SUBMISSION TO ACCC
by Duke Energy International
In response to the ACCC 19 December 2000 Draft Decision
Access Arrangement for the Moomba-Sydney Pipeline

9 February 2001

I. EXECUTIVE SUMMARY

Duke Energy International (DEI), as the owner of the Eastern Gas Pipeline (EGP), will be materially affected by the Commission's Decision on the Moomba-Sydney Pipeline (MSP) access arrangement. Because these two pipelines are in direct competition, the Decision will profoundly affect prices and market shares for the EGP. The manner in which the Draft Decision was made has paid insufficient regard to this crucial competitive dynamic.

DEI has argued, in its current appeal to the Australian Competition Tribunal, that Gas Code coverage of pipelines which compete with each other is not consistent with the aims of Australian Competition Policy. Applying regulation to situations in which competitive discipline is available creates numerous problems.

Nowhere are these problems more clearly evident than in the case of the ACCC-proposed access terms for the MSP. In brief, the consequences of the ACCC's Draft Decision are:

- Revenue impacts on MSP will be slight as the Gas Transportation Deed guarantees minimum payments from AGL Wholesale Gas Limited (AGLWG) until January 2007;
- Revenue impacts on EGP will be grave as it will be forced to attempt to match the reference tariff in order to compete;
- The recommended MSP tariffs are far below average cost for the EGP;
- Therefore it is primarily EGP, rather than the covered MSP, which will bear the financial consequences of the Commission's tariff decision;[1]
- Gas producers will have every incentive to raise gas molecule prices to capture the revenues "liberated" from the pipelines. There is no certainty that gas consumers will capture all or even the majority of the benefit of this regulatory decision;
- In the event that EGP is not able to sustain pricing at the new level proposed for the MSP, the Cooper Basin producers would have the opportunity to increase their gas molecule price relative to the Longford molecule price without altering the relative attractiveness of delivered gas to Sydney from either source;
- In this event, the fledgling inter-basin competition for gas production would be significantly distorted as a direct result of regulatory intervention in the pipeline market;
- The regulatory intentions signalled by this Draft Decision, if upheld in the Final Decision, will undoubtedly deter and delay the pipeline investments

[1] This outcome is at odds with the objective expressed in section 8.1 (b) of the Gas Code: replicating the outcome of a competitive market.

> which are needed to foster upstream and downstream competition in the potentially fast-growing natural gas industry.[2]

DEI submits that these consequences are, contrary to intention, injurious to competition in the pipeline market, injurious to competition between gas producers, unlikely to yield significant benefits to consumers in the short term, and almost certain to be detrimental to consumers in the long term because of the deterrent effect on investment in facilities-based competition among pipelines. Such an outcome appears inconsistent with section 2.24 (e) of the Gas Code.

It is recognised that, as the Moomba-Sydney Pipeline is currently a covered pipeline under the Gas Code, the ACCC has a statutory obligation to consider an Access Arrangement, which it may only accept once the relevant criteria are satisfied. This submission argues that, in its Draft Decision, the Commission has not had sufficient regard to the fact that the Moomba-Sydney Pipeline faces direct competition from the Eastern Gas Pipeline. Had this fact been taken fully into account, DEI submits that different conclusions would have to have been reached on several key elements of the Commission's Decision.

Consequently, DEI requests that in its Final Decision, the Commission reconsider its approach to the following elements of its decision:

- initial valuation of the Moomba-Sydney Pipeline; and
- depreciation treatment,

with a view to utilising instead the approaches noted in this submission.

Regarding the volume assumptions to be used in deriving a reference tariff, DEI does not support NERA's proposal for the "defined capacity" approach.

II. INTRODUCTION

The Commission published its Draft Decision on the Eastern Australian Pipeline Limited (EAPL) Access Arrangement for the Moomba-Sydney Pipeline System on 19 December 2000. This Draft Decision proposed very significant reductions to the mainline reference tariffs, and slight reductions to the tariffs to destinations served by laterals of the pipeline system.

As the Commission's Draft Decision raises a number of issues of importance to DEI Energy International, as well as to the competitive landscape in the natural gas industry more broadly, DEI feels it is necessary to draw these matters to the Commission's attention.

III. IMPACTS OF DRAFT DECISION

The Commission's Draft Decision would result in very significant reductions to the mainline reference tariffs on the Moomba-Sydney Pipeline system. For example, the reference tariff for firm forward transport from Moomba to Sydney has been reduced

[2] These outcomes are at odds with the objective expressed in section 8.1 (d) of the Gas Code: not distorting investment decisions in Pipeline transportation systems or in upstream and downstream industries.

for 2001 from $0.71/GJ (EAPL price) to $0.43/GJ (ACCC price). This represents a reduction of 39%, on a price which had already been discounted from higher levels as a result of competitive entry by the Eastern Gas Pipeline.

A. ON MSP CASHFLOWS

Despite this tariff reduction, the Commission believes that the impact on EAPL's actual cashflows over the five year regulatory period will not be affected significantly. The Commission's reasoning is set out in their media release accompanying the 19 December 2000 publication of their Draft Decision:

> *"While the amendments proposed by the ACCC will reduce the reference tariffs proposed by EAPL, EAPL's actual cash flows are not expected to be significantly affected during the five year regulatory period. The Gas Transportation Deed negotiated between EAPL and AGL Wholesale Gas Limited (AGLWG) in June 2000 specifies a minimum level of monthly payments that AGLWG must make to EAPL until 1 January 2007. These payments resulted from the renegotiation of the Gas Transportation Agreement (GTA), a long term haulage contract between EAPL and AGLWG executed in 1994 which accounted for a large part of the pipeline's capacity."*[3]

B. ON EGP

The Eastern Gas Pipeline, which commenced operation in September 2000, competes directly with the Moomba-Sydney Pipeline to deliver gas to Sydney and Canberra. EAPL's volume predictions for 1999 to 2014 contained in its access arrangement information, forecast a significant loss of volume to the Eastern Gas Pipeline during the period 2001 to 2005. The Commission's 19 December 2000 media statement notes that tariffs on the Moomba-Sydney Pipeline had already fallen by 7 per cent since the access arrangement was lodged with the ACCC. This price reduction was acknowledged by the Australian Pipeline Trust (APT) to be a competitive response by EAPL to the entry of the Eastern Gas Pipeline into the Sydney and Canberra markets.

Given this rivalry between the two pipelines, it inevitably follows that when prices on the Moomba-Sydney Pipeline are reduced, either by EAPL or by regulatory intervention, the Eastern Gas Pipeline must respond. The firm forward transport tariff proposed by the EGP in its draft Access Undertaking to the ACCC was $0.86/GJ. If this price were reduced to match the $0.43/GJ level proposed in the Draft Decision, the revenue from all affected contracts would be reduced by 50%.

Unlike the Moomba-Sydney Pipeline, the Eastern Gas Pipeline does not have contracts which provide for guaranteed revenue over most of its capacity. To the contrary, the Eastern Gas Pipeline is an entrepreneurial pipeline which depends on winning new volumes at competitive market prices in order to be financially viable. The Commission's Draft Decision has set a new benchmark price for transport of contestable volumes of gas to Sydney at a level which is approximately half the average cost level for the EGP. The EGP is fully exposed to the Commission's

3 "ACCC Issues Draft Decision on Moomba to Sydney Pipeline", ACCC media release, MR 357/00, 19 December 2000.

pricing decision, whereas the MSP is, by the Commission's own admission, scarcely exposed at all.

Putting this in another way, the MSP's guaranteed revenue from existing contracts is believed by the Commission to cover its fixed costs, enabling it to price new volumes at or near marginal cost, whereas the EGP must either price new volumes at average cost or fail to cover its fixed costs.

For this reason, the Commission's Draft Decision will inevitably distort competition between the two pipelines in a way which, ironically, is favourable to the covered pipeline and extremely detrimental to its competitor—which is not even the subject of the Commission's inquiry.

C. ON INTER-BASIN COMPETITION

In the first instance, the Commission's proposed tariffs would place the Eastern Gas Pipeline in the invidious position of having to choose between reducing its tariff to a level equating to 50% cost recovery in order to stay competitive with the Moomba-Sydney Pipeline for contestable gas volumes, or to reduce its tariff by a lesser amount and risk the loss of substantial new business.

In the event that it was not commercially feasible for the EGP to fully match the price reduction imposed on the MSP, it would create an opportunity for the Cooper Basin gas producers to raise their gas molecule price for new gas sales to Sydney by the amount of any tariff differential between the MSP and EGP. Doing so would have no adverse impact on the sale of delivered Cooper Basin gas in Sydney, as the delivered price would still be equal to the delivered price of Longford gas via the EGP.

This relatively likely scenario would result firstly in the Cooper Basin producers, rather than gas consumers, obtaining the benefit from price reductions on the Moomba-Sydney Pipeline, and secondly in a permanent tilt to the competitive playing field between the Cooper Basin and Gippsland Basin gas producers regarding sales to the Sydney and Canberra markets.

One might object that this scenario presupposes no ability of consumers to detect adverse price changes in Cooper Basin gas molecules, and no ability on the part of regulators to act to prevent them. However that is precisely the situation with which consumers and regulators are faced. The actual price of gas molecules is confidential and unregulated. There is no prohibition against price discrimination by gas producers. Any attempts by consumers to 'reverse-engineer' the gas molecule price by subtracting transportation charges from delivered gas prices would be frustrated by the fact that the majority of MSP-transported gas is subject to existing long-term contracts, which are presumably similar in character to the Gas Transportation Deed, so that any price increase would only be apparent in incremental gas sales. The visibility of such a price change would be substantially diluted by the larger quantity of gas under long-term contracts.

D. SHORT TERM IMPACTS ON CONSUMERS

Clearly the Commission intended that consumers would benefit from the proposed reductions to reference tariffs. However, it is unclear whether these consumer benefits can be realised, even in the short term. The quantum has probably been overstated by the Commission. The following factors give rise to concerns that any short-term consumer benefits will be indirect, uncertain, and in any case small in magnitude.

1. Gas producer capture of "liberated" pipeline revenues

A reduction in pipeline tariffs for new contestable volumes presents a rare opportunity for gas producers to increase their prices for incremental gas volumes virtually without detection, and without any impact on the total volume of gas sold in the major destination markets. To assume that this will not occur, and that consumers will instead obtain the full benefit of pipeline tariff reductions, appears unrealistic.

If one takes residential gas consumers, whose average price of delivered gas in Sydney is approximately $12/GJ[4], the prior EAPL tariff of $0.71/GJ represents only 6% of the final gas price. Even if the pipeline tariff reduction were fully passed on to residential customers, the effect would be slight (e.g. 39% of 6% = 2% of final gas price). If it were not fully passed on, it seems unlikely that residential consumers would notice—especially when one considers that it would apply only to a small percentage of the gas volume sold in Sydney during the access arrangement period.

2. Allocation of costs to lateral pipelines

The Commission appears to have accepted EAPL's argument that the economics of lateral pipelines is less favourable than that of mainlines. As a result, the ACCC indicative tariffs reflect considerably higher distance-based charges for the lateral pipelines than for the trunk transmission system.

While the principles underlying this approach might appear reasonable in the circumstances applying to MSP, the method of application would have the (perhaps unintended) effect of imposing the greatest price reductions for destinations which are served by more than one pipeline, and the least price reductions for destinations which are served only by one. The table below has been constructed from information contained in the Commission's table 2.29 on page 123 of the Draft Decision.

Destination	EAPL price ($/GJ) in 2001	ACCC price ($/GJ) in 2001	% reduction	Alternative pipeline?
Sydney	0.71	0.43	39	EGP
Canberra	0.70	0.40	43	EGP
Wagga	0.63	0.39	38	Interconnect
Culcairn	0.68	0.42	38	Interconnect
Lithgow	0.77	0.74	4	NONE
Griffith	0.81	0.76	6	NONE

4 IPART's 1999 review of AGL Gas Networks Access Arrangements contains estimates of delivered gas prices to residential consumers. This magnitude of cost can also be confirmed readily from any gas customer's residential gas bill.

This table demonstrates that regulatory intervention has imposed the greatest price reductions to destination markets in which competition with other pipelines would have been expected to yield price reductions over time in any case. However for those markets in which there is no foreseeable prospect of competition-induced price reductions, namely Lithgow and Griffith, the price reductions are trivial.

This outcome appears to contrast with the generally accepted regulatory model, which involves regulatory intervention where there is genuine monopoly, and regulatory forbearance when competitive discipline is evident.

E. LONG TERM IMPACTS ON CONSUMERS

In the short term, consumers might potentially derive benefit from any price reductions which flow on to final gas prices. It does not necessarily follow that consumers will benefit from the proposed reduction to MSP reference tariffs, even in the short term, as these reductions may not actually flow through to final gas prices, for the reasons outlined above.

In the long term, however, excessive price reductions—meaning regulated prices set below the average cost of supply—will act as a disincentive to new investment in gas pipelines. Over timescales long enough to include pipeline renewals, such a lack of investment will harm consumer welfare. This point is explained more fully in section 4.1.4 of the submission by NECG Pty Ltd to the Productivity Commission's Inquiry into Part IIIA of the Trade Practices Act.[5]

In the particular circumstances of the MSP and EGP, regulatory intervention which gives almost no weight to existing competitive constraints will send a strong signal to potential constructors of other competing pipelines. Intervention, when competitive discipline is clearly capable of delivering reasonable consumer prices, will convince investors that construction of competitive pipelines is unviable—not because of competitive behaviour, but because of the prospect of regulatory intervention.

Through this mechanism, regulation can actually impede investment in facilities-based pipeline competition. DEI notes that such an outcome appears inconsistent with clause 2.24 of the Gas Code, which states that:

> *"In assessing a proposed Access Arrangement, the Relevant Regulator must take the following into account: …*
>
> *(e) the public interest, including the public interest in having competition in markets"*

IV. TROUBLESOME RESULTS OF ACCC DELIBERATIONS

DEI recognises that the ACCC is obliged to judge the reasonableness of EAPL's proposed reference tariffs, and that this necessarily involves an independent assessment of the initial asset valuation, permitted rate of return, depreciation, operating and indirect costs, and volume assumptions.

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5 See www.pc.gov.au/inquiry/access/subs/sub039.pdf

The manner in which some of these independent assessments were made, however, has had the unintended effect of prejudicing the competition for gas volumes which are not yet under contract against the new entrant Eastern Gas Pipeline.

The following subsections highlight two areas in which the Commission's Draft Decision has departed from a competitively neutral approach, and one area of concern regarding the NERA proposal for a "defined capacity" approach.

A. INITIAL VALUATION—Derivation of DORC from ORC

A significant part of the Commission's write-down of EAPL's reference tariff is accounted for by a difference in view between EAPL and the Commission regarding the initial capital base. EAPL has advanced a DORC estimate for the MSP system of $666m, whereas the Commission has determined a valuation of $502m (after adjustment for taxation issues which are unique to EAPL)[6]. All else being equal, this amounts to a reduction of 25%.

EAPL and the Commission do not disagree to such a large extent on the ORC valuation of the MSP system. The Commission's ORC figure is only 8% lower than EAPL's[7]. The major difference arises in the method of accounting for accumulated depreciation to date in deriving a DORC estimate from ORC.

EAPL proposed a method of constructing DORC from ORC which was described in detail in an August 2000 discussion paper by Agility Management. The Independent Pricing and Regulatory Commission (ACT) asked Professor Stephen King to review Agility's approach. Professor King concluded, in his November 21, 2000 paper[8] that,

> *"In summary, the Agility proposal presents a consistent method for both asset valuation and depreciation. It is consistent with the standard justification of DORC as reflecting contestable pricing. In fact it is the only methodology that is consistent with contestable pricing given assumptions 1-3 above[9]. Further, these assumptions do not constrain the approach and the approach can easily be modified to be consistent with other modelling assumptions."*[10]

The Commission acknowledged some of the attractions of the Agility approach.[11] However ultimately the Commission deemed the concept not relevant for establishing

6 See page ix of the Draft Decision.

7 See table 2.6, page 35 of the Draft Decision.

8 "Report on Agility's approach to DORC valuation," Stephen P. King, November 2000, published on ICRC's web site: www.icrc.act.gov.au .

9 These assumptions are: 1) the rate of demand growth is zero; 2) the rate of inflation is zero; and 3) there is no expected future technological change.

10 Op.cit. King. p.9.

11 For example, at page 28 of the Draft Decision, the Commission states, "The attraction of the Agility concept of DORC is that it does give a value which one might expect in a hypothetical contestable market. In using the concept as the basis for rolling forward the regulatory asset base the Commission perceived value in that the tariff profiles would be similar to those observed in a competitive market thereby avoiding price shocks and inter-temporal and inter-regional inconsistencies in pricing."

an initial capital base for the MSP because of the “artificial nature and questionable relevance of the assumptions”.[12] The particular issues cited include:

1. “Agility considered a hypothetical competitive market, however a competitive market is normally considered to set prices at marginal cost.”[13]
2. “the hypothetical contestable model used to establish the revenue profiles of new and existing assets has limited relevance to the regulated gas pipeline industry.”[14]

The first of these propositions is only valid when the firms’ fixed costs are small enough to be ignored—a condition which is not satisfied for pipelines. In the presence of fixed costs, no firms, even those in a competitive market, will survive if average prices are equal to marginal costs (unless marginal cost rises sufficiently quickly—which is not the case in this industry, where marginal cost if anything falls). The second of these propositions, that a contestable model is not relevant to the regulated gas pipeline industry, flies in the face of the present fact of real competition between the MSP and the EGP for the delivery of gas to Sydney and Canberra. The Commission does note[15] that comparability with the Eastern Gas Pipeline may be an issue. However it quickly dismisses the concern by stating that the EGP does not duplicate the MSP in either point of origin, dimensions, or capacity.

DEI submits that this dismissal is incorrect. The critical question is whether the services of the EGP substitute for the services of the MSP—which quite clearly they do from the perspective of the Sydney and Canberra gas users. In essence, the Commission’s arguments for dismissing the pro-competitive approach which is advocated in the Agility paper and supported by Professor Stephen King are predicated on an erroneous view that the MSP does not face competition.

DEI wishes to emphasise that our commerciality will be affected by the Commission’s Decision. If the EGP and MSP did not compete, then DEI would be indifferent to a decision on the MSP access arrangement. The fact that we are motivated to make a submission indicates the importance of this matter to us.

B. DEPRECIATION

The Commission reports that EAPL originally proposed a ‘5/8:3/8’ kinked depreciation schedule for its pipeline assets, under which 62.5 per cent of the asset value would be depreciated over the first half of its life, and the remaining 37.5 per cent would be depreciated over the second half.[16] EAPL’s argument for this front-loaded depreciation profile was the fact that EAPL faces significant stranded asset risk as a result of competition with the EGP.

The Commission did not accept this argument, opting instead for a straight-line depreciation. Two reasons were cited by the Commission for its rejection of EAPL’s proposal:

12 Draft Decision, p.28.
13 Ibid. p. 28.
14 Ibid. p. 29.
15 Draft Decision, p. 47.
16 Draft Decision, p. 62.

1. front-loaded depreciation was believed to be inconsistent with a Code requirement that ‘the impact on reference tariffs [of depreciation] should be consistent with the efficient growth of the market for the related services’, and
2. APT, the present owner of the Moomba-Sydney Pipeline System, wrote to the Commission in August 2000 expressing a preference for a linear depreciation schedule.

DEI submits that EAPL’s concern about stranded asset risk as a result of competition with the EGP is valid, and should be taken into account in the permitted depreciation charge. The Commission’s reasons for rejecting this approach do not withstand scrutiny. Taking the second reason first—the letter from APT—surely an access arrangement should be judged from the standpoint of economic principle, rather than the preferences which industry players may express (and change) from time to time.

One of the economic principles in this case, to which the Commission has not had adequate regard, is that the fact of competition between pipelines fundamentally alters the relationship between regulated reference tariffs and actual prices offered in the market. When (as is usually the case for covered pipelines) there is no competition, the reference tariff is likely to be the price for most customers. In contrast, when two or more pipelines compete, the regulator-approved reference tariff becomes a price ceiling. It is quite likely that actual prices in the market will be lower, but they will not be higher. In fact the downward movement in MSP tariffs since the entry of the EGP confirms this prediction.

With this principle in mind it is not at all clear that, in the circumstances, permitting a front-loaded depreciation profile would be inconsistent with efficient growth in related markets. If, by seeking a price which included front-loaded depreciation, the MSP were imposing an inefficient, growth-inhibiting tariff, customers would have the option of switching suppliers to the EGP. On the other hand, given the clear potential for asset stranding, if the MSP is prevented from recovering the initial capital through depreciation charges at a time when demand is strong (noting that the MSP is virtually at capacity now) then EAPL may ultimately under-recover its initial investment.

C. VOLUME ASSUMPTIONS

The Commission’s analytical process involves establishing a revenue requirement, then dividing this by a particular volume estimate to arrive at a reference tariff. NERA was asked by the Commission to investigate a range of possible volume estimates on which to base the reference tariff calculation. While NERA recommended use of “defined capacity” as the relevant volume, the Commission ultimately opted to follow precedent and use volume forecasts provided by EAPL.

DEI prefers the use of service provider volume forecasts to the “defined capacity” approach promoted by NERA which would, if we understand it correctly, make it impossible for any pipeline to break even unless it was at 100% (or some large proportion of) capacity. While it may incent owners of sunk investments to strive to maximise utilisation (something which we believe they would be incented to do regardless), such an unprecedented approach would have a deleterious effect on new pipeline investment.

Even modest investments in capacity, such as additional compression or looping, would be strongly deterred by such a proposal. If small investments in compression (small relative to the original cost of constructing the pipeline) could double capacity, then they would double the "defined capacity" without adding significantly to the capital costs. Under NERA's preferred approach, such an investment would approximately halve pipeline tariffs until the new capacity was nearly completely utilised. No rational pipeline owner would embark on such investments until pent-up demand was so strong that the new capacity could be filled immediately. Surely such an outcome would be inconsistent with efficient growth of related markets.

While the use of supplier volume forecasts is preferable to the 'defined capacity' approach, even this method can have some pernicious effects when regulated pipelines compete. Any equilibrium position would be inherently unstable. If one pipeline captured a slightly larger share of the market, then its reference tariff would be forced lower (because its largely fixed costs would be divided by a larger volume of gas), while the other pipeline's reference tariff would be forced higher (because its fixed costs would be divided by a smaller volume of gas). In the next round, this effect would be reinforced: the pipeline with larger market share would see its reference tariff further reduced, attracting still more volume, and making the other pipeline's reference tariff higher still.

Of course in such a situation the second pipeline with the smaller market share would probably try to match the regulated price of the first pipeline rather than charge at its reference tariff. But in this case the first pipeline would be covering its fixed costs while gaining market share, whereas the second pipeline would be either losing more market share or failing to cover its fixed costs. Fundamentally the volume forecast approach runs the risk of leading to this winner-takes-all market dynamic.

V. CONCLUSION

DEI agrees with the Commission's statement that "If gas transportation was a contestable market, it could be expected that tariffs and revenues would tend to follow the costs faced by a new entrant."[17] Unfortunately, despite the undeniable fact that the Moomba-Sydney Pipeline competes with the Eastern Gas Pipeline, the Commission's proposed tariffs and revenues do not follow the costs faced by the entrant, EGP. Instead they represent an under-recovery of EGP's costs on the order of 50%.

While this proposed outcome will have a relatively slight impact on the pipeline to which the decision applies, it will have drastic financial consequences for that pipeline's competitor. It will also undermine future competitive neutrality between the pipelines, and potentially between the Cooper and Gippsland Basin gas producers. The expected beneficiaries of this price reduction—the gas consumers of Sydney and Canberra—may in fact obtain very little benefit even in the short term. In the long term the consequences of this proposed tariff level for future investment in pipeline competition are likely to be entirely negative.

[17] Draft Decision, p. 25.