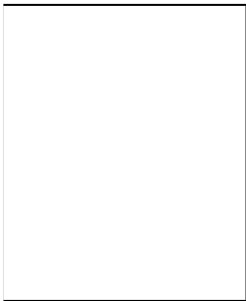
NETWORK

A publication of the Utility Regulators Forum

Issue 4, May 2000

Regulator in profile

Lew Owens



South Australia's new industry regulator, Lewis Owens, describes his feelings on returning to the energy industry as similar to the legendary character Rip Van Winkle's experiences on waking up after a long sleep. 'The industry has changed so much in the 10 years since I was last involved, that many of my experiences and skills are now irrelevant', he said of the new national electricity market.

Mr Owens has qualifications in chemical engineering, urban studies and economics/politics. He worked in the mining and oil refining industries before joining the SA Government in the mid-1970s in areas covering planning, economic development and energy. In the mid-1980s he was involved in committees planning the State's future energy supplies. From 1985–7 he was Director of the Energy Planning Secretariat responsible for the implementation of the interconnector to Victoria and the selection of the new generating plant for SA power supply. From 1987–1990 he was responsible for supply planning and gas contracts for the SA Gas Company.

In 1990 Mr Owens left the energy industry to become CEO of the SA WorkCover scheme, a position he held until late 1996 when he resigned to become CEO of the superannuation investment body, Funds SA, which manages almost $4 billion of funds. He resigned to take up the newly created role of Independent Industry Regulator on 1 January 2000 for a term of six years.

The SA Parliament passed the Independent Industry Regulator Act in August 1999, and the Office commenced activities in September with the Treasurer as interim industry regulator. The Office now has its full complement of 12 staff. The only industries currently regulated by the South Australian Independent Industry Regulator (SAIIR) are the electricity industry and the Tarcoola to Darwin railway, although other industries may be referred to the regulator at a later date.

As a new regulatory system, the SA regulator has indicated the Office will watch and learn from the experiences of other regulators interstate and overseas. 'However, we do expect to develop a South Australian approach to regulation which is best suited to our needs and environment', Mr Owens said.

In some recent speeches on the role and approach of the SAIIR, Mr Owens has referred to the 'ABC of regulation' as the descriptive title of the proposed approach, which is to:

- **A**chieve the objectives of the Act;
- **B**alance the regulatory bargain, and
- **C**ollaboration.

'The approach adopted in my previous roles has been characterised by balance, compromise and pragmatism, and I see these characteristics as underpinning the approach we will adopt in SAIIR. There is no right answer: it is always a matter of judgment, of balancing the interests of stakeholders, of making the system work for the overall good', Mr Owens said.

Appointments to the key positions in the Office are now complete, and comprise:

Bob Burgstad, Manager, Electricity

Margaret Cross, Director, Consumer and Regulatory Affairs

Greg Cox, Legal Counsel

Rajat Sarawat, Director, Pricing and Competition

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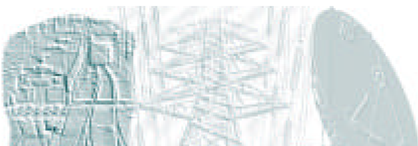
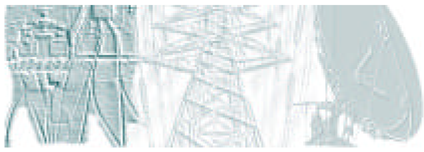




Tom Walker, Manager, Information and Financial Analysis

Pat Walsh, Director, Licensing and Performance Monitoring

'While we have major responsibilities already, especially in the areas of licensing and performance monitoring, we will need the next few months to establish normal business systems and processes.'

'The style and approach of the Office will emerge in the coming months as these fundamentals are put in place', Mr Owens said.

South Australian Independent Industry Regulator (SAIIR) – Draft Corporate Plan

Vision

The regulatory system achieves a fair balance between the interests of consumers and licensed entities, for the overall benefit of South Australia.

Mission

SAIIR's role is to oversee and manage the regulatory system so that the appropriate balance is achieved between the following objectives for regulated industries.

Objectives

- To promote competitive and fair market conduct.
- To prevent misuse of monopoly or market power.
- To facilitate entry into relevant markets.
- To promote economic efficiency.
- To ensure consumers benefit from competition and efficiency.
- To protect the interests of consumers with respect to reliability, quality and safety of services and supply.
- To facilitate maintenance of the financial viability of regulated industries.

Functions

- Perform licensing functions.
- Regulate prices.
- Monitor and enforce compliance with standards and conditions of service and supply.
- Develop and monitor codes and rules.
- Undertake customer consultation and provide consumer information services.
- Advise the Minister and perform other functions.
- Monitor the effectiveness of legislation and the regulatory regime.
- Establish appropriate information management, financial and governance systems.
- Maintain corporate services that support professional development of staff.

Statement of regulatory approach

The SAIIR intends to adopt a collaborative approach with the key stakeholder groups comprising consumers, government and licensees. It will, wherever possible, seek to achieve balanced outcomes which satisfy the, at times, conflicting objectives of the stakeholders through a clearly defined process of open consultation, dispute resolution and clarity of purpose.

Staff of the SAIIR office will operate within a system that encourages and rewards the values of professionalism, integrity, accountability, simplicity and collaboration.

Letter to the editor

14 April 2000

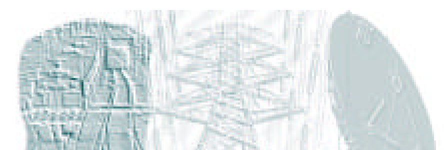
Dear Editor

It was with interest that I read Mark Pearson's article, Early Lessons — a regulator's viewpoint in the latest issue of Network.

I was heartened by the positive attitude the Commission seems to be taking in relation to incentive regulation. I would add however, that consistent with developments in other countries, notably the US, regulators must also continue to focus on pro-competitive initiatives. It is the threat and reality of competition that will enable regulatory regimes to evolve away from the cost of service and rate of return paradigms.

On another matter, Mr Pearson made a comment in relation to the cost of capital that suggested that recent sale prices for network businesses implied that the regulated WACC's were 'not unduly tight'. Regulators should be wary about taking too much comfort from these apparent 'smoking guns'.

Much of the premiums paid reflect non-regulated income streams, synergies and the anticipated (fair) sharing of efficiency gains. But even adjusting for these benefits it should be noted that the 'observed' rates of return rarely reflect the cost of debt covenants and other implied balance sheet support required to achieve the higher geared 'non-recourse' acquisition structures commonly used. There are also other transitory, inter-jurisdictional tax benefits that may be available for the initial acquisition that do not lead to permanent reductions in the required rates of return for businesses or represent the theoretical 'efficient cost of capital' that regulators seek to discover.



Rather than focusing on the inputs of WACC in its various guises, which inevitably invites the various camps to argue high or low, regulators would be better advised to pursue other independent benchmark approaches that focus on outputs.

Whilst not minimising the importance of the cost of capital, it is the experience of others who measure trends in TFP that differences in the cost of capital are not as significant as they are in cost of service methodologies. One cost of capital measure used in TFP research is the concept of 'user cost of capital' for the economy. This essentially computes the economy-wide return to capital using National Accounts data.

It includes both debt and equity and has been accepted in the US as a good proxy for the required rates of return for network investors. Such a measure is simultaneously rigorous, verifiable and more transparent than the approaches currently being pursued by Australian regulators.

Paul Fearon, CitiPower Pty

See Mark Pearson's article on Incentive Regulation: a discussion.

National developments

Telecommunications

Agreement on commercial churn

On 23 February 2000 the Australian Competition and Consumer Commission (ACCC) reached an agreement with Telstra to provide $4.5 million compensation to telecommunications service providers, which have used Telstra's commercial churn process. The $4.5 million fund will be administered by the ACCC to help these service providers develop their technical capability to transfer customers with Telstra and each other online. In addition, Telstra is reducing the price to other service providers of transferring customers.

This agreement follows an acknowledgment by Telstra that its commercial churn service may have had an adverse effect on the competitive position of carriers seeking to transfer customers. For its part, the ACCC acknowledged that Telstra's introduction of commercial churn offered an opportunity to deal with divisive issues surrounding the transfer of customers for local call services.

The ACCC and Telstra have agreed to discontinue proceedings in the Federal Court with no orders as to costs. The ACCC revoked the remaining competition notice relating to commercial churn at this time.

Draft pricing principles for mobile number portability

On 18 February 2000 the ACCC issued the draft guide entitled *Pricing Principles for Mobile Number Portability*. The guide sets out the principles the ACCC will apply to arbitrate a dispute over the terms and conditions of mobile number portability (MNP) between service deliverers and service providers involved with transferring mobile service numbers. MNP allows a customer to change their mobile carrier and/or service provider while retaining the same mobile service number(s).

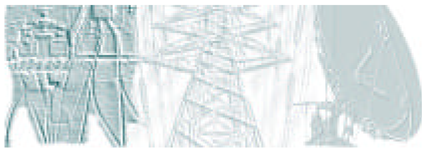
The draft principles provide that each service deliverer and mobile carrier should be responsible for their own system set-up and customer transfer costs of providing mobile number portability. Additionally, service deliverers should be responsible for all efficient call conveyance costs that result from their choice of solution to provide MNP.

The ACCC believes the draft pricing principles present service providers with the right incentives to provide MNP in the most efficient and low-cost fashion. Comments from interested parties were sought by 17 March 2000.

Rebalancing of local telephone charges

The retail price cap restrictions on Telstra require that it obtains the ACCC's consent before increasing its line rental pricing to the lowest-bill residential customers, when the proposed alteration will increase the line rental price by more than the CPI. The ACCC cannot approve the increase in line rental pricing unless it is satisfied Telstra will have arrangements in place to ensure the average telephone bills of the 10 per cent lowest-spend customers do not increase in real terms.

On 31 January 2000 Telstra applied to the ACCC to increase line rental charges for all customers from $11.65 to $13.85 per month and to reduce local call rates from 25 cents to 22 per call as from 1 March 2000. Telstra also applied to introduce neighbourhood calls (a call made within the same local exchange area) at a rate of 15 cents per call.



To protect low-spend customers, Telstra proposed to retain all prices at their current levels. These prices would be available under an opt-in pricing plan called 'Easysaver 12' with the following charges:

- access line rental will be the same as the new standard charge — $13.85;
- a local call charge will be $0.25;
- all other call charges are as per Telstra's standard form of agreement (including the availability of neighbourhood calls); and
- a rebate of $2.00 per month on all Easysaver 12 accounts of $20.00 per month or less.

Following an examination of Telstra's application, the ACCC considered that Telstra's proposal meets the retail price cap requirements and approved its increase in line rental.

Final report on mobile long-distance services

On 14 January 2000 the ACCC issued the final report of its mobile long-distance services inquiry, deciding not to declare this service. Such a declaration would have required mobile telephone network operators to allow service providers to supply the long-distance component of calls from mobile phones.

According to the ACCC there will soon be a high amount of facilities-based competition. Three network operators — Telstra, Cable and Wireless Optus and Vodafone — currently provide mobile services in Australia, in addition to a number of resellers of mobile services, including Hutchinson, One.Tel and AAPT. The latter companies have also acquired spectrum and are starting to roll out their own mobile networks. When complete, Australia will have at least five mobile network operators in its main population centres and up to four operators in regional areas — one of the highest number of suppliers of mobile services in the world.

Consequently, the ACCC found that declaration of this long-distance base service is unlikely to lead to more vigorous competition. It was also not satisfied that declaration would be in the long-term interest of end-users, the relevant test for declaration under the *Trade Practices Act 1974* (the Act).

Acquisition of OzEmail

In early 2000 the ACCC closely examined Telstra's proposal to purchase OzEmail's residential ISP business. On 10 January 2000 Telstra requested the ACCC's view on whether the acquisition was likely to breach the merger provisions of the Act.

The ACCC had significant concerns that the acquisition would substantially lessen competition. With the removal of OzEmail as a separate business entity providing residential Internet subscriber services, the ACCC was concerned that eliminating a vigorous and effective competitor to Telstra would endanger competition.

The ACCC identified several areas where the proposed acquisition could have a detrimental impact on the level of competition:

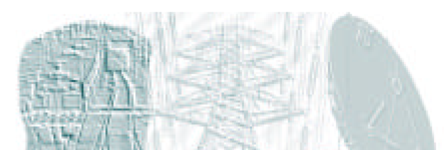
- It was claimed that the acquisition would give Telstra more than 40 per cent of the national market in providing residential Internet subscriber services. In the event of an acquisition proceeding, the next largest ISP would barely have more than 6 per cent of all subscribers.
- Although establishing an ISP is relatively easy, there are significant barriers to building a national subscriber base, including substantial marketing and equipment cost.
- It was possible that the proposed acquisition could have a detrimental impact on the competitive dynamics for Australian online content, online advertising and electronic commerce.

On 14 February 2000 eisa also proposed to acquire OzEmail. The ACCC decided that this merger would not significantly alter the existing market structure and that it would be likely to preserve the intense competition and rivalry that exist within the industry. It therefore decided not to intervene in the acquisition of OzEmail by eisa.

Telecommunications access disputes (arbitrations)

Since November 1999 several telecommunications access disputes under Part XIC of the Act have been notified to the ACCC:

- On 29 November 1999 Telstra notified the ACCC of an access dispute with AAPT on the charges to be paid by Telstra for domestic public switched telephone networks (PSTN) terminating access services, to enable the termination of local calls from Telstra's network to ISPs connected to AAPT's network.
- On 29 November 1999 Cable and Wireless Optus notified the ACCC of two access disputes on the terms and conditions on which Telstra proposes to supply Cable and Wireless Optus with domestic PSTN originating and terminating access services.
- On 30 November 1999 AAPT notified the ACCC of an access dispute with Vodafone on the charges to be paid by AAPT for domestic global systems for mobiles (GSM) originating and terminating access to the Vodafone network.
- On 5 January 2000 Macquarie Corporate Telecommunications notified the ACCC of an access dispute with Telstra on the terms and conditions on which Telstra



supplies Macquarie with the local carriage service.

- On 25 January 2000 FLOW Communications notified the ACCC of an access dispute with Telstra on the charges to be paid by FLOW to Telstra for domestic PSTN originating access services.

Contact: Michael Cosgrave, ACCC (03) 9290 1914

Gas

The ACCC is currently assessing five access arrangements and several other matters under the National Third Party Access Code for Natural Gas Pipeline Systems (the code).

The regulatory rate of return and asset base valuation remain contentious issues. Regulatory principles for these calculations and the shift to a post-tax nominal framework are currently being developed by the ACCC.

Moomba to Sydney pipeline system: EAPL

The ACCC is considering the access arrangement proposed by East Australian Pipeline Limited (EAPL) for the Moomba to Sydney pipeline system. Recent developments in gas transmission in NSW, including the interconnect with the Victorian system and the construction of the Eastern Gas pipeline from Longford to Sydney by Duke Energy, will have a significant impact on the Moomba–Sydney pipeline system.

EAPL is proposing that its tariffs under the access arrangement commence on 1 July 2000.

Moomba to Adelaide pipeline system: Epic Energy

Epic Energy South Australia Pty Ltd submitted a proposed access arrangement for the Moomba–Adelaide pipeline system in April 1999. The ACCC released an issues paper in September 1999 and received 13 submissions. Concerns included the impact of capacity reserved under existing haulage agreements on third party access, the range of haulage services offered, valuation of the initial capital base, forecast operations and maintenance costs and the rate of return proposed by Epic Energy.

The ACCC is currently finalising its draft decision on the Moomba–Adelaide access arrangement.

Riverland and Mildura pipeline systems: Envestra Limited

Envestra Limited submitted proposed access arrangements for the Riverland pipeline system and the Mildura pipeline system on 22 November 1999.

A 1997 tender for the Mildura pipeline established a real rate of return and a price path designed to deliver an appropriate internal rate of return over a 30-year period. The ACCC accepted the terms determined by the tender process in April 1999 and so cannot review those items in its current assessment of the access arrangement. The access arrangement for the Mildura pipeline covers items not addressed by the tender process.

The ACCC has released an issues paper on the access arrangements for both the Riverland and Mildura pipelines.

Amadeus Basin to Darwin pipeline system: NT Gas

An issues paper for the Amadeus Basin to Darwin pipeline was released in August 1999 and submissions have been received. The ACCC expects to release its draft decision by the end of next month.

A key issue is the potential for future asset stranding and how this should be incorporated into a five-year regulatory decision. NT Gas has argued that Timor Sea Gas Prospects and the expiration of its foundation contract may result in the pipeline being stranded in approximately ten years time. It has proposed a 'kinked' depreciation schedule that will accelerate depreciation of the pipeline over the next ten years, adding approximately $1 per gigajoule (GJ) to reference tariffs in the first regulatory period.

This in an interesting challenge for the ACCC: assessing tariffs to apply over the next five years, where these tariffs are influenced by events which may or may not occur ten years from now.

Central West pipeline (CWP): AGLP

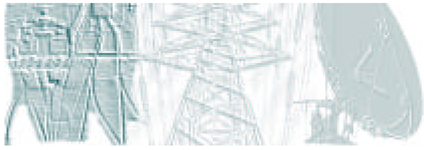
In September 1999 the ACCC released its draft decision on the proposed access arrangement for AGL's Central West pipeline in NSW. The pipeline extends 255 km from the Moomba–Sydney pipeline to Dubbo. This was the ACCC's first draft decision under the code.

A major issue has been the determination of the appropriate rate of return for a new pipeline, taking into consideration risks specific to greenfield pipelines without substantial foundation contracts. AGL proposed that a premium be incorporated in the CAPM to accommodate specific risks. However the ACCC provided a post-tax nominal return on equity of 14 per cent instead. This compared with the return on equity allowed in the Victorian gas transmission decision of 13.2 per cent.

A number of parties have argued that a higher rate of return is required to encourage greenfield investment in regional Australia. The ACCC is currently considering the best approach for dealing with specific risk.

Queensland derogations

The National Competition Council (NCC) has asked the ACCC to advise whether the Queensland gas



pipeline acccess regime is broadly consistent with the code. The NCC has specifically requested the ACCC to assess the tender process undertaken by the Queensland Government against those established in the code.

If the tender process is inconsistent, the ACCC has been asked to determine whether the reference tariffs established are broadly consistent with the pricing parameters set out in s. 8 of the code. This report will be finalised within the next few weeks.

GPU GasNet interconnect roll-in

In December 1999 the ACCC released its draft decision accepting revisions submitted by GPU GasNet to roll the interconnect assets into the asset base of the Victorian gas transmission system, and raise overall tariffs by about ten per cent.

The interconnect assets, comprising the interconnect pipeline and the Springhurst compressor and valves, were built by Transmission Pipelines Australia before the privatisation of the system in June 1999. These assets can supply about ten per cent of winter demand and about 20 per cent of summer demand for gas in Victoria.

Revenues generated directly on the new interconnect zone are estimated to cover only 8 per cent of the related capital costs. GPU GasNet has proposed that the remaining costs be rolled in under the code provision that allows the regulator to approve a higher reference tariff for all users of the system on condition that the new facilities provide system-wide benefits.

GPU GasNet has identified two system-wide benefits. Southward gas flows, following the Longford emergency, demonstrated the security benefits, including continuation of supply to essential services and insurance against total system collapse. The assets also permit inter-basin competition in south-east Australia for the first time. The ACCC expects that both the physical flows and the possibility of competition will have a major positive impact on the level of natural gas competition in south-east Australia.

The ACCC is currently considering submissions made in response to the draft decision.

Eastern Gas Pipeline Access Undertaking: Duke Energy

In November 1999 the ACCC received an undertaking from Duke Energy with respect to the terms and conditions for access to the Eastern Gas Pipeline (EGP). The undertaking was submitted under Part IIIA of the Trade Practices Act rather than as an access arrangement under the code.

Duke believes that an undertaking under Part IIIA provides more flexibility and wishes to avoid the 'cost of service' approach to tariff setting and short tariff review periods, and focus on the maintenance of revenue streams that it believes result from application of the code. It also wishes to avoid high incremental tariffs for capacity enhancement, the use of prudent discounts and differentiation between shipper classes, all of which it sees as discriminatory.

Duke is not required to submit an access arrangement because the EGP is currently not considered a 'covered' pipeline under the code. However, last month the NCC received an application for the pipeline to be covered under the code. The ACCC is currently assessing the Duke undertaking for third party access in light of Part IIIA criteria.

Regulatory Principles: toward a post-tax framework

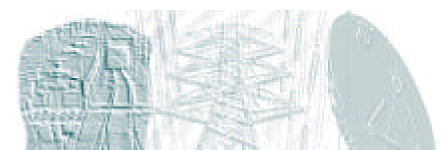
To date all of the access arrangements submitted to the ACCC have proposed a pre-tax real weighted average cost of capital (WACC). However, a number of problems surrounding the use of a pre-tax real framework were revealed during the public consultation process for the Victorian assessment. In particular:

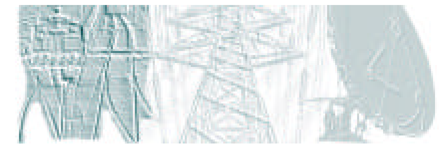
- investors base their decisions on nominal post-tax returns;
- the pre-tax real framework requires the post-tax nominal WACC to be converted to a pre-tax real WACC — no unique formula exists to cover all transmission service providers;
- calculating the long-term effective tax rate required by the pre-tax framework is problematic — errors can lead to over- or underestimation of the rate of return, creating perceptions of risk.; and
- the S-bend problem: accelerated tax provisions mean that businesses pay little tax initially, with correspondingly higher liabilities in later periods.

These problems can be addressed by changing to a post-tax framework:

- a nominal post-tax WACC can be directly compared with other financial benchmarks such as interest rates and the nominal return on equity;
- there is no need to convert the post-tax WACC to a pre-tax WACC as taxes are passed through in the cashflows; and
- a post-tax framework enables the regulator to keep track of pre-payments of tax and estimated liabilities — as a result, any uncertainty over the future tax regime and other factors that may affect actual tax liabilities can be accounted for through the regulatory regime.

The ACCC is concerned that there is undue emphasis on the WACC figure and believes it is more important that industry and commentators focus on the post-tax nominal return on equity. For these reasons the ACCC advocated a post-tax nominal





approach for future regulatory assessments in the 'Draft Statement of Principles for Regulation of Transmission Revenues' (May 1999).

Setting the WACC

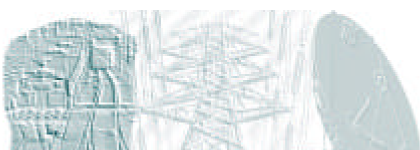
The debate on the Victorian assessment also highlighted the importance of getting the WACC parameters right. The ACCC applies a benchmark approach to setting the appropriate rate of return; the benchmarks rely on comparisons of investor returns achieved by other business entities with similar risk characteristics. It is assumed that the firm is financially structured in line with the regulatory accounts and that equity holders are Australian taxpayers (i.e. a gamma-value close or equal to one). Financial market parameters are based on the latest market intelligence, except where volatility suggests a moving average or where a value currently accepted by market analysts is more appropriate, e.g. market risk premium and inflation expectations.

Specific risk

Pipeline owners have on occasion proposed a WACC premium to account for risks that are specific to their business, for example greenfield pipelines with no established markets. Finance theory requires that specific risks that can be eliminated through diversification should not be compensated for through an increase in the cost of capital. The ACCC believes that specific risk is better addressed through the cash flows, ensuring the integrity of the CAPM model is not compromised. Several financial experts, including Officer, Davis and Hathaway support this move to a post-tax nominal framework.

Progress and status of current work projects of the ACCC's Gas Group can be found at the ACCC website http://www.accc.gov.au under 'Gas'.

Contact: Kanwaljit Kaur, ACCC
(02) 6243 1276



Electricity

Asset valuation conference

The debate on the valuation of sunk and restructured utility assets has been ongoing. There seems to be consensus that no single asset valuation methodology can be applied in all circumstances, and that different methodologies may be relevant in different circumstances.

Under the building-block approach, the value attributed to the regulatory asset base is fundamental to the calculation of maximum allowable revenues (MAR). The MAR can therefore vary depending on the methodology used and assumptions made when valuing the asset base. Once the opening asset valuation has been determined, the principles for asset base roll-forward also need to be established. Given the importance of asset base valuation, the ACCC has decided to hold a conference to discuss this and other related issues.

The conference will be held in Melbourne on 16 June 2000 and will involve several international speakers. Topics will include asset valuation techniques and the international experience; land and easement valuations; and the principles of asset base roll-forward. Conference participants will have an opportunity to question speakers and participate in panel discussions.

Confirmation of speakers and venue are available on the ACCC's website http://www.accc.gov.au under 'Electricity'.

NSW and ACT electricity transmission network revenue caps

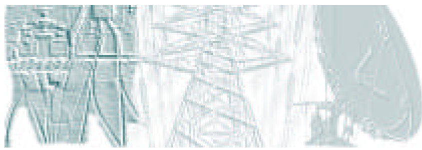
On 25 January 2000 the ACCC finalised its revenue cap decision for the electricity transmission networks in NSW and the ACT. The decision is in accordance with the principles in the National Electricity Code (NEC) and NSW's transitional rules and will apply for the period 1 February 2000 to 30 June 2004. This is the ACCC's first decision as economic regulator of electricity transmission in the National Electricity Market.

The code requires the ACCC to set a revenue cap with an incentive mechanism (such as CPI-X or some variant) for non-contestable transmission network services. The ACCC's role as regulator of those services is limited to determining the maximum allowable revenue (MAR). TransGrid will firstly calculate the network prices in accordance with NSW's transitional derogations and then in accordance with the code.

The ACCC is developing the regulatory framework through its 'Statement of Principles for the Regulation of Transmission Revenues' (Regulatory Principles). The draft was released in May 1999. In that context, the ACCC sees the decision for these networks as being part of the transition towards its Regulatory Principles framework. The ACCC's approach to future revenue caps will evolve and the Regulatory Principles will set it out.

The ACCC has adopted an accrual building-block approach to determine the revenue caps for TransGrid's and EnergyAustralia's transmission networks. In finalising this decision, the ACCC used a post-tax nominal formulation and has allowed for a pass-through of costs to take account of the Goods and Services Tax (GST) and a possible pass-through increase of insurance premiums in third-party liability. Consequently, the revenue cap is the sum of:

- a return on capital;
- the return of capital;
- an allowance for operating and maintenance expenditure;
- tax — expected business income tax payable;
- insurance — possible pass-through of insurance costs for third-party liability; and



- GST — pass-through of the net impact of the Goods and Services Tax.

Revenue cap for TransGrid

To establish the appropriate return on the funds invested in TransGrid, the ACCC has modelled TransGrid's asset base over the life of the regulatory period. The closing value of TransGrid's asset base is constructed by converting the opening real value of the asset base to a nominal figure by adding an inflation adjustment (in this case 3.15 per cent per annum) plus any capital expenditure, and subtracting the depreciation and asset sales (disposals) for the year. The closing value for one year's asset base becomes the opening value for the following year's asset base.

On considering a consultant's review of TransGrid's asset base, the ACCC set the opening value of TransGrid's assets at $1935 million.

TransGrid has planned an extensive capital expenditure program ($946 million) over the coming years. However, on considering a consultant's review of TransGrid's capital expenditure program, the ACCC has calculated TransGrid's revenue cap based on $881 million of capital expenditure, which includes interest during construction.

Calculation of the applicable straight-line depreciation component has been based on the remaining life per asset class. Moreover, as part of the post-tax nominal framework, the ACCC has also made allowance for 'economic depreciation' which adds together the (negative) straight-line depreciation with the (positive) annual inflation effect on the asset base. This approach has also allowed the ACCC to:

- normalise the tax payable estimates over the life cycle of the assets to address the so-called 'S-bend' phenomenon; and
- remove the additional return the networks would otherwise earn on the tax allowance that has been brought forward.

This economic depreciation has been used to model asset values over the life of the regulatory period and determine the return of capital.

The ACCC considers 13.85 per cent as the appropriate post-tax nominal rate of return to apply to TransGrid. This equates to a post-tax nominal weighted average cost of capital of 8.30 per cent. The ACCC believes these figures are towards the higher part of the feasible range. In arriving at this decision, the ACCC has made an upward allowance to account for risk perceptions attributable to the newness of the regulatory regime.

On considering a consultant's review of TransGrid's operating expenditure, the ACCC has included in its revenue cap decision provision for a real saving in TransGrid's controllable regulated operating expenses of approximately 7.5 per cent over the regulatory period or approximately 1.5 per cent per annum.

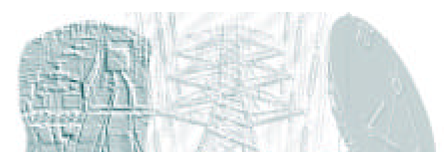
The ACCC has made an assessment of TransGrid's taxation position based on the assumptions underlying the above building-block components, TransGrid's tax depreciation profile and the taxation arrangements as proposed in the Ralph business taxation review. The last of these involves reducing the previously applicable 36 per cent company tax rate and removing accelerated depreciation allowances (although the latter is grandfathered for assets in service before September 1999). The ACCC's allowance for taxes payable trend from $8.95million in the first year of the regulatory period to $15.31million in 2003–04.

Under the regulatory regime administered by the Independent Pricing and Regulatory Tribunal (IPART), TransGrid's revenue over the last four years has been around $350 million per annum and for 1998–99 its regulated revenue was $339 million. Over the period of this review TransGrid has argued for a revenue cap trending from $357.94 million in 1999–00 to $455.45 million in 2003–04. This request was net of the GST effects and compensation for asymmetric risks.

Based on the ACCC's assessment of the financial parameters operating in the Australian economy at present as well as TransGrid's expenditure program, it has determined a maximum annual revenue for TransGrid which trends in nominal terms from $329.63 million in 1999–00 to $393.12 million in 2003–04.

As required by the NEC, the revenue cap determined by the ACCC has been constructed using a CPI-X efficiency regime. Accordingly, TransGrid can roll forward the opening revenue figure of $329.63 million adjusted from year to year for changes in the consumer price index (CPI) plus an X-factor of 1.3 per cent per annum. The X-factor ensures that TransGrid can receive the real value of the projected revenue stream. The final revenue stream also reflects an efficiency driver on controllable operating expenses of 1.5 per cent per annum. It should also be noted that the CPI-figure used during the regulatory period may need to be adjusted for the impact of the GST.

The ACCC's financial indicator analysis indicates that, after taking into account the impact of this decision, TransGrid's credit rating is likely to move from AA to A over the regulatory period. This trend is largely due to the network's ambitious planned capital expenditure program. On balance, the ACCC is satisfied that the proposed revenue stream is appropriate and sustainable.



Finally, the ACCC has proposed to include a pass-through item for the 2000–2001 financial year to address the impact of the tax changes as part of the GST package. This pass-through item will net out the impacts of introducing a GST against the impacts of removing the wholesale sales taxes. As TransGrid will be shielded from the impact of the GST through this mechanism, the ACCC will not allow TransGrid to gain from the introduction of the GST by including the inflationary effects of the tax in the CPI incentive mechanism. The CPI incentive mechanism will therefore be exclusive of the inflationary effects of the GST. The ACCC will work with the networks and the State regulators to derive an appropriate CPI adjustment factor.

Revenue cap for EnergyAustralia's parallel transmission assets

The ACCC has determined a revenue cap for EnergyAustralia's parallel (66 kV to 220 kV) transmission network. IPART administers the regulatory arrangements for EnergyAustralia's non-parallel transmission network and its distribution network.

Where possible, the ACCC has adopted a consistent approach in establishing the revenue caps for TransGrid and for EnergyAustralia's transmission assets. EnergyAustralia's transmission services are nevertheless largely integrated with its distribution services. In respect of operating costs and productivity improvements the ACCC has focused on EnergyAustralia's integrated business rather than attempting to maintain consistency for its own sake.

On considering a consultant's review of EnergyAustralia's asset values, the ACCC has used an optimised depreciated replacement cost (ODRC) value for its network assets ($384.9 million) and an indexed historic cost for its easements ($72.5 million). It accepted the prudence of EnergyAustralia's proposed $80 million capital expenditure program for its parallel transmission network.

Consistent with the TransGrid decision, the ACCC adopted a post-tax nominal return on equity of 13.85 per cent for EnergyAustralia. This equates to post-tax nominal weighted average cost of capital (WACC) of 8.1 per cent. The difference between EnergyAustralia's post-tax nominal WACC of 8.1 per cent and TransGrid's 8.3 per cent arises from the fact that the tax shield afforded to EnergyAustralia from depreciation is proportionately smaller.

Given the degree of integration of operating and maintenance across EnergyAustralia's network, the ACCC has used the same efficiency factor for the parallel network that IPART has used for EnergyAustralia's distribution network; that is, real reductions in operating expenditures of one per cent per annum.

Based on the various elements of the ACCC's building-block approach, it has derived a revenue allowance for EnergyAustralia's parallel transmission network that will grow from $73.10 million in 1999–00 to $78.12 million in 2003–04. Consistent with the TransGrid decision, these numbers are expressed in CPI-X format where X is 1.43 per cent. The actual revenue stream from year to year will be altered to take into account the impact of the GST.

Contact: Mike Rawstron, ACCC
(02) 6243 1249

Airports

New investment applications at Brisbane and Perth airports.

Brisbane airport's application

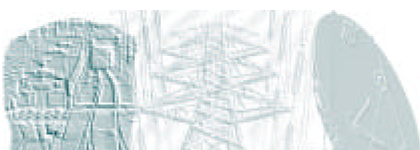
Brisbane Airports Corporation Limited (BACL) wrote to the ACCC on 6 December 1999 seeking assessment of a proposal to increase charges in excess of CPI-X.

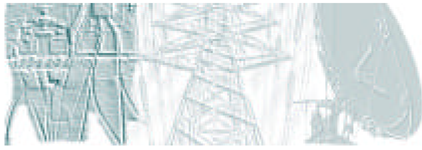
In its application BACL proposed investment projects under three general classifications:

- Projects with an estimated cost of almost $12.5 million, including domestic terminal apron and taxiway development, airfield guidance lighting and other relatively small projects. It was proposed to fund these through increased general landing charges.
- Projects with an estimated total cost of almost $27 million, including international terminal apron development, gate expansion and work on the international aerobridges and baggage handling system. It was proposed to fund these through increased international terminal charges.
- Charges to recover $2.1 million of costs associated with baggage screening requirements arising from government mandated services such as the provision of necessary security requirements.

BACL also proposed a restructuring of charges that would reduce general landing charges and increase international terminal charges.

The ACCC assessed each element of BACL's proposal against the guidelines in the Treasurer's direction.





The major issues raised in response to BACL's proposal include:

- defining necessary new investment;
- the costs associated with the proposal;
- adequacy of the proposed rate of return;
- the presence or absence of user support and;
- the proposed restructuring of prices.

The ACCC's preliminary conclusions are to accept pass-throughs for most of the projects proposed. In particular the ACCC's draft decision is:

- to accept BACL's proposals to pass the costs of the proposed new investments through the price cap with the exception of the 'missing link taxiway Bravo', 'other projects/assets', and the 'upgrade of international terminal building aerobridges and baggage handling system to PLC technology';
- not to accept BACL's proposals to include land value as costs for purposes of the new investment pass-through;
- not to accept the level of operating expenses proposed by BACL without further information on the basis of those costs or its user support; and
- to accept a pre-tax nominal WACC of 11.9 per cent.

Overall these preliminary conclusions have the effect of reducing the amount of costs that BACL could pass through the price cap and lowering the rate of return it may earn on that expenditure.

Perth airport

Higher charges are being sought to cover expenditures amounting to $5.07 million already incurred in the year to June 1999 and $4.7 million for the twelve months to June 2000.

The major projects comprise new apron facilities, runway overlays, apron and taxiway resurfacing and the airport's master plan. The minor projects cover a range of projects such as landside road resurfacing, replacement of baggage equipment, taxiway lighting, construction of a smoker's lounge and runway sweeper replacement.

Of the 37 projects for which Perth International Airport (PIA) has requested funding outside the price cap, only 11 passed the new investment test. The total value of the proposals deemed new investments was $ 4.4 million compared with $9.8 million of projects for which PIA requested charge increases over 1998–99 and 1999–2000. The lower level of new charges accepted by the ACCC also reflects a lower rate of return adopted in the draft decision.

Sydney airport draft aeronautical pricing proposal

Sydney airport has advised the ACCC that it proposes to increase and restructure aeronautical charges at Sydney Kingsford Smith Airport.

The average price increase proposed is around 117 per cent, with most of the increase driven by changes to the runway charge. Sydney Airports Corporation Limited (SACL) estimates that the proposed charges would generate $212.5 million in revenue in 2000–01 if implemented by 1 July 2000 compared to $98 million if charges remained unchanged. The proposed charges do not include the impact of the GST. The ACCC understands that SACL will provide a separate notification in relation to this matter.

The proposed prices are based on an 'allowable revenue' target. Prices are calculated from the allowable revenue target using traffic projections with adjustments for the proposed restructuring of charges.

SACL use a building-block approach to derive allowable revenue. This approach follows the ACCC's '*Draft Statement of Principles for the Regulation of Transmission Revenues*' (Regulatory Principles). SACL identifies aeronautical costs for the building-block approach separately.

SACL values its aeronautical asset base at around $1.7 billion of which around $600 million is land. SACL values aeronautical land by estimating the opportunity cost of the land. This approach considers the 'market value' of possible alternative uses for the land.

The WACC proposed by SACL is 8 per cent post-tax real. It is derived using an asset beta of 0.7. In line with the Regulatory Principles, tax is estimated using cash flow modelling, added back into allowable revenue.

In addition to the price increases, SACL also proposes to restructure charges. The proposals would see an increase in landing charges, more so for domestic users than international users. SACL also proposes to change the charging basis for some services from landed tonnes to passengers.

Contact: Margaret Arblaster, ACCC
(03) 9290 1862

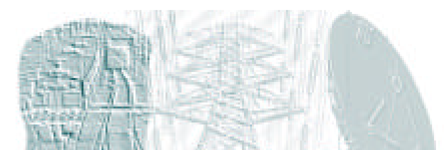
National Competition Council (NCC)

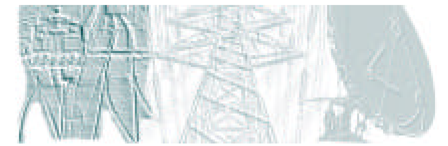
This update provides an outline of recent Part IIIA activity within the areas of NCC responsibility and also updates its assessment of State and Territory progress with national competition policy (NCP) reform implementation.

Part IIIA activities

Sydney airport declaration

The Australian Competition Tribunal released its decision on the declaration of certain international





air freight related services at Sydney airport provided by the Sydney Airports Corporation Limited (SACL) on 1 March. The tribunal declared for a period of five years those services provided by parts of the Sydney Airport to allow freight handlers to load and unload freight from international aircraft and store associated equipment. The decision is comprehensive and substantially clarifies the interpretation and application of the criteria for declaration, especially the 'promotion of competition' test and the 'uneconomic to build another facility' test.

Gas access

The eastern gas pipeline coverage application

The Duke Group is currently building a gas pipeline from Longford to Sydney. It has submitted an access undertaking to the ACCC under Part IIIA and the ACCC is to issue a draft determination shortly. In the meantime AGL Energy Sales and Marketing Ltd has applied for the pipeline to be covered under the National Gas Access Code (the code).

As a preliminary issue the NCC determined on legal advice that a pipeline under construction was a 'pipeline' in terms of the code and that the application was within jurisdiction.

The NCC and the ACCC are cooperating on the undertaking and code coverage matters to ensure a consistent and appropriate outcome.

East Australian Pipeline Limited (EAPL) may, at a later stage, apply for revocation of coverage of its pipeline from Moomba to Sydney under the code. This application has not been made as yet, but the NCC understands that it is likely. This application will involve some parallel issues with the Eastern Gas Pipeline coverage application, and the NCC will consider any common issues at the same time. One of the key issues for both applications is whether the two pipelines (plus the Albury to Wagga Wagga interconnection — the 'interconnect') supplying gas into the Sydney area will provide effective competition in gas transmission services to prevent competition being promoted in another market (like the market/s for gas wholesale or retail supply) if the code was applied.

South-east pipeline revocation application

The NCC has forwarded its recommendation on the application for revocation of coverage of the south-east pipeline in South Australia to the South Australian Minister for Minerals and Energy.

This is the eighth revocation application under the code that the NCC has dealt with.

Western Australian gas access regime

This recommendation has been forwarded to the Minister for Financial Services and Regulation and is awaiting decision.

Victorian gas access regime

The NCC is still discussing the operation of the market carriage rules under the Victorian gas access regime with the Victorian Government. Of particular interest is the effective operation of financial instruments (such as hedging arrangements) to facilitate certainty in transmission services. The NCC expects to complete its considerations of these matters shortly and will then forward its recommendation.

Queensland gas access regime

The ACCC will be forwarding advice to the NCC shortly on the pricing derogations from the code in relation to transmission pipelines in Queensland. The NCC will then prepare and forward its recommendation on this regime.

Rail access matters

Tarcoola to Darwin rail access regime

This recommendation has been forwarded to the Treasurer and a decision on the recommendation is expected imminently.

Western Australia rail access regime

The NCC's consideration of this access regime is getting very close to being finalised. Possibly the only outstanding issue concerns the question whether an interstate rail access service is a separate service from an intrastate rail access service. This issue is important because the WA rail access regime currently applies to intrastate services only, but it is possible that certification would protect all services provided by the WA track from declaration. The NCC is looking to work with the ACCC and the Australian Rail Track Corporation together with the Western Australian Government to resolve this issue before forwarding the recommendation to the Commonwealth Minister for Financial Services and Regulation.

Electricity access

Northern Territory electricity access regime

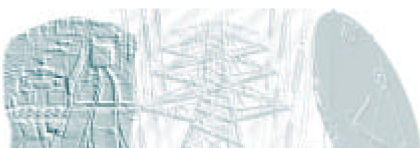
The NCC is currently considering this access regime. Public submissions have closed and the secretariat is now analysing the regime and the submission in order to identify potential issues the NCC might have with the regime. Any identified concerns will be discussed with the NT Government.

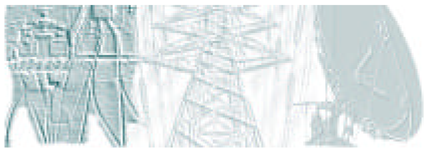
The NCC has contracted with the Network Economic Consulting Group (NECG) for advice on the regime's pricing principles and is expecting the final report within a couple of weeks. The NCC has not yet decided whether it will issue a draft recommendation for further public consultation.

The NCC is not likely to forward its recommendation to the Commonwealth Minister before June 2000.

The assessment of government performance with NCP implementation

The NCC will be completing a supplementary second tranche assessment report to go to the Federal Treasurer by 1 July 2000.





Outstanding regulation review matters are:

- for the Commonwealth: the Australia Post access regime;
- for New South Wales: reform in rice and dairy agricultural marketing arrangements;
- for Victoria: compulsory third-party, workers compensation and professional indemnity insurance arrangements;
- for Queensland, Western Australia and the ACT: dairy marketing arrangements;
- for South Australia: the review of the Cooper Basin Ratification Act; and
- for Tasmania: compulsory third-party insurance arrangements.

The NCC will be assessing certain aspects of progress in water reform for all governments except Victoria and the ACT.

It will also be assessing Queensland's performance in the implementation of the National Gas Code.

The NCC will be looking at aspects of reform implementation for road transport for all governments except NSW and Victoria.

In the area of competitive neutrality reform, the only outstanding assessment issue for the supplementary second tranche assessment is the implications arising from the complaint by Coachtrans against Queensland Rail in relation to passenger transport services in south-east Queensland.

The NCC has also commenced work on the third, and final, tranche assessment of the Government's progress with reform implementation which will be completed by 30 June 2001.

Contact: Ed Willett, NCC
(03) 9285 7499

State developments

South Australia

South Australian Independent Industry Regulator (SAIIR)

The establishment of the SA Independent Industry Regulator (SAIIR) and the commencement of new regulatory arrangements for the electricity supply industry in South Australia on 11 October 1999 was described in Issue No. 3 of Network.

Regulatory developments since 11 October 1999

On 11 October 1999 the industry regulator issued licences under the new regulatory framework to government-owned electricity businesses and also to several retailers able to sell electricity to contestable customers. At the same time, the industry regulator issued retail, distribution, transmission and metering codes.

On the same date the Treasurer also issued an electricity pricing order (EPO) pursuant to s. 35B of the *Electricity Act 1996*. The EPO applies to transmission and distribution services until 31 December 2002 and 30 June 2005 respectively (or until a new price determination for such services is made). The SAIIR will administer the EPO, though from 1 January 2001 the ACCC will administer the EPO as it relates to transmission services.

Licensing issues

On 20 December 1999 the SAIIR granted a transmission licence to Murraylink Transmission Company P/L (wholly owned subsidiary of TransEnergy Australia P/L) for a proposed entrepreneurial interconnect (Murraylink) from Red Cliffs (Victoria) to Berri (SA).

Murraylink is scheduled to commence operation in the first quarter of 2001 with construction starting later this year. The proposed transmission line is to have a capacity of 200 MW and be capable of supplying approximately 1700 GWh of electricity per year. It is proposed that Murraylink will use the HVDC technology currently used in the Directlink interconnect between NSW and Queensland.

A transmission licence application has been received from Transgrid for an interconnect from Buronga in NSW to Robertstown and/or Berri in SA consisting of a single circuit 275 kV line with 250 MW capacity.

Electricity Industry Ombudsman

The Electricity Industry Ombudsman Scheme for South Australia (EIOSA Ltd) has been established. The SAIIR has approved the charter and constitution of the EIOSA, which set out its functions and jurisdiction, as well as the procedures, powers and other duties of the ombudsman. It is a licence condition in SA that all retail, distribution and transmission licensees participate in the approved ombudsman scheme.

Mr Nick Hakof was appointed Electricity Industry Ombudsman in December 1999 and is presently contactable through the Office of the SAIIR until permanent accommodation is located. A Board of Director's has been appointed, and the chair is Professor Keith Hancock AM.

Electricity privatisation

On 28 January 2000 the SA Government's privatisation of the main distribution and franchise retail entities (ETSA Utilities and ETSA Power respectively) was completed. ETSA Utilities (which will continue as the trading name) is now operated by a partnership of five entities jointly owned by Cheung Kong Infrastructure and Hong Kong Electric International. AGL SA Pty Ltd, a wholly owned subsidiary of

AGL, now operates ETSA Power. On 28 January the SAIIR facilitated necessary licence transfers to the new entities.

Public street lighting inquiry

The South Australian Treasurer has requested the SAIIR to undertake an inquiry into the current level of charges for street lighting in SA pursuant to Part 7 of the *Independent Industry Regulator Act 1999*. The inquiry will focus on the 'fairness and reasonableness' of street lighting tariffs charged to local government authorities throughout SA. The inquiry's Terms of Reference include consideration of:

- the cost of providing the services for which the street lighting tariffs are charged;
- the cost of complying with regulations covering street lighting;
- the return on assets used to provide street lighting services;
- the efficiency and cost effectiveness of such services; and
- the standard of street lighting provided throughout the State's 69 council areas.

The inquiry will also compare the cost of supplying and maintaining SA's public street lighting against equivalent services interstate.

Establishment of the SAIIR Office

Details of the Office are as follows:

Address: GPO Box 2605, Adelaide SA 5001
Phone: (08) 8463 4444
Fax: (08) 8463 4449
Website: http://www.saiir.sa.gov.au

Rail access

In August 1999 the South Australian Parliament enacted legislation to regulate third-party access for the Tarcoola-Darwin Railway (AustralAsia Railway). The *AustralAsia Railway (Third Party Access) Act 1999* is a mirror of in legislation enacted by the Northern Territory Parliament in May 1999. The access regime was approved by the Federal Treasurer on the recommendation of the NCC in March 2000

Clause 5 of the access code provides for a regulator of the third-party access regime. This clause was amended on 17 February through joint gazettal by the SA and NT Ministers (as provided by clause 48 of the code) to provide that the SAIIR is the regulator for the access regime for both SA and NT.

South Australian Independent Pricing and Access Regulator (SAIPAR)

Pursuant to s. 2.22 of the National Third Party Access Code for Natural Gas Pipeline Systems (the code), SAIPAR has extended the period to deliver a final decision on the access arrangement submitted by Envestra for the South Australian distribution system by two months to 20 June 2000. In accordance with s. 2.22 a notice to this effect was published in the *Financial Review* dated Wednesday, 16 February 2000.

SAIPAR considered Envestra's access arrangement. A review in all areas has been completed and a draft decision under s. 2.13 of the code was released on the website on 13 April 2000 and public submissions are called for by COB on Thursday, 18 May 2000.

Contact: Gina Reardon, SAIPAR
(08) 8226 5788

Western Australia

WA Independent Gas Pipelines Access Regulator

The Western Australian Independent Gas Pipelines Access Regulator is currently assessing five access arrangements. These include:

- Parmelia pipeline;
- AlintaGas mid-west and south-west gas distribution systems;
- Tubridgi pipeline system;
- Dampier to Bunbury natural gas pipeline; and
- Goldfields gas pipeline.

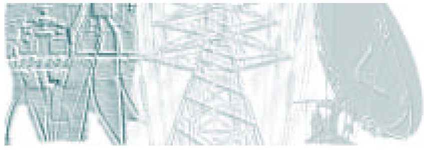
Parmelia pipeline

A draft decision for the Parmelia pipeline was published in October 1999 and a public forum was held in November 1999. Work is progressing towards finalising the assessment of the access arrangement for this pipeline. A final decision is expected in May 2000.

AlintaGas mid-west and south-west gas distribution systems

A draft decision for the mid-west and south-west gas distribution systems, lodged by AlintaGas on 30 June 1999, was issued on 14 March 2000. The mid-west and south-west gas distribution systems include natural gas reticulation areas in the Geraldton, Eneabba, Perth metropolitan, Harvey, Bunbury and Busselton regions.

The independent regulator's draft decision is to not approve the access arrangement in its current form. The regulator has called for amendments to the proposed tariffs for gas transportation and the terms for access to the mid-west and south-west gas distribution systems. A key factor of the draft decision relates to a requirement on the AlintaGas distribution business to set distribution access tariffs consistent with a minimum retail price margin



for natural gas to provide scope for competition between gas traders at the retail level.

The AlintaGas proposed initial capital base (ICB) as at 31 December 1999 is $539.4 million. The outcome of required amendments by the regulator in the draft decision is an ICB of $510.4 million, representing a 5.4 per cent reduction on that proposed by AlintaGas.

The impact of all required amendments is an overall reduction in weighted average distribution tariffs of 5 per cent as compared with those proposed by AlintaGas.

The draft decision also requires a review of the proposed distribution tariff structures to permit reasonable retail margins in the delivery and sale of gas to residential and small business customers. The effect of these margins on competition at the retail level will be monitored and subject to review by 31 December 2004 as the gas market is opened up in Western Australia.

Based on independent advice, the regulator has determined that the appropriate rate of return on equity for the AlintaGas distribution systems is 13.2 per cent (nominal post-tax), which equates to a weighted average cost of capital (WACC) of 7.9 per cent (real pre-tax).

The regulator has also opted to disallow the proposed revenue yield incentive mechanism and have it replaced with a price cap mechanism. The factors which led to the choice of a price cap incentive mechanism include the vertically integrated structure of AlintaGas (network owner and retailer) and the potentially perverse incentives that would be available under a revenue yield approach (i.e. tariff rebalancing).

In handing down the draft decision, the regulator called for public submissions which close on Friday 5 May 2000. A public forum to consider the issues raised in the draft decision is scheduled for Tuesday 2 May 2000. Further details are available on the OffGAR website at http://www.offgar.wa.gov.au

Tubridgi pipeline system

A joint access arrangement has been proposed by Origin Energy for the Tubridgi pipeline system that includes the Tubridgi and Griffin pipelines in the north-west of the State. Public submissions closed on 10 December 1999. The assessment of the proposed access arrangement is progressing and a draft decision is scheduled for completion in May 2000.

Dampier to Bunbury natural gas pipeline

The Dampier to Bunbury natural gas pipeline (DBNGP) proposed access arrangement was submitted by Epic Energy on 15 December 1999. The public consultation period was extended twice and closed on 17 March 2000.

A total of 31 submissions have been received from interested parties including several that were being treated as confidential. Independent legal advice was sought to determine the extent to which the confidential submissions could be made public. Following discussions with the parties involved, the previously confidential submissions were placed on the OffGAR public register on 20 April 2000 and a further period of public consultation has been called. Interested parties are invited to make submissions on the issues raised in the four submissions previously held to be confidential. . Submissions must be received by 4pm Friday 12 May 2000 Western Standard Time.

In other respects the assessment of the proposed access arrangement for the DBNGP has started and a draft decision will be issued as soon as possible.

Goldfields gas pipeline

The proposed access arrangement for the Goldfields gas pipeline was submitted by CMS Gas Transmission Australia on the 15 December 1999. Public submissions were called and have now closed. The assessment of the proposed access arrangement is progressing and a draft decision will be issued as soon as possible.

Ring fencing

Two ring-fencing arrangements are being progressed, one for the Parmelia pipeline and one for the Tubridgi pipeline system. The time extensions for these ring-fencing arrangements expired at the end of March 2000. Applications for waivers of ring-fencing obligations for each of the pipeline systems have been received and are being progressed. Copies of the relevant documentation are available from the OffGAR website.

Funding

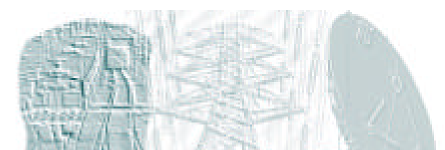
On the 14 January 2000 regulations were gazetted under s. 87 of the *Gas Pipelines Access (WA) Act 1998* allowing the regulator and arbitrator to recover costs directly from the regulated pipeline industry. The regulations provide for a quarterly standing charge to be applied in respect of pipelines ‘covered’ by the code to recover ongoing costs. In addition, the regulations also provide for the application of service charges to recover costs for services directly attributable to specific pipelines. These arrangements became effective on 14 January 2000.

Office of Energy

Electricity

Regional Power Procurement Progressing

In June 1998 the Government announced new regional power supply arrangements for the provision of electricity in areas of the State supplied by Western Power but not connected to the grid. The new arrangements were driven by a desire



to reduce Western Power's considerable losses in these areas while also introducing competitive tendering to attract new investment in power generation.

The Energy Equity Corporation–Woodside Energy Ltd consortium has been selected as the single preferred bidder to supply power to Western Power in West Kimberley, the first region to undergo this competitive tendering process.

Proposals were received from six bidders in April 1999. The detailed tenders were assessed against a number of criteria including the cost of power generation, operational capability, project management, quality and reliability, technology, environmental impact and community benefits.

The Regional Power Procurement Steering Committee (the committee) is finalising negotiations with the consortium on a power purchase agreement (PPA) for the supply of power to Western Power in this region. The final PPA negotiated by the committee will then be compared by the Government to the best deal offered by Tidal Energy Australia–Leighton Contractors before a recommendation is put before Cabinet.

In mid-1999 detailed tender proposals to supply power to Western Power in the mid-west were requested from seven consortiums. A total of four consortiums replied with bids in August 1999. The committee completed the evaluation of all proposals for the mid-west, considering the merits of each bid in accordance with the published evaluation methodology. On that basis the committee has determined not to recommend any of the bids. However, new proposals for the mid-west are currently being sought from some of these consortiums. The tender period will close on 31 March 2000.

For the Esperance region, tender documentation is being finalised and is expected to be issued shortly to proponents shortlisted to participate in the Esperance Power Procurement Process.

Contact: John Filippone
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(08) 9420 5644
Email: jfilippone@energy.wa.gov.au

Green Power Policy

On 18 December 1999 the Minister for Energy, Colin Barnett, officially launched the Western Australian Green Power Policy. The policy, designed to promote and encourage the uptake of renewable energy in Western Australia, contains the following key initiatives:

- anyone in the community, a business or household, will be able to choose to purchase some or all of their grid-based electricity as Green Power, generated from renewable sources;
- the Western Australian Government will create a new Sustainable Energy Development Fund to support the development of new renewable energy sources by independent power producers;
- independent power producers generating electricity from renewable energy will be given wider access to Western Power's grids to reach a range of potential customers;
- the Western Australian Government will fund an energy efficiency campaign to raise public awareness of the environmental benefit and the potential for saving money through wiser use of energy;
- people in isolated regions will continue to receive assistance to install their own renewable energy power supplies; and
- the Government will give independent renewable energy producers an advantage in the market to stimulate their industry in its own right.
  - From 30 September 2000 independent renewable energy generators will be able to supply their green electricity, independent of Western Power, to any customer who uses more than 300 000 kWh of power each year.
  - All other independent electricity producers will only be able to sell their power to customers using more than 1 MW of electricity each year on the main grid.

The Office of Energy will accredit supplies of Green Power if they satisfy nationally recognised guidelines for renewable energy supply.

For further information on the Government's Green Power policy, visit the website at http://www.energy.wa.gov.au

Email: greenpower@energy.wa.gov.au

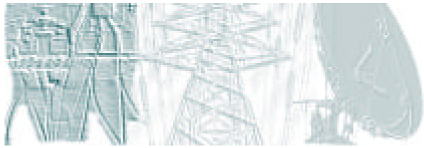
Contact: The Office of Energy
(08) 9420 5600

Electricity access charges announced

Access prices for transmission in the south-west interconnected system have been increased on average by around 6 per cent for the 1999–2000 financial year, mainly due to changes in the long-term bond rate used in determining the WACC.

In the north-west interconnected system, access prices for transmission have fallen by around 7 per cent on average mainly due to load growth.

On average, access prices for distribution in the south-west interconnected system have fallen by around 12 per cent in the CBD, 4 per cent in the urban zone, 3 per cent in the mining zone and 6 per cent in the mixed zone, mainly due to load growth. In the rural zone they rose by 2 per cent due to reduced usage in certain areas.



In the north-west interconnected system access prices for distribution have risen on average by around 3 per cent in the Port Hedland zone, primarily due to static load growth, and have fallen by around 9 per cent in the Karratha zone, mainly due to load growth.

Prices are derived from a rate of return methodology which is applied to the value of Western Power's transmission and distribution assets resulting in an access charge considered to be a fair rate of return on assets, operating and maintenance costs, and depreciation.

Copies of the access pricing papers are available from Western Power.

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Manager
Transmission Access
(08) 9326 6687

Peter Mattner
Manager, Distribution
Network Access
(08) 9326 4556

1-5 MW access pricing completed

As of 1 January 2000 electricity users with an average load of 1-5 MW will be able to access Western Power's interconnected distribution systems in the south-west or north-west systems to obtain power from the supplier of their choice. About 100 existing users will be able to take advantage of the new open access arrangement in the electricity supply market.

Access prices for calculating access charges were agreed to at the end of November 1999 and are contained in a supplement to Western Power's document on distribution access pricing and charges. The pricing is competitive with, and in many cases cheaper than, access pricing in the eastern States.

The distribution charges, which are based on location and demand, will be determined by the same methodology for whichever supplier the customer selects. Therefore electricity supply price variations between suppliers will be in the generation component and the supplier charges for administration and profit.

Access prices have been allocated to five zones — CBD, urban, rural, Goldfields and mixed. The mixed zone comprises large country towns that are connected to a grid.

Because Western Power's electricity price was previously based on a notional average across all customers, the new cost reflective distribution price will increase in some cases and decrease in others. Overall, it is expected that most customers will pay a lower total price (which includes generation as well as transmission and distribution).

The longer-term management of existing gazetted tariffs for contestable customers is under review by the Minister for Energy. Customers with an average load of 1-5 MW include larger hospitals, shopping centres and industrial sites.

This stage of deregulation brings the number of contestable customers to about 130, accounting for about 30 per cent of the total electricity supplied. No decision has been announced on the next stage of deregulation.

Copies of the supplement to Western Power's distribution system access paper can be obtained from Peter Mattner, Manager, Distribution Network Access, Western Power, (08) 9326 4556.

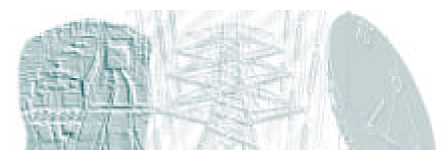
Contact: Michael Styles
Office of Energy
(08) 9420 5616

Access pricing under review

The triennial review of electricity transmission and distribution access arrangements could be completed by September 2000. Western Power and the Office of Energy are jointly preparing an issues paper and will call for written submissions from interested parties in May this year.

After these comments have been reviewed, a seminar will be held to present the findings and recommendations. A review of the valuation of Western Power's distribution and transmission assets will also be conducted. Access pricing is based on WPC obtaining a fair return on this asset valuation. Any changes recommended may be included in pricing arrangements for 2000–2001.

Contact: Peter Hawken
Office of Energy
(08) 9420 5675



New South Wales

Independent Pricing and Regulatory Tribunal (IPART)

Electricity

In June 1999 the tribunal released a report of the special reference under s. 12A of the IPART Act on the pricing of electricity transmission, distribution and retail supply based on the requirements of the National Electricity Code. Subsequently in December 1999 the tribunal issued two determinations.

Determination under the IPART Act

This determination sets a price cap on retail margins (retail costs and a profit margin) for the franchise retail supply of electricity for the period 1 February 2000 to 31 December 2000. It also sets charges levied by franchise retailers for miscellaneous services by approving an exhaustive list of charges for miscellaneous services. This determination is largely consistent with the analysis presented in the tribunal's June 1999 report. The tribunal is concerned about the lack of regulatory protection for franchise customers after 31 December 2000. The Government has yet to extend the tribunal's legislative power in relation to franchise retail customers. In the absence of legal powers, the determination gives no direction on retail regulation beyond 2000.

To protect the interests of customers, while providing some scope to franchise retailers to restructure tariffs, the tribunal has also set limits on price movements. The limits will ensure that residential consumers (including rural residential consumers) receive no price increases in real terms for the same pattern and level of electricity consumption. However, after 1 July 2000 electricity prices will adjust by the net impact of the GST package.

Determination under the National Electricity Code (the code)

The tribunal is the first regulator to issue a determination for electricity distribution network services under the code.

In this determination the tribunal established the annual revenue requirements for the six electricity distribution network service providers (DNSPs) in New South Wales for the period 1 February 2000 to 30 June 2004. The tribunal's determination will result in real price reductions for distribution service charges of 16 per cent on average over the next five years. Reflecting the benefits of greater volumes and rapid growth, customers of Integral Energy and EnergyAustralia will benefit from real reductions of around 27 per cent and 16 per cent, respectively. Great Southern Energy's customers will benefit from a real price reduction of 6 per cent, while customers of the other rural DNSPs will not face real price increases.

In its deliberations, the tribunal tried to find an appropriate balance between the interests of the owners and the users of electricity services in NSW. The outcomes determined in this report are underpinned by anticipated growth (particularly in the metropolitan areas) and a declining rate of return, offset by an increase in the value of the businesses' regulatory asset base.

The tribunal adopted a straight revenue cap as the form of regulation. This differs from the hybrid revenue cap it previously adopted.

The tribunal has established four sets of rules under clause 6.10.1(f) of the code that DNSPs must comply with. The rules relate to:

- unders and overs accounts;
- pricing notification and information disclosure;
- charges for miscellaneous services; and
- charges for monopoly services to support contestable works.

Gas

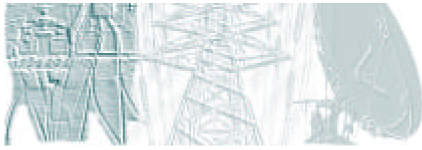
In the past two months the tribunal continued its assessment of the access arrangement for AGL Gas Network (AGLGN) and completed the review of the access arrangement for Albury Gas Company (AGC). The tribunal also completed the tariff review in Albury and Wagga Wagga. It will shortly release a draft report on the AGL tariff review.

Access arrangement — AGL Gas Network

Since the draft decision in October 1999, the tribunal has received responding submissions from AGLGN and other stakeholders. Further progress includes:

- release of a research paper on 'Benchmarking the Efficiency of Australian Gas Distributors' in December 1999;
- release of documents prepared by AGLGN regarding prices, services, terms and conditions based on the tribunal's draft decision (early February 2000) — the documents contain an alternative pricing proposal on local network charges;
- two public forums on 10 and 24 February 2000 regarding the documents submitted by AGLGN — a wide range of issues was discussed, including separation of transmission pipelines, pricing for contract market, non-pricing issues and revenue issues; and
- issue of a notice to AGLGN regarding release of fully distributed operating cost information submitted by AGLGN under s. 41 notice.

In light of the documents submitted by AGLGN in February, the tribunal extended the closing date for public comment to 31 March 2000. The tribunal is assessing AGLGN's documents. The tribunal will issue a final decision after consideration of



public submissions and further analysis.

Access arrangement — AGC's Network

In December 1999 the tribunal released its final decision on the access arrangement and access arrangement information for Albury Gas Company (AGC). AGC submitted its revised access arrangement and access arrangement information by 31 January 2000.

The tribunal assessed AGC's revised access arrangement and access arrangement information and was satisfied that these documents were consistent with the required amendments in its final decision.

On 15 February the tribunal announced that it had approved the revised access arrangement and access arrangement information for AGC relating to the natural gas distribution system in Albury and Jindera. As stated in AGC's revised documents, the commencement date will be two weeks after the approval by the tribunal.

Tariff review in Albury and Wagga Wagga

In February the tribunal released the final report on this review. It found that tariff market prices in Wagga Wagga and Albury are reasonable relative to the cost of service.

According to the tribunal there is no need for gas pricing orders at this time. This view is based on the fact that current prices are reasonable and the expectation that competition will be effective in constraining prices in the future. However, the dynamics of the retail market following contestability cannot be predicted with certainty.

Due to this uncertainty, the tribunal will continue to monitor developments in the tariff market to ensure prices remain reasonable. It intends to conduct a forum on the impact of competition in about 18 months. This forum will consider, among other things, whether voluntary pricing guidelines (including default tariffs) should continue for residential customers. The tribunal will, however, consider the introduction of gas pricing orders if, among other things, existing tariffs are not maintained for a specified grace period following contestability or if side-constraints on residential tariffs are exceeded.

Tariff review — AGL

This review has been deferred pending the review of the AGLGN's access arrangement. Following its draft decision on AGLGN's access arrangement, the tribunal is considering a draft report on the delivered tariffs in NSW. The key issues for consideration are whether the tariff market should be continued in the context of the current retail contestability timetable.

Transport

Review of taxi cabs and hire cars

After consideration of submissions on a draft report, the final report of this review was released in November 1999.

The tribunal recommended that the number of taxi licences in metropolitan Sydney be increased by 240, or 5 per cent, per annum between 2000 and 2005 to increase the availability of cabs, especially at peak times and at the 'changeover' time. The new, non-transferable taxi licences would have a life of six years, with fees set by open tender to ensure fairness and transparency.

All new licences will have to be available for hire during the weekday afternoon changeover period, with the Department of Transport monitoring and strictly enforcing these requirements.

The tribunal has recommended regular public reporting of taxi service standards as an incentive to improve service standards. It recommended that the Department of Transport publish a six-monthly report rating the performance of each taxi company against benchmark standards for pick-up times, driver and vehicle quality, wheelchair access and complaints handling. Taxi companies will be held responsible for all taxis operating on their network.

The tribunal confirmed its earlier recommendation to reduce hire car license fees substantially so that there is no effective limit on the number of hire cars. Licences would be issued on the basis of quality standards for drivers, vehicles and operators at a fee reflecting the administrative and compliance costs associated with the industry. This could significantly improve the availability of hire cars to travellers and foster an active and dynamic hire car industry.

Water

Urban water

In June 1999 the tribunal made annual determinations for Gosford and Wyong to extend the three-year price paths for a further year with prices remaining unchanged. The tribunal is presently conducting concurrent reviews of medium-term price paths to apply from July 2000 for the major urban water agencies in NSW (Sydney and Hunter Water Corporations and Gosford and Wyong Councils).

The Premier has recently asked the tribunal to determine the pricing for the supply of bulk water services supplied by the Sydney Catchment Authority to its customers including Sydney Water Corporation. This determination will be considered concurrently with the medium price paths for the urban water supply agencies.

Bulk water

Work is commencing on the review of the current two-year price path for bulk water services throughout NSW.

Other activities

Local government development fees

Reports have already been released on competitive neutrality in pricing and miscellaneous fees. The final

report on 'Development Application Fees' was released in December 1999.

Operating licences — Sydney Water Corporation and Sydney Catchment Authority

Following the split of bulk and domestic water supply responsibilities for the Sydney area the tribunal was asked by the Premier to assist with drafting operating licences for Sydney Water Corporation and Sydney Catchment Authority. After public consultation the tribunal submitted recommended licences to the Premier. The Sydney Water licence is with Parliament for consideration and the Government is discussing the Sydney Catchment licence with stakeholders.

Assistance with price regulation in the ACT

The secretariat is assisting IPARC in consideration of an access arrangement under the Natural Gas Code for AGLGN's Gas Network in the ACT and surrounding areas.

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Tasmania

Tasmanian Electricity Regulator

The regulatory structure for the electricity supply industry in Tasmania is largely modelled on the National Electricity Market (NEM) institutional arrangements with the regulator having code administration and enforcement responsibilities, as well as the responsibilities of a jurisdictional regulator for tariff customers, distribution and pricing.

The Tasmanian Electricity Code has institutional arrangements which support the regulator through a Code Change Panel and a Reliability and Network Planning Panel.

Pricing

The regulator published the 'Final Price Investigation' report on 30 November 1999 and issued the pricing determination for the period 1 January 2000 to 31 December 2002 on 17 December 1999.

The pricing determination covers the provision of regulated services undertaken by the three electricity supply entities, the Hydro-Electric Corporation, Transend Networks Pty Ltd and Aurora Energy Pty Ltd.

In his determination, the regulator defined maximum charges for tariff customers as average price paths:

- High voltage tariff customers — 7 per cent average reduction in real terms with effect from 1 January 2000.
- Low voltage business tariffs — 1.3 per cent per annum average reduction in real terms for each of the three years from 1 January 2000, with a 2 per cent allowance for rebalancing for the same level of consumption.
- Residential sector — 1 per cent increase per annum in real terms on average across the whole residential customer sector, with the increase of any customer limited to no more than 5 per cent in real terms over the period for the same level of consumption and mix of tariffs.
- Generation for tariff customers — the energy price has been set at 3.8 cents per kWh in 2000 rising to 3.9 cents per kWh in 2002, to apply to electricity for business and residential tariff customers under the vesting contracts.

The regulator also sets prices and revenue structures for system control and ancillary services, network and retail services.

The regulator's assessments do not include the impact of GST.

The regulator also investigated the appropriate level of price protection for industrial customers taking supply under non-tariff contracts. The preliminary conclusion drawn by the regulator was that there may be a case to declare a 'safety-net tariff' for the smaller (e.g. up to 20 MW) customers and a case for the review of the Tasmanian Electricity Market (TEM) algorithm.

A workshop on the issues has delivered an outcome that appears to be satisfactory. Regulatory intervention is not considered appropriate or necessary at this time.

Tasmanian Electricity Code

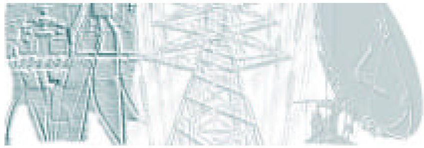
There has been extensive activity in matters of code administration.

Reliability and Network Planning Panel (RNPP)

The panel made a determination on power system frequency operating standards in December 1999, with the report of the RNPP published on the regulator's website just before Christmas 1999.

The panel has commenced work on reserve capacity standards and consideration of transmission and distribution reliability standards.

The Tasmanian version of the 'market benefits test' for application



to network development proposals is nearing finalisation and will be based very closely on the form of the test promulgated by the ACCC for application to the NEM.

Government Prices Oversight Commission (GPOC)

Competitive neutrality

The GPOC has received notice of its second formal complaint since the establishment of the complaints mechanism. This complaint was in regard to the non-application of full cost attribution by the Hobart City Council (HCC) to the services provided by the Tattersall's Hobart Aquatic Centre (the centre). Investigation of this complaint commenced in July 1999.

The HCC had recognised the centre a significant business activity (SBA) to which full cost attribution (FCA) should apply and was aware of its obligations.

Following consideration of the facts, the regulator recommended that:

- the HCC and the centre review its policies to correctly take account of the requirements under NCP and competitive neutrality principles (CNP), including the establishment of FCA and that all subsidies be made transparent; and
- the policy statements relating to application of competitive neutrality, namely the Application of the National Competition Policy to Local Government (Application Statement) and the Full Cost Attribution Principles for Local Government (FCA Guidelines) be reviewed to provide additional guidance for setting of prices in a competitive environment.

Monopoly pricing

The Treasurer issued its Terms of Reference in October 1999 for the review of Metro Tasmania (the State-owned bus company) pricing policies, to be completed by 2 June 2000.

The GPOC is required to recommend maximum prices for the three years from 1 July 2000 to 30 June 2003. The Commission for this investigation comprises Andrew Reeves and Paul Baxter.

The GPOC is also required to undertake an investigation of the Motor Accidents Insurance Board premiums policies in the first half of 2000. The Government issued Terms of Reference for this investigation on 14 April 2000.

Petrol Pricing

In the 1999 Budget the Tasmanian Government made a commitment to establish petrol price monitoring and reporting through the GPOC.

The purpose of this initiative was to address community concerns about the higher fuel prices paid by Tasmanians relative to mainland motorists. The Treasurer's Terms of Reference require that:

- The GPOC monitor and report monthly on wholesale and retail petrol prices, both in Tasmania and on the mainland.
- The report should focus on the margin between wholesale and retail prices. This will capture the margins operating at all levels within the petrol market:
  - wholesale;
  - distribution; and
  - retail.
- The GPOC should also monthly report on any other developments or issues in relation to petrol that it considers appropriate.

The scope has recently been extended to include monitoring of LPG and diesel prices.

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Queensland

Queensland Rail draft undertaking

The Queensland Competition Authority (QCA) is continuing with its assessment of Queensland Rail's (QR) draft undertaking covering certain services relating to the use of the rail transportation infrastructure QR owns.

The QCA recently released the paper, 'Request for Comments — QR's Scheduling and Train Control Protocols and Proposed Assignment of Marshalling Yards'. The closing date for submissions in response to this paper is 31 March 2000. A consultation paper on QR's costing manual will be released shortly. Further consultation with QR and its stakeholders on issues raised by the draft undertaking is occurring on an ongoing basis.

Following consideration of the issues raised by QR and its stakeholders, the Authority intends publishing a draft decision outlining its position on the draft undertaking in the second quarter. Delays have been experienced in the provision of material relevant to the valuation of QR's assets. The draft decision will give QR and its stakeholders a further opportunity to provide comments to the QCA before the release of a final decision.

Copies of all papers released by the QCA with respect to its consideration of QR's draft undertaking, as well as public submissions received in response to the papers, are available on the QCA's website at http://www.qca.org.au

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Articles

Incentive regulation: a discussion

Introduction

The National Third Party Access Code for Natural Gas Pipeline Systems (the code) is premised on the notion that reference tariffs are based on provision of services at efficient cost. In addition, the code should encourage service providers to accept a number of principles such as the direction under s. 8.44 to adopt, where appropriate, an incentive mechanism.

This mechanism allows a pipeline owner to receive some payback for better than expected performance from actions aimed at increasing efficiency or growing markets. In providing the owner/operator the opportunity to retain at least a share of better than anticipated returns, positive incentives to grow markets, develop new, innovative services and minimise operational and capital costs could become embedded in the regulatory regime, as expressed in individual access arrangements.

These incentives would lead to more efficient outcomes at both the firm and national macro-levels. End users should also benefit from better access to gas, lower costs and greater choices in energy use.

The following discussion is not meant to represent the final word on incentive regulation or to be a precise, economic treatise on the subject. Rather it aims to identify a number of issues associated with incentives that flow from the regulatory process and to discuss some of the issues in regard to incentives in regulated businesses.

Regulation and incentives

The code is often referred to as embodying the principles of an incentive regulation framework, although there is little discussion as to what that actually means. Commentators refer to the benefits of incentive regulation, while regulators extol the virtues of and their commitment to the incentive-based framework. Incentive regulation is often contrasted with the much maligned and more traditional rate of return, cost plus regulatory regimes.

It is important to understand that all regulation affects a firm's incentives to some degree. The real issue facing designers of regulatory regimes is to put in place mechanisms that overcome the perceived weaknesses of the traditional models. A strong criticism of the rate of return model is that the inherent incentives lead to dysfunctional behaviour on the part of the regulated entity. The perverse incentives may lead to abuse of the so-called principal–agent relationship under which the regulator and regulated entity operate.

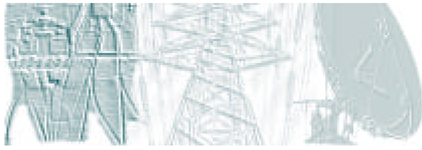
The model is also regarded as administratively costly, unnecessarily adversarial, and can often lead to complex, costly and time consuming rate cases. Much of the complexity and informational demands attributed to rate of return regulation stems from the need to overcome the information constraints that always bedevil a regulator. In essence, pipeline owners are far better informed about the cost and demand functions, the challenges and the opportunities, than most regulators can hope to be.

Incentive regulation, as we have come to understand it, is widely viewed as a means of harnessing the superior knowledge of the service provider and so overcoming the information asymmetry problem faced by regulators.

An effective regulatory regime that provides appropriate incentives, recognises the comparative advantage of management to develop efficient pricing structures due to its knowledge of the firm's costs. While the regulatory paradigm is often based on the assumption that the regulator knows a firm's costs and cost structures, the reality may be quite the opposite. The firm's management trumps the regulator on two essential fronts. The regulator really does not have sufficient information to determine exactly what it is that the firm should do, nor is it able to actually observe what the firm does on a day-to-day basis.

The bottom line is more than likely that the firm's management will know more about the opportunities, threats and underlying costs than the regulator. A firm's management operates in a manner that is not necessarily in keeping with the social welfare objectives of regulation generally, nor the distributional, allocative, productive and dynamic efficiency objectives that underly the economic considerations of pricing for regulated entities. In the case of the code and supporting legislation, the comparative advantage accruing to management may allow actions that subvert the underlying principle of the 'facilitation and development and operation of a national market for natural gas'.

It does not imply that this is happening in the Australian industry. Rather, it is the risk faced by regulators, indeed the economy as a whole, when frameworks create perverse incentives for a rational business person to act on. It is the task of policymakers, regulators and the industry to work together to develop incentives and outcomes that satisfy the needs of users, the Australian economy and, importantly, pipeline owners.



Rate of return

Under rate of return regulation, periodic reviews are held to establish the costs of the firm and then to set rates or prices to recover those costs. The costs are typically determined on the basis of a firm's accounting costs during some nominated test year. In principle, revenue is set to exactly match the costs faced by the firm, with no opportunity to retain or share the benefits of more efficient operation.

In reality, as many observers have noted, there are some benefits that ensue from the regulatory lag inherent in rate of return, which may allow the service provider to actually retain some of any extra returns it may earn between reviews. As with most regulatory pricing decisions there is also the considerably vexing issue as to the true cost of capital facing a regulated entity, which is an important aspect of the revenue–cost relationship.

Under the rate of return model, which is generally the other side to the incentive regulatory model coin, a number of inappropriate incentives have been identified. For example, due to the cost-plus nature of rate of return regimes any incentives to reduce costs are likely to be severely limited. While this may be offset somewhat due to regulatory lag, this failure to ensure that the firm is an active residual claimant is of great concern to regulators wishing to encourage efficient production and pricing to reflect true, efficient costs. Hopefully the end result would be lower costs to users generally, encouraging a more efficient allocation of gas and gas services.

If innovation is discouraged because the firm's profits will be reduced on a par with any gains due to the innovative activities, it is highly unlikely that a rational operator would work to identify and bring innovative approaches to its business.

Another major disadvantage, referred to as the Averch-Johnson effect, relates to the potential input bias that may arise from the regulator allowing a higher rate of return than the real cost of capital facing the firm. The obvious incentive facing the firm is to use more capital than would be efficient relative to other inputs. As more assets are brought into the capital base more profit can be earned and it can be in the firm's best interests to invest in capital equipment that is over and above its actual needs.

There are also incentives under the rate of return model for a firm to manipulate its prices to achieve desired outcomes. This manipulation will generally result in end prices that have no real relationship to the actual costs of production, embedding incorrect price signals to users.

In essence much of the criticism of rate of return relates to the claim that it leads to 'lazy' companies lacking in any of the dynamic incentives inherent in firms faced with the discipline of competitive markets.

Incentive regulation

So what do we mean when we speak of incentive regulation? I like to think of incentive regulation as a double-edged sword. One edge is the rewards and the other the penalties to induce a service provider to achieve desired goals. Incentive regulation allows the service provider a degree of discretion in achieving those goals. Incentive regulation also implies a sharing of gains with customers so that the benefits of improved service delivery are spread beyond the individual firm.

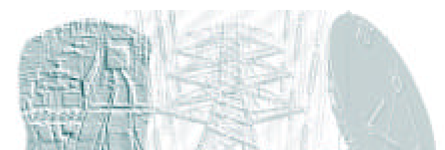
In contrast to rate of return regulation, as discussed above, incentive regulation leaves the operator with the opportunity to hold and keep gains from cost reductions. It is hoped that this would lead to stronger incentives for the service provider to innovate, bring in new ideas and cost reduction strategies and to build market share and encourage market growth.

Policy papers prior to the finalisation of the code spoke of incentive mechanisms as aspects of the regulatory framework designed to provide an owner with market-based incentives to improve efficiency and actively promote market growth. The code does not attempt to prescribe particular mechanisms, but recognises the need to tailor appropriate incentive arrangements to individual pipelines.

At s. 8.46 of the code a number of objectives are identified as benchmarks against which to test incentive mechanisms. These include incentives to increase sales of all services; minimise costs; develop and innovate; invest prudently and manage investment programs efficiently and, importantly, ensure users gain from the implementation of these mechanisms.

Under incentive regulation there is a particular relationship between costs and revenues not usually found under the rate of return model. As noted, if regulation simply allows prices and revenues to adjust to changing costs through regular pass-through, along with a 'normal' rate of return on the capital employed, little incentive is created to be efficient or innovative in service provision and delivery.

Mechanisms under the incentive regulation umbrella try to avoid this direct relationship between revenue and costs at least to some degree. The use of benchmarks, yardstick competition and price caps act to de-couple costs from final prices, and hence from firms' profits. Indeed, some regulatory economists order incentive mechanisms based on what they consider the 'power' inherent in particular regimes. The degree of power represents the extent to which revenues and costs have been de-coupled within the regulatory framework. Rate of return



would be regarded as low powered while a fixed price cap, in which revenues are not controlled by the firm and the only profit increase allowed is though cost reduction, would be considered a high-powered regime.

I have studiously avoided identifying the range of incentive approaches, as each would be worthy of discussion in its own right. In Australia the price cap approach based on an index such as the consumer price index (CPI) and some productivity factor, X, has considerable appeal to many involved in regulated industries.

To date, the access arrangements presented to the ACCC have been submitted ostensibly on the basis of the CPI-X model. However, the X-factor has not necessarily represented a projected improvement in productivity over time. Rather, it has been a mechanical balancing or smoothing factor as the result of the particular arrangements. Incentives have basically rested on the ability of the service provider to keep gains that may arise from improvements in efficiency and growth beyond those already forecast and used to establish the price or revenue cap within the actual period of the access arrangements, but not necessarily subject to any identified potential in productivity improvements.

In developing effective incentive mechanisms, the question as to the efficacy of price cap regimes over revenue cap regimes also arises. Within these there are a plethora of individual plans, including hybrid mechanisms that attempt to capture the positive incentives inherent in the various regimes.

There are several key issues that will have to be addressed cooperatively in order to ensure that incentive-based mechanisms provide efficient outcomes that are fair and equitable to owners and users. Among these is the need to develop effective benchmarks and yardsticks to allow comparison across periods and between individual firms. Benchmarks and concepts of yardstick competition are essential in the longer term for the successful implementation of dynamic regulatory incentive regimes.

Linked to the benchmarking concept is the use of specialist techniques to measure improvements over time. Techniques that have been put forward as being able to provide strong support to regulatory incentive mechanisms include the use of total factor productivity analysis and data envelope analysis. These techniques have been the subject of discussions at the Regulators' Forum and are likely to be examined further to ascertain what role, if any, they have in the regulatory framework.

The question still arises as to how anticipated gains can be shared between service providers and users. Issues such as the use of glide paths and, if that is adopted, which components of the firm's operations should be glide pathed and which should be subject to a full adjustment. It is the issue of sharing those aspects of performance that are under the control of the operator as opposed to those benefits that have accrued due to windfall gains of one type or another.

The actual design of the efficiency incentive, the X-factor, is also important and needs to be developed with a methodology consistent with the regulated entity's cash flow needs. The timing of reviews is another important factor that needs to be taken into account, with consideration given to trade-offs between consistency, relevance to the actual performance of the entity and the sharing mechanisms. There is also the matter of service quality and safety. Regulators need to be aware of the risks inherent in price capping regimes for incentives to reduce quality and safety as firms reduce expenditure on these aspects of their business to meet cost reduction targets.

Conclusion

The matter of incentive regulation, along with the development of positive mechanisms, is one of great importance to the gas pipeline industry. The work that faces us all needs to be undertaken cooperatively to ensure that the outcomes support the continued development of the industry to the benefit of all.

(While the author is grateful to Regulatory Affairs Division staff, particularly Kanwaljit Kaur, Suzie Copley and Peter Le Mesurier, the views expressed are his. A number of references were consulted in developing this article, including three books published by Kluwer Academic Publishers: *Pricing and Regulatory Innovations Under Increasing Competition, Michael A Crew,* Editor, 1996; *Incentive Regulation and the Regulation of Incentives* , Glen Blackmon, 1994; *Incentive Regulation for Public Utilities* , Michael A Crew, Editor, 1994.)

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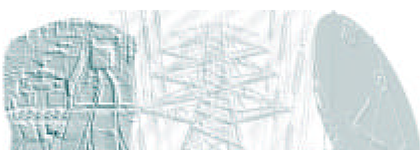
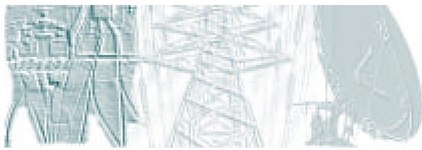
Contributing to Network

If you are interested in providing an article to be published in *Network*, please contact Katrina Huntington on (03) 9290 1915 or by email at: katrina.huntington@accc.gov.au





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