APPLICATION FOR REVISION TO ACCESS ARRANGEMENT BY GPU GASNET PTY LTD FOR ROLL-IN OF THE SOUTH WEST PIPELINE

BHP SUBMISSION

DATE: 17 January 2001

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1. Introduction

BHP thanks the ACCC for the opportunity to make a submission on the GPU GasNet Pty Ltd (GPU) application to roll the South West Pipeline (SWP) into the asset base of the Principal Transmission System (PTS).

1.1. BHP's Understanding of GPU's Requested Revisions

BHP's understanding is that GPU is seeking to roll-in $78.5[1] million ($ 31/12/00) of capital into the PTS asset base and $0.35 million of annual operating costs. The capital cost break out is as follows:

Item	**$m (99)**
Southwest Link	$59.4 m
Western System Link	$1.7 m
Lara Regulator	$3.9 m
Brooklyn Regulator	$4.1 m
Iona Regulator	$2.5 m
Iona Compressor	$3.9 m
Total	**$75.5 m**

GPU's justification for this roll-in (the increase in the capital base of the PTS would be approximately 20%) is that the SWP fails the Code's economic feasibility test, but passes the system wide benefits test. The purported system wide benefits are increased security of supply and supply competition. GPU has proposed that costs be recovered via the creation of a new South West zone (approximately 40% cost recovery) and a significant increase in the Longford Injection Charge (approximately 60% cost recovery ($NPV 47.1 million)). GPU has sought to justify their proposed Reference Tariff structure on the basis of competitive neutrality.

1.2. Summary - BHP's View

BHP believes that the ACCC should reject GPU's application outright. GPU has not demonstrated that the SWP does not pass the economic feasibility test. Even if it does not, PTS users are already paying for the key elements of system security via the Interconnect Assets roll-in and the asserted competition

[1] P31 Application for Revision to Access Arrangement by GPU GasNet Pty Ltd for the Principal Transmission System; Southwest Pipeline, 11 September 2000

benefits to be facilitated via the SWP roll-in are based on extremely broad and unsubstantiated assumptions.

GPU's proposed tariff structure does not comply with the Code and is clearly not in alignment with stated Victorian Government policy when the system was privatised.

2. The Assets

The scale of GPU's proposed roll-in is significant within the context of the initial and current regulatory asset base.

SWP as Percentage of the PTS Capital Base	**$m**
Estimated PTS Initial Capital Base on 31/12/00	376.4
Estimated Interconnect Asset's Capital Base on 31/12/00	40.4
Estimated Total PTS Capital Base	416.8
Requested SWP Roll-in	78.5
Roll-in as % Initial Capital Base	**21%**
Roll-in as % Current Capital Base	**19%**

* See Annexure 1 for calculation of BHP's estimated PTS capital base.

If the Commission is to authorise a roll-in of this magnitude on the basis of system wide benefits it must be convinced that the benefits are substantial and real and that they outweigh the very significant cost to users.

The roll-in request of $78.5 million appears to cover three categories of assets. Assets that serve the Western Transmission System (WTS), assets that link underground storage with the PTS and assets that are purely speculative in nature such as the branch valves on the south west link that have been installed to provide for future distribution connections. To seek to charge PTS users for all of these asset categories is inefficient and neither fair nor reasonable.

Recommendation: The Commission split the SWP assets into three distinct groupings (WTS assets, PTS underground storage link assets, speculative assets) and consider each grouping separately.

3. Victorian Government Capital Contributions to GPU

The Victorian Auditor-General's Office has reported that the State made a capital contribution of $46.7 million to GPU[2]. This capital contribution was to be used by GPU to expand the capacity of the interconnect pipeline and to construct the SWP. To date GPU has, in its roll-in applications, only identified $9.5 million of State Government contribution. The ACCC must investigate where the missing $37.2 million has gone and why system users are not the beneficiaries of the State's contribution.

Item	**$ m**
State's Capital Contribution to GPU	46.7
GPU Identified State Contribution SWP	7.3
GPU Identified State Contribution Springhurst Compressor	2.2
Missing State Government Capital Contribution	37.2

Recommendation: The Commission investigate how the State's capital contribution has been allocated to the Interconnect Assets and the SWP assets and if the allocation is fair and reasonable.

[2] Report of the Auditor General - Victorian Governments Finances 1998-99, Part 6.67

4. SWP Flows to Date

To date the SWP has flowed substantial volumes. Since it was commissioned in mid 1999 approximately 22 PJ has entered the PTS from the SWP. The peak day flow was in excess of 130 TJ.

A few statistics from calendar year 2000 are:

1. On the 9th of April SWP injections accounted for 37% of all injections into the PTS.

2. On its peak injection day for the year, the SWP injected 130.5 TJ into the PTS.

3. During the month of April the SWP injected over 3.5 PJ into the PTS. This was 21% of total injections for the month.

4. On the five peak system injection days for the year SWP injections totalled around 10% of all injections as detailed in the table below.

Calendar 2000 Peak Injection Days on PTS

Day	Total Injections (TJ)	SWP Injections (TJ)	SWP as % of Total
5th June	1105.6	119.9	11%
14th June	1034.8	97.3	9%
15th June	1055.6	115.4	11%
26th July	1078.2	89.3	8%
27th July	808.9	104.7	13%
Total	**5083.1**	**527.6**	**10%**

* Days obtained from GPU web site.

History shows that both peak and base load supply competition ex the SWP has occurred without any roll-in arrangement.

5. Economic Feasibility Test

GPU has not provided evidence that the SWP does not pass the economic feasibility test outlined in the Code (section 8.1(b)(i)). Given GPU's analysis of the Victorian market and demand it would appear that the SWP may well satisfy the economic feasibility test.

BHP believes the relevant facts are:

1. The interconnect assets fall into three categories, so any economic feasibility analysis should be by asset grouping rather than as a single asset group.

2. Clearly the link from the PTS to underground storage has substantial contracts that can be applied to it. Based on publicly available information it would appear that they total at least 197 TJ/d of deliverability until at least the end of calendar 2005. GPU has not demonstrated why it cannot be reasonably expected why these contracts will not extend for the economic life of the assets.

3. GPU's proposal to let the existing parties out of their SWP transportation contracts should not form part of any economic feasibility assessment. It should be conducted assuming these contracts remain on foot.

4. GPU elected to build the SWP on the basis of the existing contracts. Clearly GPU concluded the SWP was economically viable at that time, or they would not have proceeded with the project.

5. The economic feasibility test must take account of consequential revenues to GPU on other parts of the system that accrue because parties use underground storage. For example the anytime charges that occur because parties ship from the interconnect or Longford to storage must be included. Including these revenues in an economic feasibility test would be consistent with the Commissions economic feasibility analysis in it's Draft Decision on the Moomba to Sydney Pipeline.

6. The latest VENCorp Planning document indicates that there is significantly more demand for underground storage supply than GPU has assumed. The table below illustrates VENCorp's latest underground storage requirement forecast. It must be noted that VENCorp's forecast does not include any power generation load.

VENCorp Load Duration Curve Supply-Demand Analysis[3]

Winter Supply	WUGS			LNG or Shortfall			>100 TJ	>200 TJ
Demand Scenario	Peak	Days	PJ	Peak	Days	PJ	Days	Days
1 in 2 2001	188	28	1.7	-	-	-	359	336
1 in 20 2001	197	37	2.7	70	2	0.1	354	327
1 in 2 2003	197	45	3.4	44	2	0.1	351	319
1 in 20 2003	197	54	4.7	127	5	0.3	344	310
1 in 2 2005	197	71	6.9	121	9	0.4	332	293
1 in 20 2005	197	80	8.6	208	15	0.9	323	284

1. The history of gas flows over 1999 and 2000 has shown that gas entering the PTS via the SWP can be competitive with supply from other sources. If it was not competitive, 22 PJ would not have been delivered into the PTS via the SWP.

2. GPU believes that Western Victoria is a very prospective region so there is no reason to assume that non-underground storage supply will decrease.

Recommendation: The Commission conduct its own economic feasibility test for each grouping of SWP assets, including the full revenue from the existing contracts.

[3] P36 Annual Gas Planning Review 2001 to 2005, Victorian Energy Network Corporation, 30 November 2000

6. The System Wide Benefits Test

To date the only regulatory precedent on the application of the system wide benefits test under the Code has been the Commissions consideration of GPU's application to roll-in the Interconnect Assets. In that decision the Commission determined that the Interconnect roll-in was justified on the basis of system wide benefits and that the system wide benefits test is forward looking rather than backward looking. The key system wide benefit was the enhancement of supply security to the extent that total system collapse could be avoided and essential services could continue to be supplied in the event that a major supply source was disrupted. A second system wide benefit was that inter basin competition was now physically possible and, in the Commission's opinion, had the potential to benefit both the Victorian and NSW markets. The Commission considered that the total benefit provided by the Interconnect Assets was substantial and that it justified all users of the PTS paying more. The Commission was satisfied that users should pay ($98 NPV 35.3 (40.4 x 0.875) million plus opex) for the above mentioned benefits. Payment was to be spread over the economic life of the PTS and recovered via an increase in the anytime charge.

The Commission's Interconnect Assets decision has set a precedent against which future roll-in proposals can be compared. The key criteria was that the system wide benefits were certain and substantial. That is sufficient gas could be supplied in an emergency in order to present total system collapse and supply essential services.

The Commission's consideration of the SWP roll-in application will determine if the system wide benefits test extends to less substantial and less certain benefits and if benefits that may occur justify a substantial 100% certain cost impost on users. At stake are the principles that users should only pay for the assets they use and that the market should determine the merit order of peak day and base load supply sources.

7. Risk Transfer from GPU/Retailers to Users

Under section 2.24(b) of the Code the Commission must take existing contractual obligations into account when it is accessing GPU's application. A key consideration that the Commission must take into account is the transfer of risk from GPU and the parties that have contracted 197 TJ/d of deliverability to users. Given the information that is available it appears as though the GPU proposal to relieve retailers from the obligations of their existing transportation contracts if the roll-in is approved also transfers significant risk to end users.

Under the existing arrangements it is the retailers and GPU that take on the risk that the services the SWP provides are in fact demanded by the market at a price that covers cost. If the ACCC approves GPU's application GPU and the retailers will have that risk removed from them. Instead users will pay for the assets regardless of market demand for them.

Recommendation: The Commission consider risk transfer in it's assessment of the costs and benefits of the SWP roll-in application.

8. System Security

Given that the Commission has determined that the key elements of supply security (avoidance of total system collapse and supply to essential service) have been achieved via the Interconnect Assets and they are currently being paid for by users, they cannot be counted again when this roll-in application is considered. The issues therefore becomes: 1) Is any incremental system security worth the incremental cost to users? 2) Could the incremental system security be procured in a more cost effective manner?

8.1. Incremental System Security

GPU has submitted that the SWP provides the WTS with a similar base level security (avoidance of total system collapse and essential services supply) as the interconnect assets provided the PTS. GPU also believes that the SWP provides an additional quantum of system security to the PTS in excess of LNG and the Interconnect Assets.

While the SWP might provide base level system security to the WTS it is extremely expensive security for a small network that is forecast to require only 4.1 PJ in 2001[4]. It may well be more cost effective to provide any essential services with user funded dual fuel back-up and have a system shut down protocol that ensures that in the event of a major supply disruption the system is shut down quickly and remains pressurised.

In the Final Decision regarding the Interconnect Assets roll-in the Commission noted the following:

"The Commission notes the concern raised that the investment in the Interconnect Assets may be excessive, that is, that adequate benefits could be achieved with a smaller investment. .... Clearly there are competing tensions between generating worthwhile benefits and avoiding excessive investment costs. As suggested by BHPP, taken to the extreme, 'a service provider could duplicate its entire system in the name of system security'.[40] The Commission agrees that such a scenario would indicate a high level of imprudent investment and that it would not be reasonable to undertake the level of investment needs to prevent any chance of future involuntary curtailments.'[5]

Clearly the Commission is of the view that 100% redundancy in a gas supply system is not cost effective or practical. It logically follows that each increment of enhanced system security above a base level of system security must have an ever decreasing value. BHP believes that the intangible system security value that may be provided by the SWP does not outweigh the 100% certain cost to users.

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[4] P39 Annual Gas Planning Review 2001 to 2005, Victorian Energy Network Corporation, 30 November 2000

[5] P20 Final Decision Access Arrangement for the Principal Transmission System, Application for Revision by GPU GasNet Pty Ltd, 28 April 2000

Other sources of incremental supply security are available to PTS users and if the Commission determines that more security of supply is appropriate over and above the Interconnect Assets they should be investigated to ensure that the SWP source is in fact prudent. Two sources of immediate additional supply security that could be available at a lower cost to users than the SWP roll-in are:

1. User funded demand side management. VENCorp, in its latest planning review, notes that the Governments winter 99 contingency projects generated over 40 TJ/d[6] of interruptible load.

2. Supply capacity via non rolled-in GPU owned compressors located at Young and Bulla Park on the MSP. These assets provide an additional 42 TJ/d[7] of capacity via the interconnect.

Together there is in excess of 80 TJ/d of capacity that could be immediately available for supply security at a lower cost to PTS users than the SWP roll-in.

Recommendation: The Commission consider the costs and benefits of any additional system security and alternate sources of security.

[6] P37 Annual Gas Planning Review 2001 to 2005, Victorian Energy Network Corporation, 30 November 2000

[7] P25 Final Decision Access Arrangement for the Principal Transmission System, Application for Revision by GPU GasNet Pty Ltd, 28 April 2000

9. Incremental Competition Benefits

BHP finds GPU's competition argument extremely difficult to understand. GPU's concept seems to be that all peak day users of the Longford injection point should pay more now, so that they can maybe benefit from increased supply competition in the future.

9.1. Victorian Government Policy on Gas Supply Competition

At the time when the natural gas transmission and distribution system was being privatised and the Victorian tariffs and market model were being developed it is clear that Victorian Government Policy was;

1. that the market should price deliverability (peak day supply)
2. that network tariffs should be cost reflective
3. that new sources of supply should not get any form of transmission subsidy or holiday.

This is made clear in the following extracts from the Victorian Government response to comments received on the proposed draft access arrangements in November 1997.

"**4.13 Injection charges "holiday" sought for new producers in Eastern Victoria**

> *An injection charge "holiday" was sought for new producers in eastern Victoria to allow more effective producer competition, with proposed funding by spreading incremental cost to users via VENCorp charge.*
>
> Eastern Victorian injection charges recoup capital related assets along the Longford to Pakenham pipeline. A holiday of this charge to new producers will send erratic price signals to the market and effect the injection of gas into Victoria from other sources, ie other Gippsland and Underground Storage leading to potentially inefficient end-use investment decisions.
>
> One of the key objectives for introducing the current model is to provide cost reflective network tariffs. The introduction of an injection charge holiday would compromise cost reflectively on this constrained asset and may lead to substantial price differentials for adjacent end-users. This would distort the transparency of the current tariff structure and add risk to investment decisions for end-users.
>
> Also, there would be potential for cross-subsidies to be introduced as lost revenue may be recouped via other charges, ie VENCorp uplift as suggested. This again would produce inefficient outcomes by benefiting a few at the expense of the majority.

It should be noted that all charges listed are maxima, hence discounts can be negotiated on a purely commercial basis between the user and service provider in line with market development and expectations.

4.14 High costs a barrier to entry to new suppliers

There was concern that new suppliers (ie UGS) may face unreasonable costs to enter the market and the charges that new entrants will have to pay.

All transmission zone peak delivery and anytime charges apply equally irrespective of the source of the gas. Therefore, in the first regulatory period gas from UGS, NSW and Longford supplying the Calder zone attract the same delivery charges.

Injection charges are treated somewhat differently in that for the first regulatory review period the predominant flow through the interconnect is assumed to be south to north (to NSW). Therefore, no physical flows are assumed to come from NSW, hence no injection charges apply for NSW gas coming into Victoria.

In future regulatory review periods, the assumed predominant flow may be north to south and the Interconnect may be deemed to be an injection asset for which an injection charge will be calculated.

For UGS gas no TPA injection charge is applicable since no injection assets are utilised. However, in order for UGS to connect to the TPA system at Corio, a pipeline will need to be constructed which will be equivalent to an injection charge.'[8]

Recommendation: The Commission have regard to Victorian Government gas supply (peak and base load) competition policy at the time the asset privatisation took place.

9.2. Existing Supply Competition

The GPU proposal seems to ignore the fact that significant peak day supply competition already exists without the SWP being rolled-in. Some sources of supply are contracted and other sources are potentially available via contract if the market or VENCorp concludes they are required. In addition to peak day supply, there are also many sources of base load supply apart from Western Victoria. Some of these sources could be disadvantaged by the GPU proposal.

[8] P17 & 18 The Government's Response to Comments Received on the Draft Access Arrangements and Accompanying Information dated 18th August 1997. Energy Projects Division Department of Treasury and Finance Victoria, November 1997

9.3. Peak Day Supply Competition

Apart from Gascor's rights to peak day supply under its contract with the Bass Strait producers, there are a number of other sources of peak day supply that are currently contracted to the market or could possibly be available to the market subject to commercial negotiation. They are:

Possible Sources of Peak Day Supply

Volume	**Supply Source**
197 TJ/d	Underground storage deliverability and 8.6 PJ of volume until at least 2005
150 TJ/d	LNG deliverability and 459 TJ of volume contracted to market participants until December 2002
50 TJ/d	Rolled in interconnect capacity
42 TJ/d	Non rolled in interconnect capacity
3 TJ/d	Uncontracted underground storage capacity
40 TJ/d	Potentially interruptable load
482 TJ/d	**+ Total**

These sources of peak supply are currently physically available and it is just a question of the price the market has to pay to access them. It is not the role of the ACCC to distort market pricing signals or peak day supply solutions by artificially lowering the cost of one source and increasing the burden on another.

9.4. Base Load Supply Competition

GPU's application appears to have disregarded that there are a number of gas fields in the Gippsland basin that are not owned by BHP/Esso alone that could provide base load supply competition. The Victorian Government identified the following Gippsland Basin fields that could be developed.

Non Esso/BHP Gippsland Basin Gas Fields[9]

Field	Estimated Reserves (BCF)
Kipper	500
Sole	200
Patricia/Baleen	120
Golden Beach	40
Total	**860**

In addition to undeveloped Gippsland basin gas fields that could compete with Western Victorian fields for base load supply there is the possibility of physical or swapped supplies via the interconnect or EGP. EAPL has forecast that South Australian and/or Queensland producers will sell up to 12 PJ/pa[10] of gas into Victoria by 2005. Similarly VENCorp reports that Victorian market participants have reported net prospective imports from NSW increasing from 24 TJ/d in 2001 (8.7 PJ/pa) to 48 TJ/d (17.5 PJ/pa) in 2005[11].

BHP's conclusion is the alleged system wide benefit of increased competition flowing from the SWP roll-in is a fiction, and it in no way comes close to paying for the 100% certain increase in costs to be passed on to users via the roll-in.

Recommendation: The Commission have regard to the distortionary effect that GPU's roll-in application will have on both peak and base load supply competition.

9 P60 Victorian Gas Industry, Implementing a Competitive Structure, Information Paper No 3, Second Edition, April 1998

10 P95 Draft Decision Access Arrangement by East Australian Pipeline Limited for the Moomba to Sydney Pipeline System, 19 December 2000

11 P17 Annual Gas Planning Review 2001 to 2005, Victorian Energy Network Corporation, 30 November 2000

10. Flaws in GPU's Supply Competition Analysis

All of GPU's analysis of the competitive environment in Victoria seems to assume that there is or will be no competition between suppliers of gas, whether base load or peak, at the inlet flanges to the GPU system. GPU cannot possibly know the economic drivers of all the possible supply sources and hence their analysis is fundamentally flawed and based on a sweeping assumption.

Similarly, GPU seems to assume that without a roll-in approval very limited competition will occur because the SWP would to have a high standalone tariff. This would only be true if GPU were not an economically rational firm. GPU has sunk its investment and the physical asset exists. On a look forward basis, GPU will set a tariff on its sunk investment that meets the market and is sufficient to return the highest portion of fixed costs that the market will stand. Any competition benefits will therefore be available to gas users without the need to impose an arbitrary and unreasonable roll-in.

Recommendation: The Commission assess GPU's application on a look forward basis.

11. Reference Tariff Design

All Reference Tariffs approved by the Commission must comply with the requirements of the Code whether or not they are designed to recover target revenue for assets rolled-in on the basis of system wide benefits.

The Commission is required to access GPU's proposed revisions to its Access Arrangement against Section 2.24 of the Code generally and the proposed Reference Tariff against the appropriate Code provisions specifically.

Under section 8.1 the Commission is given the power to determine how best they reconcile any competing objectives or which objectives should prevail out of a list of objectives. The key objectives that the Commission should consider in this application are 8.1(b) and 8.1(d), 8.1(a) and 8.1(e) are secondary and the rest are of a lower importance.

The key objectives are:

8.1 (b) Replicating the outcome of a competitive market.

8.1 (d) Not distorting investment decisions in pipeline transportation systems or in upstream or downstream industries.

The secondary objectives are:

8.1 (a) Providing the Service Provider with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that service.

8.1 (e) Efficiency in the level and structure of the Reference Tariff.

The proposed tariff structure does not replicate the outcomes of a competitive market as required by 8.1(b), in fact it does the complete opposite. In a competitive market, an investor invests in an asset and hopes to earn a return from that asset. If the investor cannot earn a return it will continue to operate the asset provided revenue exceeds variable costs. A competitive market does not allow an investor to build a asset and then recover the costs of that asset from users of another asset or service as proposed by GPU.

The proposed tariff structure clearly will have a distorting effect on both upstream and downstream investment decisions and GPU has made clear that it is intended to do so. This does not meet the objective 8.1(d).

From an upstream perspective the tariff structure will clearly impact the economics of upstream gas base load producers and peak day suppliers. The price paid by Eastern Victorian producers to deliver their product to a demand centre will be in excess of the cost of providing the service, while the price paid by Western Victorian producers to deliver gas to a demand centre on the PTS will be significantly below the cost of providing the service. This very significant distortion may, for example, lead to the Minerva field being developed before the Kipper field. Clearly the Commission must not approve a tariff structure that may fundamentally damage the competitive nature of one supplier over another by loading it up with a tariff in excess of cost.

Objective 8.1(a) makes clear that GPU is not to be guaranteed a revenue stream that covers the efficient costs of delivering the Reference Service. GPU through their proposed tariffs are virtually guaranteeing themselves a revenue stream that covers their SWP costs. The asset risk which GPU freely elected to carry would be transferred to gas users while the rewards would be kept by GPU.

The proposed tariff is not efficient in its structure as required by 8.1(e) even if it were accepted that the SWP assets should be rolled in on the basis of system wide benefits. The alleged system wide benefits (at least in part) apply to all users of the PTS and WTS not just users of the Longford injection point on peak injection days.

The structure of the Reference Tariff will determine the competitive landscape in Victoria. If the Commission accepts GPU's design proposal it will send a clear signal to all stakeholders that the ACCC has disregarded the user pays principal and the ability of the market to determine how to most efficiently ensure supply.

Recommendation: If the Commission does accept GPU's roll-in application, it must reject the proposed reference tariff structure as it does not comply with the objectives specified in section 8.1 of the Code.

ANNEXURE 1

BHP'S ESTIMATE OF THE PTS CAPITAL BASE @ 31/12/00

Initial Capital Base 1/7/97	**$m**
PTS	331.7
WTS	15.3
Other	15.2
Total	**362.2**
Add Forecast Capex	
1998	17.2
1999	4.4
2000*	2.2
Total Capex	**23.8**
Less Forecast Depreciation	
1998	12.62
1999	13.40
2000*	14.39
Total Depreciation	**40.41**
Initial Capital Base @ $ 1/7/97	345.6
x 1.089	
Initial Capital Base @ $ 31/12/00	376.4
Add Interconnect Assets	
Capital Cost @ 1/7/98	40.4
Less Estimated Depreciation to 31/12/00	3.1
Capital Base @ $ 1/7/98	37.3
x 1.08	
Capital Value @ 31/12/00	40.35
Total GPU Capital Base 31/12/00	416.75
Proposed Roll-In	78.5
Roll-In as % Current Capital Base	19%
Roll-In as % Initial Capital Base	21%

Interconnect Assets Indexation

Sep 00 CPI = 130.9 = 1.08
June 98 CPI = 120.2

Initial Capital Base Indexation

Sep 00 CPI = 130.9 = 1.89
June 97 CPI = 120.2

* Note $29.8 million of capex that was assumed by GPU to be spent in 2000 in it's AAI to fund looping Brooklyn to Lara line.

ANNEXURE 2

PAPER PREPARED FOR BHP BY NERA ON GPU'S SWP ROLL-IN APPLICATION

ASSESSMENT OF GPU GASNET'S PROPOSAL TO ROLL-IN THE COST OF THE SOUTH WEST PIPELINE

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I. INTRODUCTION / EXECUTIVE SUMMARY

GPU GasNet, the owner of Victoria's natural gas transmission network, has requested that the Australian Competition and Consumer Commission (ACCC) amend its current access arrangement to allow for the roll-in of the cost of the South West Pipeline (SWP). The South West Pipeline runs from Lara, on the western edge of Melbourne, to the southwest of the State and connects the gas storage project owned by TXU with the transmission network. It also interconnects the small western Victorian system with the rest of Victoria. At least initially, the unregulated market-area seasonal storage facility will be the primary user of the South West Pipeline.

GPU proposes to roll-in the cost of the SWP on the grounds that it provides sufficient "system-wide benefits." Section 8.16 of Australia's National Third Party Access Code for Natural Gas Pipeline Systems (the Code), which refers to investment in new facilities, discusses system-wide benefits. This section of the Code states that capacity expansion costs may be rolled-in, provided that:

> A. That amount does not exceed the amount that would be invested by a prudent Service Provider acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of delivering Services; and
>
> B. One of the following conditions is satisfied:
>
> i) the Anticipated Incremental Revenue generated by the New Facility exceeds the New Facilities Investment; or
>
> ii) the Service Provider and/or Users satisfy the Relevant Regulator that the New Facility has system-wide benefits that, in the Relevant Regulator's opinion, justify the approval of a higher Reference Tariff for all Users; or
>
> iii) the New Facility is necessary to maintain the safety, integrity or Contracted Capacity of Services.[1]

GPU asserts that the South West Pipeline will provide system-wide benefits in the form of increased security of supply and transportation, competition for peak gas supply, and support

[1] National Third Party Access Code for Natural Gas Pipeline Systems, section 8.16, page 51.

for the development of new gas fields in the Otway basin.[2] GPU proposes to increase the Longford Injection charge, equalizing the Longford and South West Pipeline injection charges.

We conclude that the ACCC should not approve GPU's request to roll-in the cost of the South West Pipeline. Rolling-in the costs of the South West Pipeline will subsidize users of this pipeline, including the unregulated storage facility, at the expense of the rest of the system users. This subsidization conflicts with the basic principle of "user pays" and distorts the price signals necessary for sound economic decision making.

In Section II, we provide a detailed explanation of the concept of roll-in and its fundamental conceptual and economic flaws. In Section III, we contextualize both the theory and the particular case of the South West Pipeline by discussing the history of roll-in in the US. In Section IV, we examine GPU's claim that rolling-in the South West Pipeline will yield system-wide benefits, and we find GPU's claims groundless, as they will instead generate additional system-wide costs, subsidize would-be competitors and distort competition rather than promote competition. We close with our recommendation on how the ACCC should rule.

[2] GPU GasNet Presentation, 29 June 2000, South West Pipeline Tariff Proposals, pp. 5.

II. ROLL-IN IS NOT A VIABLE ECONOMIC CONCEPT

Conceptually, the terms and conditions of service received by current pipeline customers should neither be helped nor hurt in any way if the pipeline expands capacity to provide new service. Existing customers using existing services do not receive new rights as the result of expansions elsewhere or to provide other users with service. The pipeline must continue to provide its services to existing customers, as before, and no more. Thus, the issue "benefits" to existing customers of capacity expansions to serve others is an odd subject from the start. That is to say, if an existing customer received safe and adequate pipeline services before the expansion, and if the expansion does not serve that customer, then the concept of "benefits" must be a secondary issue at best.

Put another way, unless a capacity addition for a new customer provides a new service to an existing customer (more daily capacity, more flexibility, more reliability, etc.), the existing customer does not benefit from the expansion. Both contract and market carriage moot any notion of a "system-wide benefits" test for existing customers who do not participate in an expansion project. Only if the expansion changes the terms and conditions of the existing services are system-wide benefits compensation for the cost of roll-in to the existing customer even remotely possible.

If one remains unconvinced by this logic and continues to explore the possibility of capacity expansion cost roll-in, one will find that roll-in causes numerous effects that run counter to sound economics. Roll-in explicitly creates subsidies among different customer groups, causing some customer groups to overpay for capacity and others to underpay for capacity. Roll-in increases the likelihood of overbuilding—of building more capacity than would be economic if its users had to pay its costs—as those who benefit from new investments do not pay their fair shares of these investments. Roll-in hinders also competition in the gas pipeline industry, elevating entry barriers and boosting the incumbent's advantage. We discuss each of these three detrimental effects, in turn.

A. Roll-In Creates Subsidies Between Customer Groups

In this section we examine roll-in in its most basic form, in the form that typically generates the most surface appeal—the expansion of an existing pipeline. The case of a new pipeline built in an entirely different place stretches severely the premise that roll-in could *ever* make sense, and this is the case that applies to the South West Pipeline. Here, we look at a generic "pipeline service." We find that faster growing system users (and in particular, entirely new users) receive a subsidy from existing and slower-growing customers.

Under a roll-in policy, a customer whose growth rate is lower than the system average subsidizes a customer whose growth rate is higher than the system average. Thus, if a customer grows more slowly than the whole system, that customer subsidizes a faster growing customer.[3]

Consider the following example of a pipeline with two customers. Pre-expansion, each uses one-half of the pipeline's total capacity. The slow-growing customer has a 20 percent growth rate, while the fast-growing customer has a 50 percent growth rate. Under an incremental policy each customer pays a share of the expansion costs in proportion to how much of the new capacity it will use. In this example, the pipeline's overall growth rate is 35 percent (the average of 20 and 50). The slow-growing customer pays for and will use 28.6 percent (10 percent capacity growth divided by 35 percent) of the new capacity, while the fast-growing customer will pay for and use 71.4 percent (25 percent capacity growth divided by 35 percent) of the new capacity. Under a roll-in policy, the slow-grower actually uses 28.6 percent of the new capacity, but pays for 44.4 percent of the new capacity. The fast-grower pays for 55.6 percent of the new capacity, even though he uses 71.4 percent of that new capacity. [4] This is cross-subsidization of the growth of the faster growing customer.

[3] We present a mathematical proof at the end of our statement that illustrates the subsidies under a roll-in ratemaking policy.

[4] 44.4 percent equals the slow growing customer's share of all rolled-in capacity (60/135). 55.6 equals the fast growing customer's share of all rolled-in capacity (75/135).

B. Roll-In Encourages Capacity Overbuilding

Because of subsidies, rolling-in will lead to overbuilding, encouraging bigger and uneconomic projects. Subsidizing larger projects is not efficient, however, and the larger projects induced by roll-in pricing are not worth their cost. Neither incremental nor roll-in policy will prevent buyers or sellers (or agents for either) from building the most cost-effective projects given whatever tariffs they face. Under incremental pricing, however, buyers will not pursue projects that are *not* cost-effective.

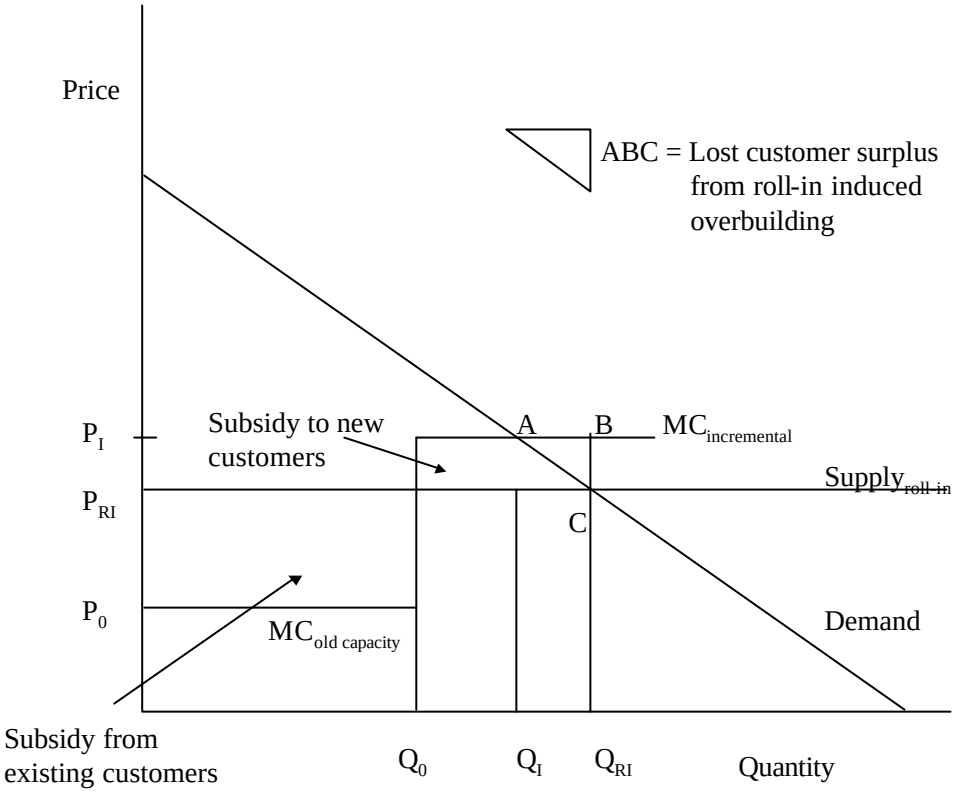
It is *possible*, but unlikely, for the ACCC to prevent overbuilding under roll-in. To do so, the ACCC would set the approved amount of capacity building at precisely the quantity that would be built under incremental pricing. However, this outcome would be unlikely because at the roll-in price, there will be excess demand for capacity. However, even if the ACCC prevents overbuilding, the subsidy from old to new customers is still present.

Figure 1 depicts the inefficiencies of roll-in. We graph supply and demand curves that show the current efficiency losses with rectangles and triangles. The graph illustrates the two points we have made thus far regarding roll-in:

1. Rolling-in new capacity costs always results in the subsidization of new capacity users by existing customers; and

2. Rolling-in new capacity costs will result in overbuilding.

Figure 1: Inefficiency of Rolling-in Costs of New Capacity



The subsidy from roll-in does not affect the pipeline,[5] but benefits new customers at the expense of existing customers. Existing customers pay a subsidy, represented in **Figure 1** by a rectangle of height equal to the difference between the old price and the roll-in price and of width equal to the amount of capacity the existing customer purchases. A new customer receives a subsidy, represented by a rectangle[6] of height equal to the difference between the incremental price and the roll-in price and of width equal to the amount of capacity the new customer purchases at the subsidized roll-in price.

Overbuilding will result because the new capacity is priced below its cost. Consequently, the demand curve crosses the rolled-in supply curve at a point below the true (incremental) supply

[5] Other than to the extent it increases the size of its operations more than is economic.

[6] It is not a trapezoid. If it were just the trapezoid and thus remained below the demand curve there would be no dead weight loss from the overbuilding promoted by a roll-in policy.

curve. This discrepancy leaves a triangle of unambiguous loss in consumer surplus that would not exist under incremental pricing.[7]

C. Roll-In Hinders Competition

Roll-in also limits gas pipeline competition. An independent pipeline company, whose prices would reflect its own construction costs, will have difficulty competing against an existing pipeline that can roll-in new facilities' costs. Under roll-in, the ability of an existing pipeline to beat competition from a new entrant will not stem from being a more efficient business. The incumbent's advantage will result from the incumbents' ability to force its existing customers to subsidize the costs of new facilities construction.

[7] For simplicity, this graph is drawn with a single demand curve. If the demand curves for new and existing customers are drawn in separately, it can be shown that the combination of long-term contracts and rolled-in pricing could result in existing customers wanting to reduce their contract quantities.

III. SWP ROLL-IN WILL NOT PROVIDE NET "SYSTEM-WIDE" BENEFITS

Rolling in the cost of the South West Pipeline will not provide net "system-wide" benefits. The benefits of this project will accrue to its users, and it is these users that should pay for it. In this section, we review the Code's requirements for rolling-in the costs of new facilities, GPU's initial statements in support of its proposed roll-in, and an assessment of these criteria and of rolling-in the South West Pipeline. In particular, we focus on the issue of system-wide benefits.

A. Code Criteria for Rolling In Costs & GPU's Initial Statements

Australia's National Third Party Access Code for Natural Gas Pipeline Systems, establishes criteria for the roll-in treatment of the costs of new facilities investments. The Code states that a gas pipeline company may roll-in the cost of a new investment if:

> (a) that amount does not exceed the amount that would be invested by a prudent Service Provider acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of delivering Services; and
>
> (b) one of the following conditions is satisfied:
>
> (i) the Anticipated Incremental Revenue generated by the New Facility exceeds the New Facilities Investment; or
>
> (ii) the Service Provider and/or Users satisfy the Relevant Regulator that the New Facility has system-wide benefits that, in the Relevant Regulator's opinion, justify the approval of a higher Reference Tariff for all Users; or
>
> (iii) the New Facility is necessary to maintain the safety, integrity or Contracted Capacity of Services.[8]

GPU GasNet attempts to justify its desired roll-in of the cost of the South West Pipeline under the "system-wide benefits" criteria. GPU's roll-in proposal hinges on whether or not there are system-wide benefits from the South West Pipeline. However, in analyzing the South West Pipeline's future impact on existing pipeline customers' rates, we find that the South West Pipeline will not yield system-wide benefits. On the contrary, it will simply increase the rates of current users who will not benefit from the pipeline in order to provide a subsidy to

[8] National Third Party Access Code, Section 8.16, pp. 51.

users of the new pipeline. Thus, the South West Pipeline should not be permitted under the system-wide benefits test.

1. Financial Impact of South West Pipeline Roll-in

We have examined the financial impact of the proposed roll-in. To do this, we contrast two alternatives:

1) The cost of the South West Pipeline is rolled-in to the Longford injection cost, as GPU proposes; and

2) A standalone injection cost is implemented for the Southwest pipeline.

According to numbers put forth by GPU, the current Longford injection tariff is $11.30, an incremental charge for South West Pipeline injection would be $44, and with roll-in injection charges at both places would be $16.[9] A straightforward way to assess the level of the cross-subsidy that roll-in would impose would be to see how much of the South West Pipeline's costs would be collected elsewhere. GPU's proposal to charge $16 instead of $44 for injection into the South West Pipeline would result in only 36.4 percent (16/44) of the South West Pipeline's costs being collected from SWP users, and he remaining 63.6 percent (1-.364) charged to other users. This 63.6 percent subsidy would result in a 41.6 percent increase in peak injection charges to Longford customers.

In dollar amounts, this would be a $48 million cross subsidy on a $75.5 million pipeline.

2. Market-Area Seasonal Storage

The South West Pipeline connects Victorian gas users to depleted gas fields to the southwest of the city. TXU owns these fields, and has converted them to a seasonal storage facility—one that it intends will be filled in the summer, and emptied in the winter.

Market-area seasonal storage is found in a number of places where gas is used as a winter heating fuel, and such storage can be the most economic way to meet demand, and

[9] Based on the five peak days charge, without-taxes.

market-area seasonal storage may be wise for Victoria—but this is something that the market should determine for itself. If the market-area seasonal storage facility makes economic sense then it does so on its own merits, with its users paying its costs—and those not using it, not paying for it. In order to allow the market to work, however, there must be clear and correct price signals, and this is where rolling-in the costs of the pipeline connecting the market-area seasonal storage facility to the main transmission system could lead to uneconomic choices being made.

The determination of whether to pursue market-area seasonal storage primarily involves a comparison of three types of costs:

1. The costs of installing and operating market-area seasonal storage facilities;
2. The costs of expanding transportation capacity from the production area to the market area; and
3. The costs of utilizing gas purchase contracts at various load factors and in various patterns.

If the price of gas in the production area does not vary seasonally—either for contractual reasons or for market-based reasons—then the comparison involves only the first two factors. Here, all three factors matter, as a key concern involves factor (3) from above—the peak "contract MDQ" in the GASCOR contract with Esso/BHP has been reached. If that happens, then measure(s) will need to be taken to meet increases in Victoria's aggregate gas demand. This could include one or more a number of alternatives: (1) gas from NSW via the Interconnector; (2) increased industrial dual-fuel users; (3) gas from undeveloped fields in or offshore of Victoria; or (4) increased gas supplies from Esso/BHP.[10]

It is not clear which of these alternatives would be the most economic. However, as the Victorian gas industry is no longer run as it did under the monopoly of Gas and Fuel, no regulator or other authority needs to make such a determination. Instead, the market can determine for itself how best to meet Victoria's energy needs—and participants in the market might reach different conclusions.

[10] Other alternatives also might exist, such as LNG imports.

B. Competitive Benefits of the South West Pipeline

In general, the competition-related issues regarding the Interconnect and the South West Pipeline are similar. Both projects provide access to gas sources other than the Gippsland basin, and both can in theory help to meet Victoria's peak needs. The Interconnect provides Victoria with Cooper basin access while the South West Pipeline provides Otway basin access and access to the underground storage facility (UGS), which can be used as a seasonal storage facility to help meet peak needs.

1. Evaluating competition-related benefits of new pipelines is inappropriate

It is our view that on competition grounds, roll-in of any new pipeline does not make sense. Competition-related benefits of a new pipeline accrue to those who can take advantage of the new access, and the benefit they get is direct—lower gas prices. In other words, it is inappropriate to evaluate a regulated pipeline project on the basis of what unregulated gas commodity benefits it provides.

This view is at odds with previous ACCC statements (e.g., in the Interconnect decision). It is however, consistent with US precedent, a precedent only established after years of struggle with the issue of pricing new capacity. FERC now has a "no subsidy" test and uses competition-related benefits such as basin access only for other considerations. Specifically:

> *After satisfaction of the threshold no-subsidy requirement*, the Commission will determine whether a project is in the public convenience and necessity by balancing the public benefits against the adverse effects of the project. The public benefits could include, among other things, meeting unserved demand, eliminating bottlenecks, access to new supplies, lower costs to consumers, providing new interconnects that improve the interstate grid, providing competitive alternatives, increasing electric reliability, or advancing clean air objectives. Among the adverse effects the Commission will consider are the effects on existing customers of the applicant, the interests of existing pipelines and their captive customers, and the interests of landowners and the surrounding community, including environmental impacts. The Commission will approve a project where the public benefits of the project outweigh the project's adverse impacts.[11] [emphasis added]

[11] PL99-3-001, February 9, 2000, page 16, 90 FERC ¶ 61,128.

We provide a further discussion of relevant US precedent in Annex B. In the remainder of this discussion we discuss the pitfalls with having a regulatory commission (or any other central authority) put in a position of making such determinations.

2. Evaluating competition-related system-wide benefits

In determining which of several alternatives to pursue, in order to reach the economically efficient outcome one must do a proper evaluation of these alternatives. This evaluation entails comparing the full cost of each of the alternatives. For a new pipeline project, its costs must be included only with the costs of the alternative(s) of which it is a part. Rolling-in the costs of a new pipeline would effectively treat the pipeline as if it had no costs at all, since it would then have the same cost effect on all alternatives.

In doing a comparison of alternatives, a new project either will or will not be economically sensible—however its costs are handled. Consider a project that involves a new pipeline along with unregulated upstream costs, such as gas from access to a new basin or to the UGS:

- If a new project is the best alternative on financial grounds, subsidizing the cost of the pipeline (by rolling it in) is just a gift to those who benefit from the new access (since they're already benefiting through lower gas prices); and
- If the project does not make good economic sense on its own merits, then subsidizing the cost of the pipeline doesn't actually promote competition, only a "competitor" (e.g., the new basin) too weak to succeed on its own merits.

For evaluating the competition-related merits of the South West Pipeline, one can evaluate several alternatives:

- Buying more gas from Esso/BHP;
- Bringing gas in via the Interconnect;
- Arranging supplies from the Otway basin;
- Using the UGS for seasonal storage;
- Buying gas from a different producer in the Bass or Gippsland basins; or
- Any other alternatives.

Deciding between alternatives involves a careful assessment of the price of each alternative. From a competition perspective, it is simply the price of the alternative that matters.

It should not be the responsibility of either the pipeline company or the regulator to determine which of these options a gas buyer should pursue. Gas supply is an unregulated business. It is the gas buyers who are the ones who are responsible financially for the gas purchase decisions they make, and who have the relevant information at hand—such as the prices and other terms and conditions they are offered.

The price of transport is one factor gas buyers take into consideration. Subsidizing the cost of transport via roll-in will only distort the evaluation of alternatives. To achieve an economically efficient outcome, where gas buyers purchase economically efficient amounts of various alternatives, there must be clear price signals. Any evaluation of competition-related system-wide benefits must be done bearing in mind that under-pricing one alternative will lead to an outcome where an inefficiently large amount of the subsidized service is purchased.

C. Security Benefits of the South West Pipeline

In assessing security benefits provided by any project, and who should pay for their costs, it is important to consider the overall purpose such facilities are intended to serve, who it is that has requested such facilities, and how well these facilities could actually serve that role.

In the Interconnect proceeding, the ACCC ruled that the customers who benefit most from increased security of supply are those first in line to be curtailed, the industrial customers. This was a surprising ruling, particularly given that industrial users receive no compensation or price discount for being placed first in line for curtailment.

Many factors can promote security of supply, including:

- Duplicate pipeline facilities;
- LNG facilities;
- Pipelines to new basins, particularly large basins;
- Dual fuel users, who can interrupt more readily; and even

- Market-area storage facilities.

In assessing the merits of claimed security of supply benefits, it is useful to ask what the principal purpose of such facilities is. For market-area storage, the principal purpose is meeting winter (i.e., seasonal) needs. The security benefits of such facilities are questionable, given their relatively slow withdrawal rates vis-à-vis LNG, and that at winter's end market-area seasonal storage would have little gas available to supply in any event.

Similarly, new pipeline facilities to new basins are not constructed on the basis of their security of supply benefits. The costs of exploration and development of a new field are much too high to be justifiable on security of supply grounds.

LNG facilities are, in some cases, constructed for both peak shaving and security reasons.[12] Similarly, dual fuel users frequently receive price discounts for being interruptible. As with LNG, these users provide this benefit for peak shaving and security purposes.

IV. CONCLUSION

Ultimately, the only way to prevent against the subsidies inherent in roll-in is to require that the costs of the new pipeline only be collected from the customers who decide to use it, and that those decisions be made based on the proper price signals. The South West pipeline will benefit its users, primarily those utilizing the market-area seasonal storage service. It is those users who should pay for its costs. We conclude that in this instance, the basic premise of "user pays" should be upheld.

[12] We describe LNG facilities of the sort other than those supplied by LNG tanker ships, and used for base load purposes.

ANNEX A: PROOF TO ILLUSTRATE ROLL-IN CROSS-SUBSIDIZATION

We define the following terms:

s = Customer's share of the pipeline's existing capacity;

g = Customer's growth rate; and

G = Pipeline's overall growth rate.

Thus, a particular customer's share of new capacity costs under an incremental policy is its share of the expansion:

$$(s*g)/G$$

Whereas, a particular customer's share of new capacity costs under a roll-in policy is:

$$[(1+g)*s]/(1+G)$$

Therefore, the share of costs for any new customers under an incremental policy vis-à-vis a roll-in policy can be expressed as follows:

$$\frac{s*g}{G} \begin{matrix} < \\ \geq \end{matrix} \frac{(1+g)*s}{1+G}$$

$$\frac{g}{G} \begin{matrix} < \\ \geq \end{matrix} \frac{(1+g)}{1+G}$$

If $g = G$, then the customer's costs from expansion are the same under either policy.

If $g < G$, then $\frac{g}{G} < \frac{1+g}{1+G}$ (i.e., incremental is cheaper for a slow-growing customer).

If $g > G$, then $\frac{g}{G} > \frac{1+g}{1+G}$ (i.e., rolled-in is cheaper for a fast-growing customer).

As a result, a subsidy passes from a slow-growing to a fast-growing customer according to the customers' relative growth rates. If a customer's growth rate is lower than the pipeline average, this customer will pay for the subsidy. If a customer's growth rate is greater than the

pipeline average, this customer will receive the subsidy. An existing customer experiencing no growth will see its capacity costs rise under a roll-in policy.

ANNEX B: ROLL-IN HAS BEEN PROBLEMATIC IN OTHER JURISDICTIONS

In the US gas pipeline industry, the issue of whether to roll expansion costs into current rates or to price new service incrementally has incited dispute for many decades. We find US experience in this regard instructive. For decades, the FERC acted strongly in favor of rolled-in pricing. As the industry began its restructuring process, there was increasing pressure for more economically efficient (and equitable) pricing arrangements for new capacity. The FERC gradually shifted in favor of incremental pricing, until a court remand required the FERC to explain its change in stance. The FERC then adopted a formal policy of rolled-in pricing for cases where the price increase involved for non-participating customers was five percent or less. However, after experience with this policy the FERC replaced it with a policy of incremental pricing whenever rolling-in new investments would raise existing users' prices at all. It is that final evolution in the FERC's policy on the matter that comports with our recommendations regarding the proposed roll-in of the South West pipeline.

A. Initially, FERC Condoned Rolled-In Pricing (pre 1980s)

Until the 1980s, all interstate pipeline service was provided on a "bundled" basis. Customers paid one price for delivered gas. The Federal Power Commission (FPC), predecessor to the current regulator, the Federal Energy Regulatory Commission (FERC), regulated both transport and commodity prices.

The FPC first addressed the pipeline pricing issue in the 1960 Battle Creek case, ruling in favor of rolled-in pricing "when facilities were part of an integrated system and provided system-wide benefits."[13] In Algonquin Gas Transmission Company v. FERC, the Court of Appeals held that FERC had failed to adequately justify rolled-in pricing, finding only that the pipeline's system was integrated. To support a rolled-in pricing determination, the Court required that FERC demonstrate that specific system-wide benefits flowed from the expansion project.[14]

[13] See Trunkline Gas Company, 21 FPC 704 (1959), aff'd, Battle Creek Gas Company v. FPC, 281 F.2d 42 (D.C. Cir. 1960); Great Lakes Gas Transmission Limited Partnership, 45 FERC ¶ 61,237 (1988).

[14] 948 F.2d 1305 (D.C. Cir. 1991), construed in, TransCanada Pipelines v. FERC, 24 F.3d 305 (D.C. Cir. 1994).

B. FERC's Support Shifted to Incremental Pricing (1980s-1990s)

In Order Nos. 436[15] and 636,[16] FERC restructured the natural gas market, requiring pipelines to provide open access transportation service and to unbundle gas service from transportation service. This separation incented shippers[17] to use various transportation paths and options to access to competitive gas supplies. Distinct pipeline capacity prices enable shippers to make appropriate decisions regarding the amount of capacity to build and to purchase.

Subsequently, shippers criticized FERC for rolling-in the costs of major construction projects. Roll-in often increased existing shippers' rates, disproportionate to the benefits these shippers felt that the expansion brought them. In particular, expansion by TransCanada Pipeline's US affiliate, Great Lakes, caused contention.

C. Federal Appeals Court Remanded Incremental Pricing Decision (1994) [18]

In its "Great Lakes" orders, FERC formulated a commensurate benefits test; the benefits to existing customers were weighed against the costs of roll-in. The Court of Appeals remanded the Great Lakes case,[19] finding that FERC had not justified its deviation from the policy of permitting rolled-in pricing based on a specific qualitative description of the system-wide benefits provided by the project.[20]

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[15] Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, Order No. 436, 50 Fed. Reg. 42,408 (Oct. 18, 1985), FERC Stats. & Regs. [Regulations Preambles 1982-1985] 30,665 (Oct. 9, 1985).

[16] Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation; and Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, 57 Fed. Reg. 13,267 (Apr. 16, 1992), III FERC Stats. & Regs. Preambles 30,939 (Apr. 8, 1992).

[17] Shippers are the transportation customers of a pipeline—i.e., those customers that contract for gas to be moved from one point to another.

[18] See Great Lakes Gas Transmission Limited Partnership, 57 FERC ¶ 61,140 (1991) (Opinion No. 367), reh'g denied, 62 FERC ¶ 61,101 (1993), 57 FERC ¶ 61,141 (1991) (Opinion No. 368), reh'g denied, 62 FERC ¶ 61,102 (1993), remanded sub nom., TransCanada Pipelines v. FERC, 24 F.3d 305 (D.C. Cir. 1994); Southern Natural Gas Company, 51 FERC ¶ 61,296 (1990).

[19] TransCanada Pipelines v. FERC, 24 F.3d 305 (D.C. Cir. 1994).

[20] Ultimately, FERC permitted Great Lakes to roll in the project (80 FERC ¶ 61,105 (1997)) and raise rates for all customers as it deemed that the "pipeline demonstrated that the project provided increased reliability and flexibility and was not tied to the provision of service to specific customers." (90 FERC ¶ 61,128, Certification

(continued...)

Part of the problem with FERC's approach at this time was the *ex post* nature of ratemaking; FERC made the roll-in/incremental decision after the investment had been approved and put in place.

In the Great Lakes case, FERC could have satisfied the Court's remand by clarifying its decision in favor of incremental pricing. Instead, FERC took a different path.

D. FERC Reverted to Rolled-In Pricing in PL94-4—the "5 Percent" rule[21] (1995)

FERC issued PL94-4 to establish the rate design method for future expansions. FERC decided that roll-in could not increase existing customers' rates more than 5 percent. For projects that did not meet this specification, FERC declared that it would permit roll-in if the system-wide benefits offset existing customers' rate impact.

PL94-4 had two fundamental problems.

- Besides encouraging gaming in terms of projects sized to meet the threshold, PL94-4's rate increase threshold gave larger pipelines and advantage over smaller pipelines, and all pipelines an advantage over potential entrants. The larger the pipeline's "rate base," the larger the investment that would qualify for automatic roll-in.

- The criteria FERC used to approve roll-in were useless. FERC used two criteria to determine whether or not the cost of a new facility would be rolled-in to current rates: (1) the extent to which the new facility is integrated into the existing facilities; and (2) the specific system benefits the project produces. The first of these criteria proved simple to demonstrate and avoided the central issues: for whom is the capacity constructed, who will it benefit, and who should pay for it? The second criteria proved difficult to measure; FERC identified two types of system benefits: operational benefits such as increased access, reliability, flexibility, or new services; and monetary benefits such as fuel or other cost savings or the prevention of rate increases from unrelated load loss."[22] These categories were problematic, as experience revealed.

(...continued)

of New Interstate Natural Gas Pipeline Facilities, Docket No. PL99-3-001, Order Clarifying Statement Of Policy, February 9, 2000.)

See also, Order on Remand, RP91-043-027, 72 FERC ¶61,081, July 26, 1995.

[21] 71 FERC ¶ 61,241, Pricing Policy For New And Existing Facilities Constructed By Interstate Natural Gas Pipelines (Docket No. PL94-4-000), Statement of Policy, Issued May 31, 1995.

[22] Ibid., PL94-4.

E. Experience with PL94-4 (1995-1998)

PL94-4 prompted numerous roll-in proposals, most of which were fairly limited. Many of these were approved either outright or as part of a settlement. In this section, we discuss two of the more prominent cases in which roll-in was contested.

1. Transcontinental Gas Pipe Line[23]

A rate case filed by Transco served as one of the first tests of PL94-4.[24] Prior to the issuance of PL94-4, Transco had filed a rate case, proposing to continue applying incremental rates. In this proceeding:

- Customers proposed a roll-in, inconsistent with the rules.[25] These customers filed testimony to demonstrate that the roll-in would meet PL94-4's criteria. Other customers filed to maintain the existing incremental rates.
- In March 1998, FERC Administrative Law Judge (ALJ) ruled for incremental pricing, finding that that the new facility would not benefit existing customers.
- In April 1999, FERC Commissioners unanimously reversed the ALJ's decision.
- In June 1999, FERC agreed to review its decision. No rehearing ruling has been issued to date.
- In April 2000, an ALJ ruled on the implementation of roll-in rates, but FERC has not issued a decision on this subject to date.

The new facilities proposed for roll-in predate PL94-4. The rate increase to existing customers would exceed five percent. Rolled-in pricing would be inconsistent with FERC's present pricing policy. Whatever FERC ultimately rules, it will almost certainly be taken to Federal Court by the losing side.

[23] Docekt RP95-197, Trancontinental Gas Pipeline Corporation, 91 FERC ¶ 63,001 (2000).

[24] Docket RP95-197, Trancontinental Gas Pipeline Corporation, 91 FERC ¶ 63,001 (2000).

[25] Ordinarily, it is the pipeline that files rates. By proposing a roll-in, Transco would have been taking a substantial financial risk. When a pipeline files new rates, it is then at risk of having to refund payments to customers whose rates it proposed to increase, but whose increase FERC denied. However, the pipeline cannot go back to customers whose rates it proposed to lower, if that too is denied.

2. Pony Express

The Pony Express project reveals the problems with the inherent incentive to underestimate future costs in order to receive roll-in approval.

- In May 1997, FERC granted KN Interstate permission to purchase an existing oil pipeline and convert it to natural gas service. At that time, KN received approval to roll in the costs of this project, referred to as the "Pony Express" line. KN received this permission on the basis of its filing a study showing that prices to existing customers would fall precipitously (up to 35%).

- In January 1998, KN filed a rate case, to roll in these costs. At that time, KN revealed there had been a substantial cost "overrun," and that prices to existing customers would increase, not decrease.

- In February 1998, FERC removed the presumption of roll in.

- In November 1998, the ALJ denied roll-in, after hearing the case.

- In March 1999, FERC denied the roll-in, and required incremental pricing.

- In December 1999, FERC settled the case with KN Energy, allowing the company to roll-in rates for ten years. However, in this case, KN made numerous concessions, and FERC's settling of the case should not be seen as an endorsement of roll-in pricing.[26]

F. FERC Adopted Incremental Pricing in PL99-3 (Sept. 1999)

FERC addressed dissatisfaction with PL94-4 in two 1998 Notices of Public Rulemaking (NOPRs), RM98-10[27] and RM98-12.[28] In these dockets, FERC sought comments on a wide range of issues and developments in the post-636 environment. Subsequent to receiving comments (and holding hearings), on September 15, 1999, FERC issued Policy Statement PL99-3,[29] supplanting PL94-4.[30]

[26] Foster Report No. 2266, January 6, 2000, pp. 14-16.

[27] Notice of Proposed Rulemaking, Regulation of Short-term Natural Gas Transportation Services, 63 Fed. Reg. 42982, 84 FERC ¶ 61,087 (1998).

[28] Notice of Inquiry, Regulation of Interstate Natural Gas Transportation Services, 63 Fed. Reg. 42974, 84 FERC ¶ 61,087 (July 29, 1998).

[29] 88 FERC ¶ 61,227, Certification of New Interstate Natural Gas Pipeline Facilities, Docket No. PL99-3-000, "Statement of Policy," September 15, 1999.

A major policy change in PL99-3 is the adoption of incremental pricing for new gas pipeline capacity. FERC also tightened the requirements for the demonstration of need for a project. Under PL99-3-000, the following items are necessary to obtain a certificate to build a new pipeline or facility:

3. The applicant must show that there is substantial demand for the proposed construction. This showing of demand can take several forms, including demonstration of increased reliability or reduction of prices to existing customers, or contracts for some percentage of the proposed capacity.

4. Subsidization of the new construction by existing customers of the applicant will no longer be allowed. While rates to existing customers can be increased if construction yields better service to those customers, this rate increase must be obtained through an application for a rate increase. As all costs of construction must be recovered through the customers of the new capacity, this will lead to incremental pricing.

The Policy Statement changed FERC's previous policy of giving a presumption for rolled-in rate treatment for pipeline expansions. As FERC itself stated:

> The current [rolled-in] pricing policy sends the wrong price signals, as some commenters have argued, by masking the real cost of the expansions. This can result in overbuilding of capacity and subsidization of an incumbent pipeline in its competition with potential new entrants for expanding markets. The pricing policy's bias for rolled-in pricing also is inconsistent with a policy that encourages competition while seeking to provide incentives for the optimal level of construction and customer choice. This is because rolled-in pricing often results in projects that are subsidized by existing ratepayers. Under this policy the true costs of the project are not seen by the market or the new customers, leading to inefficient investment and contracting decisions. This in turn can exacerbate adverse environmental impacts, distort competition between pipelines for new customers, and financially penalize existing customers of expanding pipelines and of pipelines affected by the expansion.

PL99-3 maintains PL94-4's goal of up-front rate certainty. It also focuses more directly on providing incentives for the optimal level of construction and efficient customer choices.

Under both PL94-4 and PL99-3, when a pipeline proposes to charge a cost-based incremental rate (establishing separate costs-of-service and separate rates for the existing and

(...continued)

[30] On February 9, 2000, FERC issued docket PL99-3-001 to clarify PL99-3-000.

expansion facilities) higher than its existing generally applicable rates, FERC will usually approve the proposal. However, FERC generally will not accept a proposed incremental rate that is lower than the pipeline's existing rates.

Following the issuance of PL99-3, numerous parties raised questions, filed protests, and sought clarification. In response, FERC issued PL99-3-001, stating:[31]

1. If the construction is a relatively cheap expansion of a previous construction, then rolled-in pricing may be the correct method of recovering the costs of the construction.

2. A further argument against the regular use of rolled-in rates is that changing an existing customer's contract rate to fund construction does not increase rate stability, and may lead to unnecessary construction.[32]

The appendix to PL99-3-001 presents two methods for pricing new capacity. The first simply adds the new capacity to the incremental capacity, and calculates the new rates holding existing shippers' rates constant. The second makes the average of the existing and incremental rates the new rate.[33]

G. Experience with PL99-3 (2000-present)

Since the passage of PL99-3, FERC has continued to support incremental, rather than roll-in pricing. In a preliminary determination issued on December 14, 2000, the FERC conditionally approved nonenvironmental aspects of an $80.9 million project proposed by Questar Pipeline Co. to expand its pipeline system, which will require the construction of 75.6 miles of 24-inch pipeline loop. FERC denied Questar's request for roll-in of the project's costs in the company's next rate case. FERC concluded that the incremental cost of service of the project would exceed estimated revenues in each of the first five years, so that Questar's existing customers would be forced to subsidize the project. The decided that if the project was

[31] 90 FERC ¶ 61,128, Certification of New Interstate Natural Gas Pipeline Facilities, Docket No. PL99-3-001, Order Clarifying Statement Of Policy, February 9, 2000.

[32] PL99-3-000, pp. 19-23; 90 FERC ¶ 61,128, Certification of New Interstate Natural Gas Pipeline Facilities, Docket No. PL99-3-001, Order Clarifying Statement Of Policy, February 9, 2000, pp. 4-11

[33] 90 FERC ¶ 61,128, Certification of New Interstate Natural Gas Pipeline Facilities, Docket No. PL99-3-001, Order Clarifying Statement Of Policy, February 9, 2000, pp. 22-23

pricing incrementally, the project would not adversely affect Questar's customers, other pipelines or their captive customers.

FERC only supports rolled-in pricing where obvious system wide benefits will occur. For instance, in June 2000, FERC approved roll-in rate treatment of Great Lakes Gas Transmission system extension, 14 miles of 13-inch looping at a cost of about $11 million. The project will loop the last remaining single-line portion of the Sault Mainline Extension in Michigan's Upper Peninsula, which receives Canadian imports at the international boundary. FERC determined that the facilities will enhance system security and reliability and prevent loss of throughput if an outage occurs on the single-line segment of the extension. The new looping will provide dual-line reliability for transportation and delivery of gas to Michigan Consolidated Gas Co. and TransCanada PipeLines Ltd. The 1998 order also authorized Great Lakes to roll in facility costs, as noted, barring a material change in circumstances.[34]

[34] Docket CP98-143, Great Lakes Gas Transmission Limited Partnership, 83 FERC ¶ 61,185 (1998) and 91 FERC ¶ 61,232 (2000); Foster Report No. 2287, June 1, 2000, pp. 19.