of Code compliance and competitive neutrality, the Directlink Joint Venturers still firmly agree with TEUS[25] and VENCorp that unserved energy is appropriately and accurately valued at $29,600 per MWh for the purposes of transmission planning—and applications of the Regulatory Test, in particular.

[22] NEMMCO*, IRPC Stage 1 Report Update, Proposed SNI Interconnector*, November 2000, p. 29.

[23] VENCorp, *Update on the Economics of Optimising the Latrobe Valley to Melbourne Electricity Transmission Capacity,* April 2003, p. 4.

[24] Powerlink Queensland, *Application Notice: Proposed New Large Network Asset – Darling Downs Area,* 31 March 2003, p. 23.

[25] TransÉnergie US Limited, *Estimation of Directlink Alternative Projects' Market Benefits*, April 2004, pp. 34-5.

In support of this view, the Directlink Joint Venturers note that the Commission clarifies in its Revised Regulatory Test the need to recognise the value of reductions in loss load (VENCorp's value of customer reliability or '**VCR**') that VENCorp currently sets at $29,600 per MWh.[26]

Accordingly, TEUS has calculated the inter-regional market benefits for the alternative projects using a both values of unserved energy, that is, $29,600 per MWh and $10,000 per MWh. TEUS believes that $29,600 per MWh is the more accurate and appropriate value. For the purposes of the Regulatory Test, the Directlink Joint Venturers used $29,600 per MWh as the basis of its credible scenarios and considered $10,000 per MWh as a sensitivity test.

When coming to its view on the appropriate value of unserved energy for the purposes of transmission planning, VENCorp grappled with the issues of Code compliance and competitive neutrality.[27]

VENCorp noted 1(b)(ii) of the Regulatory Test state that:

> In determining the *market benefit*, the following information should be considered:
>
> (b) reasonable forecasts of:
>
> (ii) the value of energy to electricity consumers as reflected in the level of VoLL;

VENCorp interpreted the Commission's reference to 'VoLL' to be a reference to the value of unserved energy to consumers, rather than the wholesale market price cap. This interpretation is based on note 6(a) of the Regulatory Test that applied at the time, which states:

> "Modelled projects should be developed within market development scenarios using two approaches: 'least-cost market development' and 'market-driven market development'. The least-cost market development approach includes modelled projects based on a least-cost planning approach akin to conventional central planning. The proposals to be included would be those where the net present value of benefits, such as fuel substitution and reliability increases, exceeds the costs."

VENCorp subsequently concluded that:

> As noted in Section 4.1 above, if "reliability increases" are valued at a level below the marginal cost to consumers of unserved energy (the VCR), then the resultant level of supply reliability delivered to consumers will be inefficiently low. In light of this consideration, it is VENCorp's view the value of "reliability increases" must be assessed with reference to the VCR.
>
> Any over-riding considerations of competitive neutrality give rise to a further need to ensure that the VCR is consistent with the fundamental driver of reliability levels in the wholesale market, which is the Reliability Panel's reliability standard. As noted in Section 4.1 above, the VoLL implied by the Reliability Panel's reliability standard is

[26] Australian Competition and Consumer Comission, *Final Decision: Revenue of Regulatory Test for network augmentations* ('**Revised Regulatory Test**'), 11 August 2004, p. 9.

[27] VENCorp, *Response to Submissions: Final Report – Value of Unserved Energy to be used by VENCorp for Electricity Transmission Planning*, 23 May 2003. pp. 5-7.

> not less than $26,500 per MWh. This value is consistent with the VCR determined during the recent study commissioned by VENCorp.

This view is implicitly supported by TransGrid and Powerlink who recently used $29,600 per MWh as the value of unserved energy in their QNI Upgrade Report.[28]

The Directlink Joint Venturers strongly concurs with VENCorp's views and therefore, continues to submit that $29,600 per MWh is the most credible the value of unserved energy and should form the basis of its credible scenarios.

12. Criteria of the selection of alternative projects

Issue:

A stakeholder hopes that the list of alternative projects that the Directlink Joint Venturers have identified reflect all the projects that would maximise net market benefits of the investment. The stakeholder is concerned that the alternative projects used to determine the 'net market benefits' need to be 'relatively substitutable'.

Another stakeholder believes that Directlink's alternative projects should offer a *similar level of service* benefit rather than purely *technical* benefits. Adoption of the second benchmark could result in the exclusion of demand management and generation projects.

Response:

The stakeholder responses reflect a a level of uncertainty as to what should be defined as Directlink's alternative projects for the purposes of the Regulatory Test. Nonetheless, the Directlink Joint Venturers has made a reasonable interpretation of the Commission's requirements for the selection of alternative projects, and demand management and generation projects have not been inappropriately excluded.

The Commission's previous statements in the Murraylink are not conclusive as to the criteria for the selection of Directlink's alternative projects. In terms of the breadth of the scope of alternative projects, the Commission has stated[29]:

> As noted in chapter 3, the Commission is applying the regulatory test to determine the appropriate revenue to apply to Murraylink and in applying the regulatory test, the Commission does not believe that alternative projects are required to deliver the exact same level of service as the proposed project.

In terms of the limitations of the scope of alternative projects, the Commission has stated:

> Consistent with the findings of the National Electricity Tribunal and the Supreme Court of Victoria regarding SNI, the Commission considers that alternative projects should contain a level of similarity to the proposed augmentation. The Commission

[28] TransGrid & Powerlink Queensland, *Benefits of upgrading the capacity of the Queensland – New South Wales Interconnector (QNI), A preliminary assessment* ('**QNI Upgrade Report**'), 19 March 2004, p. 27.

[29] Murraylink decision, p. 52.

considers that an alternative project could be considered a reasonable alternative if it delivers substantial gross market benefits to all regions and or nodes.

The Directlink Joint Venturers sought to interpret the Commission's previous statements in a reasonable manner. As a result, BRW set down its criteria for the selection of Directlink's alternatives.[30]

Directlink's alternative projects:

- are to be relevantly substitutable for Directlink but not necessarily equivalent;
- include all components necessary for them to be technically feasible;
- should attempt to address in part some of the existing and emerging local network constraints that Powerlink Queensland and TransGrid have recently identified[31];
- should make use of existing infrastructure and/or commercially available current technology;
- are to have real power transfer capabilities consistent with the limitations of the surrounding network infrastructure and not necessarily the same as Directlink - BRW chose the amount of real power transfer capability needed to provide the level of network support required in the Gold Coast and far north-eastern NSW;
- can provide reactive power transfer or generation capability - BRW chose the amount of reactive power capability necessary to make each alternative technically feasible. Where appropriate BRW has added the cost of additional reactive plant into the alternatives to the extent to make each alternative technically feasible. It is assumed that the TNSPs have their own reactive plant capital programs to address reactive demand growth and are not included as part of the alternative projects;
- shall use control schemes to an extent where the benefits exceed the cost of the control scheme and are technically acceptable - BRW has considered control schemes that provide post-contingent support are technically acceptable and justified. Therefore their costs and benefits have been defined for inclusion into the Regulatory Test. Control systems for system restart or system stability enhancement are not recommended for inclusion in the Regulatory Test;
- shall appropriately address environmental issues only to an extent that would be necessary for the alternative projects to gain environment and planning approval. BRW adopted the recommendation of URS Australia whose report on the environmental issues in the Tweed Heads and Byron Bay areas accompanies the Directlink conversion application.

According to these criteria, BRW selected 7 alternative projects[32]:

0. Modified Directlink;

---

[30] Burns and Roe Worley, *Directlink, Selection and Assessment of Alternative Projects to Support Conversion Application to ACCC* ('**BRW Report**'), May 2004, pp. 14-5.

[31] As documented in Powerlink Queensland, "Emerging Transmission Network Limitations – Electricity Transfer to the Gold Coast and Tweed Area", August 2003 and TransGrid, "Emerging Transmission Network Limitations on the NSW Far North Coast", August 2003

[32] BRW Report, p. V.

1. DC Link using HVDC Light® (or equivalent) technology;
2. DC link using conventional HVDC technology;
3. AC link using a phase shifting transformer;
4. AC link using a conventional auto-transformer;
5. State based AC augmentations in NSW and Queensland;
6. Demand Management and / or Embedded Generation.

The criteria that BRW set down clearly allows for the consideration of demand management and generation alternatives. BRW excluded Alternative 6 from detailed examination solely on the basis of feasibility.[33]

> BRW has assessed that Alternative 6 is not a feasible alternative on the basis of not being of sufficient size to make any impact on the load growth. The NSPs have already included planned demand-side and embedded generation schemes in their load forecasts, therefore the underlying growth is substantially greater. Alternative 6 would need to implement additional capacity above and beyond what is already planned. BRW does not believe this is practical and has therefore recommended that Alternative 6 not be included as an alternative project for the purposes of applying the Regulatory Test.

So it can be seen that the alternative projects that BRW has selected and assessed provide a comprehensive list of Directlink's alternative projects. They exclude no reasonable alternative that has the potential to maximise net market benefits.

13. Planning criteria for network deferral periods

Issue:

The deferral periods put forward for Directlink's alternative projects do not satisfy the reliability criteria that Powerlink is obliged to meet.

Response:

The Directlink Joint Venturers acknowledge Powerlink's Code and licence obligations to ensure that power transfer is available through the power system that is adequate to supply the forecast peak demand during the most critical single network element outage.

The Directlink Joint Venturers recognise that they are not in a position to bring forward a detailed technical specification for Directlink's post contingent support that would satisfy Powerlink's concerns in the time that Powerlink has available to develop reliability augmentations in the Gold Coast.

[33] BRW Report, p. VI.

However, there still remains substantial opportunity for Directlink as a prescribed service to provide network support in the northern NSW region from the summer of 2006/07 and possibly in the Gold Coast region in the longer term.

The Directlink Joint Venturers is reviewing these opportunities in consultation with TransGrid and Powerlink, and they will present supplementary information to the Commission in the near future that describes the nature and benefits of the network support that is technically and economically feasible.

CORPORATE FINANCING AND TAXATION

14. ACCC should 'knock down' Directlink Joint Venturers' proposed WACC

Issue:

A stakeholder submits that the Directlink Joint Venturers' proposed nominal 'vanilla' weighted average cost of capital ('**WACC**') of 9.29% is around 1% higher than the 'already inflated' returns that Commission has granted in other TNSP revenue decisions. On this basis the Commission should 'knock down' the Directlink Joint Venturers' WACC to a level more consistent with other regulated transmission.

Response:

The Directlink Joint Venturers submits that the Commission's view of the appropriateness of the Directlink Joint Venturers' WACC should take full account of the merits of the case that the Directlink Joint Venturers has presented as to the methodology they have applied and how they have determined the required parameters.

The Directlink Joint Venturers has applied the Commission's standard approach to determining rates of return in recent transmission revenue decisions. This has been to calculate and apply what has become known as the 'vanilla' form of the post-tax nominal WACC.[34] The estimation of a vanilla WACC requires an estimate of the cost of equity associated with a project, and estimate of the cost of debt, and an assumption about the share of equity and debt in the financing of the asset.

To guide the estimation of the cost of equity, the Directlink conversion application applies the simple form of the capital asset pricing model ('**CAPM**'), which estimates the post-tax nominal return on equity in terms of the nominal risk free rate, the market risk premium and the relevant equity beta. Of the CAPM parameters, only the equity beta is specific to any particular asset—all other inputs are economy-wide factors that affect the required rate of return on all assets.

The Directlink conversion application has also adopted the Commission's standard approach of adopting a benchmark for the cost of debt, rather than the actual debt costs of the project, as well as a benchmark assumption about the share of debt in

[34] Examples include the Commission's recent transmission revenue cap decisions for Transend (2003), Murraylink Transmission Company (2003), SPI PowerNet (2002) and ElectraNet SA (2002).

the financing of the asset, reflecting the Code's emphasis on incentive regulation.[35] The cost of debt has been derived with reference to the prevailing cost of debt finance in the debt markets. The average of the estimated cost of equity and the observed cost of debt (weighted by the respective shares of equity and debt in the financing of the asset) can then be used as an estimate of the WACC for the asset.

The Directlink conversion application provides estimates and substantiation of the relevant WACC parameters including:

- The risk free rate of return and the inflation forecast;
- The market risk (equity) premium;
- The beta associated with the proposed regulated activities; and
- The assumed finance structure and debt premium.

In addition to calculating the cost of equity and the cost of debt, the application also discusses the use of benchmark assumptions for the estimation of dividend imputation credits (gamma) and the appropriate allowance for the transactions costs of debt and equity.

The Directlink Joint Venturers stands by its methodology and market evidence presented in the application. They submit that the nominal 'vanilla' WACC they have put forward is consistent with the Commission's standard approach and its obligation to determine a WACC for Directlink's network service that has regard to the risk adjusted cash flow rate of return required by investors in commercial enterprises facing similar business risks to those faced by TNSPs in the provision of that network service[36].

REVENUE DETERMINATION

15. Application of Draft Regulatory Principles

Issue:

A stakeholder considers that it would be appropriate to apply the up-dated principles of the Draft Regulatory Principles to determine Directlink's regulated revenue to enhance regulatory certainty because, under these principles:

- Directlink's asset based would be locked in provided there is non-deficiency with the original asset value and it should not be subject to re-optimisation; and
- Directlink's capital and operating expenditure would be set ex-ante over its 10 year regulatory control period.

[35] Clause 6.2.4(a) of the Code.

[36] Clause 6.2.4(c)(4) of the Code.

Response:

The 'up-dated principles' to which the stakeholder could be referring are the principles set out in the Commission's Draft Capital Expenditure Framework discussion paper.[37] The Commission has since released its actual Revised Draft Regulatory Principles.[38]

Directlink Joint Venturers would also prefer that Directlink's asset value is not subject to re-optimisation. They are content for the Commission to determine capital and operating expenditure would be set ex-ante over its 10 year regulatory control period in a manner that reflects all efficient expenditure, as the Directlink Joint Venturers have proposed.

16. 10 year regulatory period

Issue:

One stakeholder believes that the Directlink Joint Venturers should be allowed a 10 year regulatory control period where:

- The Directlink Joint Venturers' asset base consistent with the alternative project that satisfies the regulatory test; and
- The Commission is satisfied that there is minimal scope for efficiency gains.

Another stakeholder believes that there are advantages to having 5 year period the same as other TNSPs. If the Commission does grant a 10 year period, the stakeholder believes that the Commission should have power to control cost pass-throughs and reopen decision if circumstances change such as in the case where another interconnector is built. The stakeholder believes that it is undesirable to review Directlink's service standards after 5 years if it has a 10-year regulatory control period.

Response:

The Directlink Joint Venturers continue to propose that a 10 year regulatory control period is appropriate.

As stated in the Directlink conversion application, this regulatory control period is justified given the high initial and ongoing efficiency of Directlink's operation and maintenance, the unlikelihood of unforeseen capital expenditure, and the substantial cost savings to the Commission, the NEM participants and the Directlink Joint Venturers associated with deferring the next regulatory review process.

[37] Australian Competition and Consumer Commission, *Supplementary Discussion Paper, Review of the Draft Statement of Principles for the Regulation of Transmission Revenues Capital Expenditure Framework*, ('**Draft Capital Expenditure Framework**'), 10 March 2004.

[38] Australian Competition and Consumer Commission, *Draft Decision - Statement of Principles for the Regulation of Transmission Revenues*, ('**Revised Draft Regulatory Principles**'), 18 August 2004.

In addition, a regulatory period of 10 years provides certainty that encourages private sector investment and attracts new entrants to the NEM. Transmission investments are very long term investments for which investors seek as much certainty as is reasonably possible, especially for regulated investments where returns are designed to reflect lower levels of risk. Upon appropriate conditions, such as those presented by Murraylink, the Commission's acceptance of an almost 10 year regulatory control period would provide a positive signal to investors that the Commission is willing to provide a good level of certainty where it can.

The Commission determined a 10 year regulatory control period for Murraylink Transmission Company.[39] The Directlink Joint Venturers can see no advantages to the Commission determining a 5 year period for them simply because it would be the same as the regulatory control period the Commission determine for the TNSPs other than Murraylink.

Stakeholders need not be concerned that a longer regulatory control period creates additional opportunities for a TNSP to pass through unexpected costs. By its very nature, subject to the Commission's approved pass through rules, the Commission's revenue determination controls the extent to which the Directlink Joint Venturers may pass through its costs for what ever length the regulatory control period may be. Further, the Directlink Joint Venturer's proposed pass through rules provide an explicit opportunity for the Commission or the Directlink Joint Venturers to bring about the pass through of cost reductions as well as cost increases.

The Directlink Joint Venturers strongly submits that the Commission should not create an opportunity for the Commission to reopen its revenue decision if circumstances change such as in the case where another interconnector is built. Such an opportunity would expose the Directlink Joint Venturers to risk well above that experienced by other regulated transmission businesses and, thus, would be highly inconsistent with the regulatory WACC determined for it.

In their conversion application, the Directlink Joint Venturers proposed to the Commission that its performance incentive scheme be reviewed after 5 years because the Commission determined that this was appropriate in the Murraylink case where the Commission determined a 10 year regulatory control period.[40]

> The Commission believes, given the 10 year regulatory period, it is appropriate to review its conclusions [on Murraylink's performance incentive scheme] after 5 years.

After 5 years, the Commission and the Directlink Joint Venturers will have more information about the performance of Directlink as it provides a prescribed service and the Commission's performance incentive regime is likely to be much more advanced.

So, while a review of the Directlink Joint Venturers' performance incentive scheme creates an element of uncertainty for them within their 10 year regulatory control period, the Directlink Joint Venturers see no other reason why it is undesirable for the Commission to review Directlink's performance after 5 years.

[39] Murraylink decision, pp. 160-2.

[40] Murraylink decision, p. 177.

17. Revenue of a calendar year basis

Issue:

A stakeholder has suggested that the Commission make its determination for the Directlink Joint Venturers on the basis of financial years, which is consistent with other transmission and distribution decisions.

Response:

The Directlink Joint Venturers would welcome the Commission's revenue determination on a July-June financial year basis.

18. Service standards

Issue:

A stakeholder has suggested that the Directlink Joint Venturers' proposed performance incentive scheme places inadequate revenue at risk and there is need to place a competitive discipline on TNSPs.

Response:

For the purposes of the performance incentive scheme in their application, the Directlink Joint Venturers have proposed to place 1% of their regulated revenue at risk, which is consistent with the levels of revenue at risk that the Commission has determined recently for other TNSPs.[41]

The Directlink Joint Venturers note that the Commission is currently at an early stage of its work to develop the principles that it will apply to the reporting of performance and the establishment of performance incentives for TNSPs. This work is challenging given the current NEM market design and the role and regulation of TNSPs in the market. Most importantly, when considering whether a higher level of TNSP revenue should be placed at risk in relation to performance or whether a TNSP should be subjected to competitive disciplines, the ACCC must have regard to the material adjustment that would have to be made to the TNSP's WACC.

At this stage, while the Commission continues to determine regulatory WACCs in the manner it does—assuming a low variance in cash flows that permits a higher level of debt financing than for unregulated activities—the Directlink Joint Venturers believe that the Commission could only justify placing small amounts of TNSP revenue at risk.

[41] Examples include the Commission's recent transmission revenue cap decisions for Transend (2003), Murraylink Transmission Company (2003), SPI PowerNet (2002) and ElectraNet SA (2002).

At the request of the Commission, the Directlink Joint Venturers is reviewing its proposed availability projections for Directlink so that they reflect outages of one or more transfer elements and a supplementary document will be provided separately.

19. Pass through rules

Issue:

A stakeholder is concerned that the Directlink Joint Venturers will have an advantage over a competitive business by being able to pass through unexpected costs and that the Directlink Joint Venturers will not pass through of cost reductions.

Response:

Regulated TNSPs by definition do not operate within a flexible competitive environment. Their revenues are determined on an ex-ante basis using the best information available at that time. While TNSPs can manage efficiently most of the risks within a fixed revenue cap—for example, through commercial or self-insurance for which allowance would be made in the revenue—there are some risks that are outside of a TNSP's control or management, and that could substantially increase their costs and/or decrease the value of its regulatory asset base. TNSPs are not compensated for accepting the full financial impact of these extreme risks.

The Directlink Joint Venturers has put forward a set of pass through rules that describe a detailed procedure for how the Directlink Joint Venturers or the Commission could instigate the adjustment of the Directlink Joint Venturers' maximum allowable revenue and/or capital expenditure program to deal with the cost impacts of some extreme, unlikely but predefined events. These pass through rules are identical to those that the Commission accepted for the Murraylink Transmission Company[42] and provide an explicit opportunity for the Commission or the Directlink Joint Venturers to bring about the pass through of cost reductions as well as cost increases.

20. Allocation of Directlink revenue within and between the regions

Issue:

One stakeholder believes that Directlink's benefits are localised to the Gold Coast and northern New South Wales areas and that Directlink transmission charges should be apportioned to customers who benefit.

Another stakeholder has highlighted that the allocation of Directlink's revenue will depend on the confirmation of Directlink as transmission and the location of the regional boundary.

[42] Murraylink decision, pp. 129-33.

Response:

Directlink's economic benefits will be spread throughout the NEM. The Directlink Joint Venturers will consider the allocation of Directlink's revenue when NEMMCO has advised the Directlink Joint Venturers of the location of the regional boundary.

Directlink provides two principle kinds of benefits:

- Network augmentation deferral benefits, which arise from the extent to which a project can defer or avoid the 'default reliability augmentations'—that is, further network augmentations that would be necessary for TNSPs to met their network performance standards; and

- Benefits that arise from Directlink's ability to enable inter-regional power flows, which include cost savings by enabling more efficient generation dispatch, deferment or avoidance of market and reliability entry generation plant, and reductions in costs to customer associated with unserved energy.

The capital costs savings associated with Directlink's network deferral benefits will be experienced, in the first instance, by TNSPs and would be ultimately passed on to transmission customers as a whole, rather than in a localised area.

Directlink's inter-regional benefits are spread throughout the NEM and will ultimately result in lower electricity spot prices.

The Code requires that the Directlink Joint Venturers' revenue be allocated to the regions in which Directlink is located.[43] So the principal factor for the Directlink Joint Venturers to consider when it determines how its regulated revenue will be allocated is the location of the regional boundary.

The Directlink Joint Venturers has asked NEMMCO to confirm the location of the Queensland – New South Wales regional boundary in the vicinity of Directlink and the Directlink Joint Venturers understand that NEMMCO has the matter in hand.

[43] Clause 6.3.2(d) of the Code.