The Proposed Privatisation of the Moomba-Sydney Natural Gas Pipeline

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Abstract:

This pipeline, with its associated laterals, has been operated by the Pipeline Authority (a Commonwealth government instrumentality) since it was opened in 1976. That Authority was established in 1973, to take over the design and construction task from AGL, which reticulates gas in Sydney and elsewhere in NSW, and is still the only customer for the pipeline. The terms of the recently proposed privatisation were opposed by AGL, and the proposal is in abeyance. This study presents an economic analysis of the various agreements made in 1974 and subsequently, and evaluates the terms for the proposed privatisation

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Introduction

Among the arguments commonly advanced for privatisation are those relating to economic efficiency. Under private ownership, the profit motive will provide management with appropriate incentives: in the operation of existing assets, costs will be kept to the minimum level consistent with quantity and quality objectives, and pricing policy will be flexible; new investment will be undertaken when and only when there is 'sufficient' demand; and the costs of construction will be kept to a minimum. To the extent that the market expects such private management to give better financial results than the existing public-sector regime, the revenues gained from selling the asset - assuming vigorous competition among potential buyers - will exceed the present value of the stream of future profits expected form public sector operation. In that sense, the sale can result in public-sector gain.

Even if those matters work out well in practice, there can be other difficulties. In some contexts, including that of transport infrastructure, unregulated operation often confers considerable market power, perhaps even natural monopoly status. The consequent discrepancy between profits and economic welfare is then so great as to require economic regulation. In such cases, although privatisation changes the form and the extent of government involvement, it does not eliminate the need for a government role. Furthermore, the intended form and stringency of economic regulation will affect expected profits, and hence the sales proceeds yielded by privatisation.

In this study of the proposed privatisation of the pipelines used for the haulage of gas from Moomba (in the Cooper Basin gasfield in South Australia) to various places in New South Wales, the focus is on the terms of sale. These terms were influenced by some earlier undertakings. Although it was the Australian Gas Light Company (AGL) which first proposed construction of the pipeline, the scheme was taken over by the Commonwealth government. This followed an early decision by the Whitlam ministry, which resulted in the establishment of a public-sector Pipeline Authority. AGL sought and obtained a number of undertakings before agreeing to have its gas hauled by the Pipeline Authority (PA) rather than seeking to build the pipeline itself.

When the government proposed privatisation in 1989, AGL (still the only customer of the Authority) protested that the intended terms contravened some of the earlier agreements, and secured court intervention on its behalf. Although that privatisation proposal is now in obeyance, the policy issues remain; in particular, these relate to the haulage tariff as well as to ownership of the pipelines.

To permit consideration of these issues, the study first examines the initial agreements between AGL and the Pipeline Authority, together with some renegotiation of tariffs. The effects of haulage tariffs on the fortunes of AGL depend on the form of economic regulation of that company by the NSW government, and this is the subject of the second section. The third part analyses the terms of the proposed privatisation, and the final section draws conclusions.

An economic history of the Pipeline Authority

The initial proposal was for a 1300 km pipeline to carry gas from Moomba to Wilton, the 'city gate' for Sydney. Besides the question of ownership, there was controversy about the choice of route, and about the construction of laterals and off-takes to serve Canberra and many NSW places such as Goulburn and Bathurst (Juvik, 1986).

When the *Pipeline Authority Act* was proclaimed in June 1973, the new Authority took over. Construction of the Moomba-Wilton line was begun in 1974, and this line was brought into use in December 1976 (Pipeline Authority, 1988, p. 3). From Wilton, gas is reticulated by AGL to its customers in Sydney, Newcastle and Wollongong. Despite the initial lobbying for early extensions, the agreements signed by the PA required only that the laterals be built as soon as possible (Juvik, p. 66; Task Force on Asset Sales, 1990, p. 20). This programme has added about 500 km of (smaller -diameter) pipeline (PA, 1990, p. 10 and p. 13).

After the defeat of the Commonwealth (Labor) government in December 1975, the incoming coalition government offered to transfer ownership of the pipeline to AGL, but that company declined the offer (PA, 1978, p. 7). The following years saw financial difficulties for the Authority, as is now explained in detail

The initial haulage agreements

In 1974, the PA entered into two agreements, each to have effect for 30 years in the first instance. Although the details are still not publicly available, it is known that the agreements dealt with use of pipeline capacity and with tariffs (among many other matters). As to the former, gas purchased by AGL from the Cooper Basin producers was "to be transmitted through the pipeline with absolute priority", and the PA was not to compete with AGL in the distribution of natural gas in the Sydney region, except in limited situations" (Task Force, 1990, pp. 19-20).

The haulage tariff payable by AGL was "to be sufficient to reimburse [the PA] for the cost of constructing and operating the pipeline by the time the agreement was due to end. It was predicated on the assumption that [the PA] would carry certain specified volumes of gas for AGL" (Task Force, 1990, p. 20). Any gas hauled for the Cooper Basin producers was "to be transported at a cost 'on a pro rata basis to the cost of haulage of AGL's gas'", and any gas transported for other parties was 'not to be carried at a cost which is less than the cost of haulage paid by the producers" (Task Force, 1990, p. 19).

By these agreements, AGL sought to secure its position: no other party would get cheaper gas haulage, and the PA would never make a profit from the AGL gas, but would cover its cumulative costs *eventually* (With the significant economies of scale in pipeline working, operating costs would increase only moderately with the anticipated growth in the rate of gas haulage, while revenues would increase markedly; after taking interest payments into account, the cash-flow surpluses of the later years would eventually outweigh the deficits of the early years.)

The tariff provisions of the agreements soon proved to be a source of trouble. Even before the pipeline entered service, the PA noted (PA, 1976, p. 12) it had "tried to preserve the normal commercial confidentiality of its agreement with [AGL]. However, in view of recent comment in the press it is thought necessary to reveal the basis of the pricing clauses". The revelation was to the effect that the pricing formula (not revealed) was subject to triennial reviews, to take account of actual costs; while AGL had estimated that the average tariff (over the 30 year period) would be 3.08 cents per therm (106 megajoules), "as a normal commercial arrangement the Authority has agreed that the tariff ... during the first five years shall be fixed at 1.4 cents per therm".

The PA goes on to report: that the agreement also provided that if market conditions permit, and subject to approval by the NSW government, AGL would pay a higher price not exceeding 1.969 cents per therm; that "the shortfall to the Authority during this initial five year period will be a charge against [AGL] over the next 25 years"; and that AGL "has stated that it proposes, if possible, not to take advantage of the low tariff provisions of the Agreement. This is obviously a reasonable and proper commercial approach to the problem" (PA, 1976, p. 12). (For the outcome, however, see Table 2 below and the accompanying text.)

The early years of operation

Given the economies of scale in pipeline construction, taken in conjunction with anticipated growth in market demand, it is natural and proper to build a large-diameter pipeline, whose capacity is under-utilised - perhaps grossly - in the early years. Thus it is normal for early-period revenues to be insufficient to cover interest charges on capital invested. It is also conceivable that it might be optimal to build the pipeline at such a scale that gross revenue did not cover even all the operating costs (given the economies of scale in pipeline *working*, already mentioned.) But there is a presumption that most of the operating costs will be covered at the outset, because if not there is likely to be a case for postponement of construction until market demand has grown sufficiently.

Thus it was to be expected that an accounting policy which charges against gross revenue both the current interest outlays and depreciation (calculated on some reasonable basis, no matter what the details) would result in financial deficits in the early years (assuming no equity capital, as is the case here).

For the Pipeline Authority, however, the deficits (Table 1) were exacerbated by the failure of AGL to take as much gas as that Company had anticipated, with the 1974 agreement being predicated on the anticipated amounts. In the Authority's annual reports, the gas shortfall is first noted after the first six months of operation (PA, 1978, p. 8). By 1980, the PA reports that it "is now generating sufficient cash flow to meet its operating expenses (excluding interest) (PA, 1980, p. 6). But it also mentions, in the notes to the accounts (p. 22) that there are 'take or pay' provisions in the 1974 haulage agreement, under which AGL paid $5.3 m in 1979-80, compared with $ 6.3 m in 1978-79. Although the report is not explicit, it seems that these payments did not fully compensate the PA for the shortfall in gas hauled.

Table 1 **Financial performance and output of the Pipeline Authority**

Years ended 30 June	Current expenses[1]	Deprec-iation	Interest etc [2]	Total expenses[3,4]	Gross revenue[4]	Profit/loss	Gas delivered
			million	dollars			million gigajoules
1977[5]	1.4	0.6	10.8	12.8	2.8	-10.0	7.7
1978	3.4	1.8	23.5	28.8	11.7	-17.1	22.7
1979	3.1	2.6	25.0	30.8	18.1	-12.6	32.8
1980	3.7	4.0	26.6	34.3	23.4	-10.9	50.4
1981	4.3	5.0	28.1	37.4	23.3	-14.1	62.7
1982	5.1	6.1	31.1	42.2	31.1	-11.2	72.1
1983	5.8	6.7	35.3	53.6	42.1	-11.5	78.0
1984	6.9	7.1	37.8	65.5	49.4	-16.1	84.4
1985	7.4	7.4	40.8	58.3	55.8	-2.5	84.2
1986	8.6	8.6	39.8	56.4	67.5	11.2	95.4
1987	12.3	9.5	40.6	62.4	73.7	11.3	96.8
1988	12.3	14.7	42.8	69.4	74.3	4.9	94.8
1989	11.7	15.1	42.4	69.3	78.5	9.2	95.3
1990	14.4	16.0	42.2	72.6	86.4	13.7	100.8

Sources: Pipeline Authority *Annual Report 1979-80* p. 27
Pipeline Authority *Annual Report 1989-90* pp. 32-33

Notes:

1. Current expenses of operating the pipeline: wages, salaries etc.; compressor fuel; other materials and services; administrative expenses. Excluded is the cost of some gas purchased at Moomba for sale in NSW.

2. Interest and other financing expenses

3. Includes abnormal items; by far the largest of these are the costs of repair, duplication and reconstruction, following a rupture in the main pipeline near Moomba in July 1982; these abnormals totalled \$ 5.9 m in 1983, \$ 13.8 m in 1984 and \$ 2.6 m in 1985.

4. Total expenses excludes cost of gas purchased for subsequent sale. The same amounts are excluded from gross revenue

5. Pipeline operation began at the end of December 1976

By 1981, the Authority is giving the matter greater emphasis: "AGL has not in any year so far been able to sell the volume of natural gas it nominated in the Haulage Agreement." Despite an increase in gas hauled in 1980-81, "there was a marginal decrease in revenue ... because the 'take or pay' component was reduced" to about $ 0.7 m (PA, 1982, p. 16). (Although no explanation is offered, it seems that from 1980-81, the original agreement reduced the unit charge for gas not taken.)

The 1980-81 report goes on to note (p. 18) that "as a consequence the operating losses of the Authority have been greater than expected . . Over the past year the Authority and AGL have been discussing this problem, following a proposal by the Company that would have added to the Authority's potential loss." Although the PA neglects to reveal the nature of the proposal, subsequent events allow the inference that AGL wanted the PA to build a compressor station. The Authority's response was cold: "the AGL proposal could not be considered unless the Company were prepared to amend the terms of the Haulage Agreement in such a way as to ensure that the Authority would not suffer financially as the result of past shortfalls in volumes or in the event of AGL's failure in the future to supply gas for carriage in the volumes required for the Authority to cover its costs" (PA, 1982, p. 18).

In the outcome, another five years was to pass before the dispute was resolved. Apparently the AGL desire for compression was not urgent: in 1981-82 "the Authority agreed to .... discussions with AGL about the possible installation of compression on the Moomba-Sydney pipeline during or before the winter of 1985", but pointed out that "early compression would have important financial and contractual obligations" (PA, 1983, p. 5). That year saw another dispute: after applying a formula included in the 1974 agreement, the PA notified AGL of new tariffs for the 1982-84 triennial, and the company disputed the manner of application of the formula. After negotiations in which both parties reserved their rights, an agreed basis was found for tariffs to apply until the next triennial review (PA, 1983, p. 7).

Shown in Table 2 are the actual charges paid under the principal tariff. Two points deserve mention. The charge paid in each of the first five years is equivalent to 3.816 cents per therm, which is much higher than the figures initially proposed, and described by the PA as commercially proper. Secondly, the charges have increased at a lower rate than the CPI, a result which reflects the economies of scale that become available as throughput increases.

Renegotiation of the haulage agreement

The dispute about gas volume shortfalls went on for several years. As noted in PA 1986a (p. 11), "Since the Authority's [1980-81] Annual Report to the Parliament it has been necessary to report annually that, because AGL has been unable in any year to sell the volume of gas it nominated, the Authority's initial operating losses have been greater than expected. Those reports have also referred to discussions in which the Authority sought amendment of the terms of the Haulage Agreement to ensure realisation of the original intention of a break-even result for the Authority over the 30 year term of the Agreement. The matter continued to be unresolved at 30 June 1985." The Authority still linked this matter to AGL's request for compression, on which negotiations also were still continuing (p. 6).

In its next annual report, the PA said "Early in 1985-86, AGL sought the addition of compression to the Moomba-Sydney pipeline as a matter of urgency. This led to extensive discussions about the difficulty of making costly technical improvements to the pipeline while operating losses continued to accrue" (PA, 1986b, p. 12). That report goes on to record (also p. 12) that "Heads of Agreement were negotiated" covering a range of matters besides amendment of the 1974 agreement. Thus "in return for an assured break-even financial result over the term of the Haulage Agreement, the Authority agreed to commence forthwith to install a compressor station at Bulla Park" and to construct a new pipeline to supply Orange, Bathurst and Lithgow. (The 'costly technical improvement' at Bulla Park involved an outlay of $ 18 million, and commenced operation in June 1986 - PA 1987 p. 5)

Table 2 Haulage charges under the principal tariff[1], and pipeline depreciation

Years [2]	Haulage charge[3] (cents/GJ)	Deprec-iation[4] (cents/GJ)	Years	Haulage charge (cents/GJ)	Deprec-iation (cents/GJ)
1977	36	7.8	1984	56	8.4
1978	36	7.9	1985	61	8.8
1979	36	7.9	1986	66	9.0
1980	36	7.9	1987	71	9.8
1981	36	8.0	1988	74	15.5
1982	46	8.5	1989	77	15.8
1983	51	8.6	1990	80	15.9

Sources: Pipeline Authority Annual Reports - see 1982-83 report p. 8, 1983-84 report p. 12, 1984-85 report, p. 11, 1988-89 report p. 40; also see Task Force (1990) p. 7

Notes:

1 Applies to all gas hauled, except that delivered to Canberra, Bathurst, Orange, Lithgow and Oberon, and gas delivered before 1988 to Cootamundra and Wagga Wagga (cf. PA Annual Report 1987-88, p. 6)

2 Tariff contract years coincide with calendar years.

3 In addition to these payments for gas hauled, until 1980-81 AGL also made payments arising from a 'take or pay' clause in the 1974 agreement.

4 Implied depreciation charge per unit of output; calculated for financial years ending 30 June, using aggregates reported in Table 1

When the Heads of Agreement were announced in September 1985, media reports (see, for example, Randall, 1985 and Mackay, 1985) reinforced the PA view that the new arrangement provided financial salvation for the Authority. Yet this judgement is not strongly supported by the financial and output data Although it is true that 1985-86 saw the first annual profit for the PA (Table 1), it seems that the Heads of Agreement would have had little effect on that result. The unit charges (Table 2) for 1985 and 1986 had been determined in 1984 (PA, 1986a, p 11), and an important factor in the profit was the considerable increase in throughput (Table 1). Also noteworthy is the 1984-85 outcome in which, despite a slight fall in throughput, the loss was much reduced (to $ 2.5 million), thanks to substantial increases in the 1984 and 1985 unit charges.

Thus the turnaround in the Authority's financial situation (Table 1) may be attributed to growth in market demand, and to increases in unit charges which were agreed before the Heads of Agreement were established. However, part of that increase in unit charges may be due to the stand taken by the Pipeline Authority from 1981 onwards; concealment of the details of the 1974 agreement precludes full investigation

The irony of a recent development should be noted The Authority's 1989-90 annual report notes (p 6) that the PA "has made a record operating profit in 1989-90 and expects all accumulated past losses to be eliminated in 1992-93" The 1974 agreement intended only to recoup all the investment outlays (with interest) by 2006, and this should now be readily achievable

Depreciation of the pipeline

As part of the cost-recovery arrangements in the 1974 haulage agreement and in the later heads of agreement, the total (historic) cost of construction of the pipeline system is to be recouped over a period of years (up to 2006 in the case of the initial Moomba-Sydney pipeline).

A very long-lived asset such as a pipeline involves joint provision of service in each of many years, and hence provides (in a most acute form) the problem of how to allocate the fixed joint cost across the output of the various years As is well known, practices such as straight-line depreciation are merely arbitrary rules of thumb. Without going into the relevant economic theory (for which see, for example, Littlechild (1970) p. 329, and - in a regulation context - the brief comments in Joskow and Schmalensee (1986) pp. 6-7), this account merely comments on the practices found in this case.

As seen in Table 1, the total depreciation charge increases over time. In some years, the increase is explained in part by the addition of assets, as lateral lines and off-takes are constructed and brought into use. In all other respects, the key is the method of calculating depreciation. Under the initial 1974 agreement, depreciation charged in any year was proportional to throughput (PA, 1978, p 4 of the Accounts). The effect of this is shown in Table 2 where the implied unit charge (depreciation per GJ of throughput) remains steady over the first five years, with modest increases in the next six years. The renegotiation of that agreement resulted in a change of basis to straight-line depreciation ie. the same total charge in each year (PA, 1988, p 22)

In consequence, the unit charge is markedly higher in 1987-88 (Table 2) Had the straight-line method been used at the outset, depreciation charges in the early years would have been *very* much higher than those actually made on the throughput basis, which served to postpone the payments to be made by AGL.

Economic regulation of AGL

Because the focus of this study is the Pipeline Authority, the status of AGL is considered here only to the limited degree needed for an understanding of AGL's interest in the 1974 haulage agreement and the later agreements. In the relevant years up to 1985, AGL was regulated by the NSW government by means of the provisions in the *Gas and Electricity Act 1935* This legislation included price controls, but the mechanism was not at all like the recently-developed practices of price-capping.

Instead, the fundamental mechanism was that of *dividend* control; s. 6 of the Act limited the dividend (on ordinary shares) to an annual rate of two percentage points higher than the annual percentage rate yielded by long-term Commonwealth securities, with a limited catch-up provision to apply if in any previous year the actual dividend declared is at a lower rate than that permitted. The price control (s 12) then limited prices to levels that generated enough revenue to support the permitted level of dividends. Thus the regulatory mechanism was essentially that of rate-of-return regulation, widely practised in the US, and having well-known defects (Sherman, 1989, Part III)

This scheme of regulation was radically changed by the 1985 passage of the Gas and Electricity (Amendment) Act. However the price and dividend control is the same in essence: the gas activities of the company are separated from other activities (on which, more anon); regulation of the gas activities includes limiting prices to the levels required "to make a reasonable profit" (s 12), defined as "the amount which is equivalent to a return on shareholder's funds at a rate which is . . 2 percent per annum higher than the long-term bond rate" (s. 12K).

The new feature of the legislation is the formal separation of activities By 1985, AGL was in possession of valuable land holdings (mostly sites previously used for the manufacture of gas, but by then redundant - or soon to be), and had embarked upon real estate development in other locations too. The 1985 Act prescribes a formal separation of these other activities: the gas subsidiary is subject to continued regulation, the activities of the holding company are not regulated. The capital profits already accumulated by 1985 were divided between the holding company and the gas subsidiary The latter share (some $134 million) was placed in a Tariff Stabilisation Account, interest on which is regarded as income of the gas subsidiary for the purposes of price control

Capital profits realised by the gas subsidiary *after* the commencement of the Act are shared equally between the unregulated holding company and the Tariff Stabilisation Account Finally, s. 12B of the Act stipulates that all dealings between the gas subsidiary and AGL (or any of its other subsidiaries) "shall be effected in good faith and, unless the Minister otherwise approves in writing in respect of any particular dealing, on ordinary commercial terms which do not reflect that the companies are related". Many decades of experience with rate of return regulation, and with the porous nature of Chinese walls, cast doubt on the effectiveness of such a provision. In the present case, concern is increased by the presence of a complex holding company structure (Colebourn, 1987 pp. 2-5 and Appendix A).

Nevertheless the letter and spirit of the legislation (which, incidentally was replaced by the Gas Act 1986, which restated the legislative requirements of the previous act, and added a few provisions, notably about maximum shareholding) imply that AGL's gas activities are operated on a cost-plus basis. Hence any increase in the haulage charges (payable to the Pipeline Authority) can be passed through to the customers with little or no detriment to the regulated profits of the gas subsidiary, unless the increase is so great as to result in the price of gas delivered to the customer becoming so high as to make the gas uncompetitive in relation to alternative energy sources (ie electricity, oil and coal).

The proposed privatisation

Unlike most privatisation effected in other countries (notably the UK), shares in the pipeline enterprise were not offered to the public. Rather, the initial move was to invite expressions of interest "from any parties in Australia or overseas who may wish to acquire part or all of the ownership of the entire system, or [of] any of the individual pipelines" (Task Force, 1989, p. 1). (Although splitting of the assets is a literal possibility under the wording, the same document (also p. 1) refers to negotiations with "the prospective new owner" of the pipeline system.)

At that time (December 1989), the precise terms, conditions and method of sale had not been determined. The government was still considering whether to retain a small equity interest. It also indicated its "wish to discuss with a short-list of prospective purchers" whether the pipeline should in future operate as a common carrier, and what regulation "should be put in place to prevent undue exploitation of [the pipeline's] status as a natural monopoly by a new owner wishing to charge excessive haulage fees" (Task Force, 1989, p 5)

The invitation also noted that the existing tariff is "essentially a cost recovery contract rather than a commercially based agreement" and "does not permit a fair and reasonable return to be earned on total ... assets, valued at their current worth". (This term 'current worth' is not explained; but see below.) "There appears to be some scope" for "a new owner .. to re-negotiate the existing haulage tariff arrangements". (Task Force, 1989, p. 7)

It was August 1990 before the government requested purchase proposals, and by then, the government had had further thoughts about many of the difficult issues. In order to 'commercialise' the pipeline operations, the government had announced that legislation was to be introduced into parliament to increase the principal existing tariff (of 80 cents per gigajoule of gas transported) to $1.00 from 1 January 1991, and to $1.25 from 1 January 1992 (Task Force, 1990, p. 7). (It may be presumed that those parties who had responded to the 1989 invitation had expressed doubt that they would have the power to alter the existing contract, and had requested legislative authority.)

Having given further thought to the regulatory aspect, the government now asked for bids on the basis of each of two alternative regulatory regimes:

Option A: Following the two initial price increases, price capping would limit subsequent percentage increases, the cap being the percentage increase in the Consumer Price Index *less* one percentage point per annum; *in addition*, there would be a cap on earnings, to be set "at the long-term bond rate plus a margin of, say, 3%", with the return on equity calculated on "a deemed debt/equity ratio of 70:30". Bidders were to note that the parameters might be negotiable, and that "the suitability of the arrangements adopted would be subject to review after either 10 or 15 years... " (Task Force, 1990, p. 8).

Option B: Following the two initial price increases, further increases would be made subject (by legislation) to determinations of the Prices Surveillance Authority (PSA), made under the *Prices Surveillance Act 1983* which requires the PSA to have regard for the need to curtail market power, and the need to allow sufficient profit to maintain investment and employment. This regulatory arrangement "would be reviewed five years after its introduction" (Task Force, 1990, p. 9).

In effect, the government was asking prospective purchasers to indicate how the regulatory regimes would affect the purchase price, to help the government to consider the trade-off between high revenue from sale of the assets and low prices for consumers - one of the standard issues in the determination of privatisation arrangements (cf. Vickers and Yarrow, 1988, p. 187 on the general issue, and pp. 206-7 on the case of privatisation of British Telecom)

The Pipeline Authority (Charges) Bill 1990

Presented to Parliament on 8 November, this Bill provided for the major adjustments to the haulage tariff intended to take place in 1991 and 1992 According to the explanatory memorandum, "Existing haulage tariff arrangements are non-commercial as they do not permit TPA to earn any overall profit on the main bulk of its business until the year 2006, and to earn only inadequate profits over the following 10 years. As a consequence, the Commonwealth is, in effect, heavily subsidising the transportation of gas in NSW " (Minister for Resources, 1990, p. 1)

Accordingly, the objects of the Bill include (s.3)

- to set the PA the financial goal of achieving "a fair and reasonable rate of return on the total current worth" of its assets, where 'current worth' of a pipeline is defined (s.4) as "the estimated replacement cost ..... adjusted to take account of the unexpired portion of the asset's effective service life"
- "gradually (*sic*) to increase the charges for the carriage of natural gas . . "
- "to remove the inequity and economic inefficiencies that arise from the implicit subsidies to consumers of natural gas"

For the principal haulage agreement with AGL, section 6 of the Bill provides for 'adjusted rates', which embrace the successive 25% increases in 1991 and 1992, and which in subsequent years were to be fixed by regulations (thereby giving a means of implementation for whichever regulatory scheme were to be chosen). Section 25 requires that the PA, if it hauls gas for any other party, shall not set a haulage charge below the adjusted rate charged to AGL; this continues the protection first secured by AGL in the 1974 agreements. Incidentally, s.25 also requires the PA to "act in accordance with sound commercial principles" - indeed this is the purported object of the section Was Canberra aware of the potential for conflict between commercial principles and the granting of 'most favoured corporation' status to AGL?

The other main provisions of the Bill set out arrangements intended to secure for AGL financial reimbursement for its extra costs resulting from adjustment of the haulage rates. Specifically, the Bill enables the increase in charges "to be passed through to consumers of gas" To achieve this, s.11 ensures that "legislative provisions in either NSW or the ACT which regulate the price of natural gas will not prevent the additional costs ... from being included in gas prices charged to consumers"; and s 12 has similar effect on fixed price contracts, made between AGL and industrial consumers before the commencement of the (proposed) Act. (Minister for Resources, 1990, p. 5)

Although there is no mention of it in s.11 and s.12, the Minister (p. 6) claims that "The extent to which the increases in costs are passed on to particular types of consumers (domestic, commercial and industrial) will be a matter for the commercial judgement" of AGL and its subsidiaries, who will be able "to pass on a less-than-proportionate share of the increased costs to some consumers and a more-than-proportionate share on to others, in accordance with their judgement of what is the most appropriate marketing strategy."

Further assistance for AGL is found in s 14 which provides for government "compensation as the Minister determines ... for the loss of profit resulting from the quantity of natural gas sold ... being less than it could reasonably be expected to have been" if prices had not been raised to cover the increases in haulage charges. In determining this compensation amount, "the Minister must have regard to the extent to which [AGL] has taken action to mitigate the loss ... by seeking alternative markets for natural gas." The Minister's determination of such compensation for loss of profit is explicitly made subject (s 21) to review by the Administrative Appeals Tribunal.

Finally, the Bill provides (s 24) that if it results in "the acquisition of property from any person otherwise than on just terms", the person is entitled to compensation from the Commonwealth, with the Federal Court having jurisdiction.

Notwithstanding all these safeguards offered to AGL (though not to the final consumers of natural gas), the Bill was defeated on 19 December 1990, when the Senate read the Bill for the second time.

Economic evaluation of the Bill

The (guillotined) debate in the Senate contained little of substance. Senator Short said that the coalition opposed the Bill because its passage would breach the previous agreements made with "a private sector firm" and "governments should not breach contractual obligations" (Hansard, Senate, 5968). Rather than the government's approach, the coalition would "first of all create a regulatory framework within which the privatised pipeline would operate", then "establish an agreed process of sale by negotiation with the contracted parties", and in the sale process ensure that "all information as to future revenues, ongoing legal obligations, if any, and other commercially necessary information [was] made available to all bidders" (5970)

What Senator Short did not say was what the coalition would do if the negotiations with AGL resulted in that company insisting on an 'agreement' in which the terms for the haulage of AGL's gas were not to be altered in any way from the previous agreement. Furthermore, no speaker in the debate sought to analyse those several forms of compensation for AGL that were provided in the Bill - indeed none of those opposing the Bill even acknowledged the existence of those compensatory mechanisms.

In evaluating those mechanisms, the first thing to say is that in principle they seem to provide very thorough protection of the interests of AGL. Of course, some of the provisions rest on complex judgements, notably that of the Minister on the extent of the loss of profit. Even with the right of appeal to the Administrative Appeals Tribunal, the company might worry (perhaps justifiably) that the amount could be pitched a little below a reasonable figure. But surely the procedure would not produce a gross inequity. Furthermore, given the nature of the economic regulation of AGL's gas activities in NSW, the price it pays for haulage of its gas is hardly a fundamental determinant of the fortunes of the company, as already noted.

The remaining issues of compensation relate to the interests of AGL's customers. Domestic users have no long-term legal contract; also the size of the effect is limited. Both sides of the dispute have their figures; in the Senate debate, the government spokesman (Senator Button) said the 1992 price level would imply a 9% increase in the delivered price for the average domestic user (Hansard, Senate, 5975). The situation of industrial users is more troubling, both because some may have long-term contracts, and because the percentage increase in the final price is greater (since the existing industrial tariff will be lower, reflecting the lower cost of bulk supply, and perhaps the greater bargaining power of large buyers.)

The overall effect of the Bill was to compensate AGL but not its customers. The lack of customer compensation explains why the net proceeds to the government from the sale would be significantly increased if the haulage charges were raised. If it were necessary to compensate all (existing) parties, the net proceeds would be much the same whether or not the haulage charges were increased.

The remaining big issue is the size of the effect of the two price increases, each of 25%, on the capital value of the assets (a matter not considered in Task Force, 1990). Some rough-and-ready assumptions permit a simple calculation. If in 1989-90, the tariff had been $1.25 per GJ rather than the actual 80 cents, if as a result there had been no reduction in the amount of gas hauled, and if there had been no increase in operating costs, then gross revenue (from the cost-based contracts) would have been $135 million (instead of $86.4 million - cf Table 1). Thus the financial surplus after charging interest but before charging depreciation would have been $78.4 million, rather than the actual surplus of $29.7 million. The ratio of hypothetical surplus to actual being 2.64, the increase in asset value would be the same, if the proportionate effect on financial surplus were the same in all subsequent years.

This ratio of (say) 2.5 may be compared with a historic cost of pipeline construction of $305 million, and with replacement cost put at about $1300 million (Task Force, 1990, p. 17). Although it must be remembered that a significant part of the physical life of the main pipeline is already past, the ratio of 2.5 does not seem to imply a capitalisation greater than the asset value measured in replacement cost terms.

AGL's right of first refusal

In Task Force, 1990, pp. 6-7, the government acknowledged that the 1985 heads of agreement "provides for AGL to be given a 'right of first refusal' if [the PA] is empowered to dispose of the pipeline system or any interest therein. However, it is not proposed to give such a power to [the PA]. Respondents should note that it is the Government .... which will be arranging the sale .... [and] the transfer of ownership .... will be effected by legislation."

AGL was not impressed. In the NSW Supreme Court on 16 November 1990 it obtained a court order reinforcing its right. However, the judge is quoted (Sydney Morning Herald, 17 November 1990) as saying that "At the end of the day it may well be that there is nothing AGL can do to prevent the Commonwealth legislating to give effect to its intentions, although of course if there be an acquisition of property involved it will need to be on just terms.."

Conclusions

There are two major difficulties in devising privatisation terms for the assets of the Pipeline Authority. The first of these is a common problem, especially in the context of transport infrastructure: the operator of the pipelines has considerable market power, and government will need to regulate any private owner. Terms for such regulation have to be determined before privatisation is effected. Inevitably these terms will embody some measure of uncertainty, and the consequent commercial risk may itself lower the price offered by a risk-averse bidder. In the case of the pipeline, two alternative regulatory regimes were specified by the government, and bids were invited on each basis; this allows the government to explore the trade-off between regulatory stringency and the amount of the sale proceeds.

The second difficulty is peculiar to the circumstances of the Pipeline Authority: to secure AGL's agreement for its plan for public-sector ownership of the pipeline, the Whitlam government allowed AGL some generous terms, including the right to have gas hauled at a price that does no more than recover the PA's costs, and does so only on a historic cost basis. One consequence is that sale of the pipeline with that tariff in force would yield a capital sum that is much less than the replacement cost (less depreciation) of the assets. To increase the sale proceeds, the government proposed legislation for a once-and-for-all adjustment to a higher tariff level, but this proposal was defeated in the Senate.

Although any legislation that breaks previous agreements is rightly considered with suspicion, in the present case it seems difficult to find grounds for sympathising with AGL's position. First (as already noted) the company turned down a purchase opportunity in 1976-7 - of course, purchase at that time would have required it to fund the early deficits, a burden which in the event it avoided, by postponing payments, and by relying on the historic cost nature of the haulage agreement. (Incidentally, AGL did make an attempt to purchase in 1981, but the then coalition government declined the offer.) Second, there seems to be adequate compensation for AGL in the 1990 Bill, especially when account is taken of the effect of NSW regulation; indeed only if, and to the extent that, the regulation is not effective could *uncompensated* privatisation (even) have significant impact on AGL profits.

Third, strategic considerations have to be taken into account. Although AGL has now lost its legislative monopoly on gas reticulation in Sydney, Newcastle and Wollongong (as noted in Task Force, 1990, p. 10), it retains a natural monopoly advantage for distribution to domestic customers. From AGL's point of view, the vertical integration achieved by its buying the pipeline could be advantageous. At least it would prevent market power falling into other hands, and might enhance its own market power (all this predicated, of course, on some shortcomings in regulatory mechanisms). (In this vertical integration aspect, the pipeline is similar to some other transport situations. Ore miners in the north-west choose to operate their own railways; Queensland coal producers have found some of their resource rents dissipated in charges levied by Queensland Railways, with part of the revenue supporting other QR services.)

At the same time, it is not obvious that there is a good economic case for privatisation in any shape or form. With an average of only 137 employees in 1989 - 90, the Authority earned gross revenue of $86 million through very capital-intensive means of production; there seems little if any scope for improved management of the existing business. Perhaps future developments might be better managed under private ownership But the advocates of privatisation seem not to have bothered to argue the case.

Thus it may be that the principal consequence of privatisation would be merely the placing of the sale proceeds in the hands of govermnent. It is by no means certain that this process would result in an increase in economic welfare (on *any* reasonable definition of that term).

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	Year	Parliamentary Paper
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PA (1978)	1976-77	110, 1978
PA (1980)	1979-80	293, 1980
PA (1982)	1980-81	18, 1982
PA (1983)	1981-82	33, 1983
PA (1986a)	1984-85	22, 1986
PA (1986b)	1985-86	353, 1986
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