

Rural Water Pricing

Introduction

In submitting the strategic framework for CoAG consideration February 1994 the Neal Report noted that:

'In the future there will be an increasing need for the water industry as a whole to pay its way, not only in terms of new investment but in providing for the ongoing maintenance and refurbishment of existing infrastructure.'

Approximately 70 per cent of Australia's harvested water is used for irrigated agriculture. In many instances however, rural water prices have not been sufficient to cover costs. In addition to the cost associated with governments need to raise taxes to pay these often substantial subsidies, setting prices below cost has resulted in over use of water, in some cases to the detriment of the environment and the future productivity of agricultural land.

In signing the COAG water reform framework jurisdictions agreed to reform rural water prices to promote more efficient and sustainable water use. This paper discusses:

- a definition of rural activities for the purposes of clause 3(d) of the framework;
- jurisdictions' third tranche commitments with respect to rural water pricing. In this paper rural water refers to surface and groundwater (excluding private withdrawals of groundwater¹); and
- the Council's interpretation of these commitments.

The rural water supply sector

The water industry can be broadly divided into three sectors, the metropolitan urban (such as bulk and reticulated water provided to major cities), the non metropolitan urban (such as reticulation services to country towns) and the rural water sector. Application of CoAG water pricing reforms to the urban and non metropolitan urban (NMU) sectors was considered as part of the Council's second tranche assessment. However, under the agreed water reform framework rural pricing reform will not be considered until 2001.

¹ Private withdrawals of groundwater include both private providers and small co-operatives who extract water from bores for private use, but does not include large co-operative arrangements (including trusts) that act as wholesalers supplying water as a commercial venture and that are subject to control or directions by government or receive substantial government funding.

The distinction between urban and rural services is not always clear. Some parties have suggested that a size threshold could be used to define rural and urban activities. For example, the SCARM Taskforce cost recovery project defined rural water services as those with less than 25 000 customers. However, given the differences in the nature of water service provision across jurisdictions, a single threshold level may not be the most appropriate approach.

The Steering Committee on the National Performance Monitoring of Government Trading Enterprises (SCNPMGTE) defines urban water authorities as those that provide the majority of their services to urban populations. These services include reticulation, sewerage collection and treatment, drainage and bulk water provision. The SCNPMGTE also makes provision for a mixed rural classification which includes water, sewerage and drainage services provided to rural areas. The Council's second tranche assessment made no such geographical distinction defining all water and wastewater services to urban customers as urban regardless of their location.'

For the purposes water pricing (clause 3 of the agreed framework) the Council has defined the rural supply sector to include all water supply services other than those supplied to urban or NMU customers. A broad definition has been adopted to achieve a comprehensive application of pricing reform across the water and wastewater industry.

Under the above definition CoAG rural water pricing commitments will be applied to such activities as:

- services provided by government owned irrigation schemes;
- government owned bulk water supply services to users in non urban areas such as private irrigation schemes, power stations or processing/mining plants; and
- license fees set for commercial users extracting surface or ground water using their own infrastructure.

Improving the financial viability of irrigation schemes is important and was a key objective of original agreement signed in 1994. However, consistent with the general commitment to full cost recovery made under clause 3(a)(i) the Council's view is that rural water reform should involve moving prices paid by all commercial water users towards a more cost reflective basis. Therefore, in considering progress against rural pricing commitments the Council will look for water pricing reforms to be applied to all water supplied for commercial purposes other than that supplied to urban or NMU customers.

Reform Commitments

In relation to pricing generally clause 3(a) notes governments' commitments:

- (i) to the adoption of pricing regimes based on the principles of consumption-based pricing, full-cost recovery and desirably the removal of cross-subsides which are not consistent with efficient and effective service, use and provision. Where cross-subsides continue to exist, they be made transparent,*
- (ii) that where service deliverers are required to provide water services to classes of customer at less than full cost, the cost of this be fully disclosed and ideally be paid to the service deliverer as a community service obligation;*

In relation to rural water supply specifically clause 3(d) states:

- (i) that where charges do not currently fully cover the costs of supplying water to users, agree that charges and costs be progressively reviewed so that no later than 2001 they comply with the principle of full-cost recovery with any subsidies made transparent consistent with 3(a)(ii) above;*
- (ii) to achieve positive real rates of return on the written-down replacement costs of assets in rural water supply by 2001, wherever practicable;*
- (iii) that future investment in new schemes or extensions to existing schemes be undertaken only after appraisal indicates it is economically viable and ecologically sustainable;²*
- (iv) where trading in water could occur across state borders, that pricing and asset valuation arrangements be consistent;*
- (v) where it is not currently the case, to the setting aside of funds for future asset refurbishment and/or upgrading of government - supplied water infrastructure; and*
- (vi) in the case of the Murray-Darling Basin Commission, to the Murray-Darling Basin Ministerial Council putting in place arrangements so that, out of charges for water, funds for the future maintenance, refurbishment and/or upgrading of the headwork's and other structures under the Commission's control be provided.*

² Commitments under clause 3(d)(iii) are considered in the background paper "New Investment in Rural Water Infrastructure".

Assessing progress

Full cost recovery

To clarify what is meant by the term full cost recovery a set of pricing guidelines were developed through the SCARM Taskforce on Water Reform which have been subsequently endorsed by ARMCANZ and Senior Officials (see Box 1A).

In developing the guidelines it was agreed that given the different circumstances faced by different service providers there is no one best way of achieving full cost recovery. For example, a November 1997 report to ARMCANZ stated that;

'...it becomes clear that a prescriptive approach that can be universally applied is not practicable. Indeed to apply a rigid formula to cost recovery is likely to lead to unintended consequences in pricing.'

Therefore, flexibility was built into the guidelines by:

- providing a band of prices through which full cost recovery could be achieved. At one end of the scale, full cost recovery means that water businesses should recover operating, maintenance and administration costs, enough money to fund future refurbishment, and pay appropriate taxes and interest charges. At the other, it means water businesses should not charge prices that are so high as to extract monopoly rents because they are the only service providers; and
- placing responsibility for setting prices with jurisdictional regulators (or their equivalent) to enable the circumstances peculiar to each water service provider to be taken into account when setting prices within the agreed band.

The CoAG guidelines provided an effective basis for assessing compliance with full cost recovery within the urban and NMU sectors in the Council's second tranche assessment. However in contrast to the metropolitan urban sector, attaining the lower bound of the above guidelines (rather than staying below the upper bound) will be a key third tranche issue for the rural sector. This is particularly the case for government owned irrigation schemes and government rural bulk water supplied where substantial price increases are required. In respect to licence fees provided for private diversions, the reform requires a change in pricing regimes to reflect costs such as administration, enforcement, resource management.

Box1A: CoAG pricing guidelines

1. Prices will be set by the nominated jurisdictional regulators (or equivalent) who, in examining full cost recovery as an input to price determinations, should have regard to the principles set out below.
2. The deprival value methodology should be used for asset valuation unless a specific circumstance justifies another method.
3. An annuity approach should be used to determine the medium to long term cash requirements for asset replacement/refurbishment where it is desired that the service delivery capacity be maintained.
4. To avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or TERs [tax equivalent regime], provision for the cost of asset consumption and cost of capital, the latter being calculated using a WACC [weighted average cost of capital].
5. To be viable, a water business should recover, at least, the operational, maintenance and administrative costs, externalities, taxes or TERs (not including income tax), the interest cost on debt, dividends (if any) and make provision for future asset refurbishment/replacement (as noted in (3) above). Dividends should be set at a level that reflects commercial realities and stimulates a competitive market outcome.
6. In applying (4) and (5) above, economic regulators (or equivalent) should determine the level of revenue for a water business based on efficient resource pricing and business costs. Specific circumstances may justify transition arrangements to that level.
7. In determining prices, transparency is required in the treatment of community service obligations, contributed assets, the opening value of assets, externalities including resource management costs, and tax equivalent regimes.

The Tripartite meeting of January 1999 recommended that in relation to rural water supply, the NCC would assess jurisdictions as having complied with pricing requirements where jurisdictions:

- have achieved full cost recovery;
- have established a price path to achieve full cost recovery beyond 2001 with transitional community service obligations (CSOs) made transparent; or
- for those schemes where full cost recovery is unlikely to be achieved in the long term, the CSO required to support the scheme is made transparent; and
- have made cross-subsidies transparent.

The above approach is consistent with Council's aim of undertaking assessments focused on good reform outcomes rather than rigid adherence

to deadlines. However, the Council will look for a substantial proportion of services to be achieving at least the lower bound by June 2001. Where this is not possible the Council will look for the price paths provided by jurisdictions to see reform achieved as soon as practicable.

Jurisdictions will need to provide strong evidence to support each of the small number of situations where attaining even the lower bound of the CoAG pricing guidelines is unlikely in the long term. Further, to be satisfied that third tranche commitments have been met the materiality (in terms of water use, asset base, etc) of these schemes would need to be small.

Therefore in assessing progress against full cost recovery the Council will:

- apply CoAG pricing guidelines in assessing progress against rural full cost recovery commitments. Jurisdictions should provide evidence demonstrating compliance with each element of the agreed guidelines including extent to which costs are being recovered with respect to the upper and lower bounds of the guidelines as well as information on approaches to asset valuation and consumption, taxes and TERs, efficient costs and CSOs;
- look for CSOs to be transparently reported;
- look for most rural water suppliers to be recovering at least the lower bound of the guidelines by 2001;
- look for a price path based on efficient costs to be provided that will see appropriate reform introduced as soon as practicable in situations where rural service providers have not met the lower bound of by 2001; and
- look for strong evidence to justify the small number of situations where cost recovery is unlikely in the long term and that the materiality of such situations be small.

Community Service Obligations

In writing to all States and Territories in June 1998 the Council President noted that the payment of subsidies and CSOs represented:

'...leakages from the goal of attaining full cost recovery. To meet the requirements of 3(a)(ii) and 3(d)(i), any CSOs or subsidies would need to be clearly defined, well targeted, and justifiable in terms of departure from the general principles as well as being explicit and transparent. Hence, a situation where a jurisdiction had large undefined CSOs and large subsidies may find it difficult to prove compliance with full cost recovery goal in 3(a)(i).'

The January 1999 Tripartite meeting further clarified the nature of the Council's role in assessing CSOs:

'In making its assessment the NCC shall not seek to make its own assessment of the adequacy of the justification of any individual CSOs or cross-subsidies but jurisdictions will provide explanations of the intent of the CSOs and cross-subsidies and the NCC will examine how in totality they do not undermine the overall policy objectives of the strategic framework...'

In assessing whether CSOs undermine the intent of the reform framework the Council will look for CSOs be well specified in terms of targeting a particular special needs group (e.g. pensioners) or community outcomes rather than being operating subsidies and that any operating subsidies be minimised and reduced over time.

This approach is consistent with outcomes of the 1999 Tripartite meeting discussed in the previous section. For example, the Tripartite meeting's reference to *transitional* CSOs in discussing price paths for schemes not achieving financial viability by 2001 suggests that this assistance should be reduced over time so that schemes at least recover the lower band of the guidelines.

Thus in reviewing progress in relation to CSO delivered by rural water services the Council will:

- look for jurisdictions to provide an explanation of the objectives of all relevant CSOs and cross-subsidies including establishing how they are consistent with the intent of the agreed CoAG framework; and
- review CSOs and cross-subsidies individually and collectively to ensure compliance with the objectives of the framework (including the principles of full cost recovery and consumption based pricing).

In reviewing CSOs, the Council will look for CSOs to be well targeted with generic operating subsidies to be minimised and reduced over time such that sufficient revenues are earned to achieve viability as soon as practicable in as many instances as possible. The Council accepts that a small number of schemes may require ongoing operating assistance to achieve at least the lower bound of the CoAG pricing guidelines but the number and significance of schemes should be small.

Positive rates of return

The lower band of the CoAG pricing guidelines does not require a rate of return. However, clause 3(d)(ii) requires that a positive return be achieved wherever practicable. The Council has previously noted that the term 'wherever practicable' requires attainment of a non negative rate of return on all assets (which may include a zero return) by as many rural water service providers as possible.

A significant difficulty associated with valuing established infrastructure and thus identifying the appropriate rate of return is that the current

price is used to determine the economic value but then the rate of return on the economic value is used to determine the price. In its most recent determination for rural bulk water prices IPART avoid this circularity by not requiring a rate of return on existing infrastructure.³ However, a return on new infrastructure is required as is provision for the maintenance and replacement of all infrastructure. The Productivity Commission state that this approach:

‘...emphasises the need for a sound basis for future developments of water and involves a pragmatic approach to improving cost recovery pricing for rural water.’

The Council supports the above approach and encourages jurisdictions to establish price paths to move service providers towards a positive return on all assets over time. However, attaining the lower bound of the CoAG guidelines and thus meeting full cost recovery commitments (clauses 3(d)(i) and 3(a)(i)) does not require prices that include a commercial rate of return.

It is also worth noting that compliance with clause 3(d)(iii) requires that new investments be economically viable. As discussed in Attachment 2 the Council see the establishment of economic viability and setting prices actually charged as separate processes. The Council’s view is that establishing economic viability involves demonstrating that the investment has the *potential* to generate sufficient benefits that cover all costs (including an appropriate return).

Thus in considering progress against commitments to achieve a positive rate of return the Council encourages jurisdictions to:

- earn an appropriate return on new assets and provide for the replacement/refurbishment of all assets; and
- move towards a positive return on assets over time.

Provision for future expenditure

A key finding of both the 1994 Neal Report and the 1995 *Expert Group on Asset Valuation and Cost Recovery Definitions for the Australian Water Industry* was that adequate financial provisions had not been made to refurbish and replace assets in many rural areas.

The CoAG pricing guidelines also note that an annuity approach should be used to calculate long term cash requirements for asset

³ The Productivity Commission Inquiry into the Impact of NCP on Rural and Regional Australia notes that many irrigator groups argue that the capital costs of existing water infrastructure are sunk as they have no alternative use and therefore that no contribution to a rate of return should be expected.

replacement/refurbishment. The 1994 Neal report (which contained the strategic framework) noted that in relation to irrigation schemes provision for future asset refurbishment should include the cost of supply and reticulation assets including headworks.

A 1997 Ernst and Young report on pricing reform to the SCARM Taskforce noted that a renewals annuity has the advantage over traditional formula based asset depreciation of looking forward towards future asset refurbishment and replacement needs. However, the report also noted that the real benefits of this approach will only become obvious overtime as adequate asset management plans are developed.

Therefore, consistent with the agreed CoAG pricing guidelines, the Council will look for a renewals annuity to be used in considering future arrangements for providing for asset maintenance and replacement. However, the Council will also accept that rigorous application of depreciation methodologies can lead to outcomes consistent with framework commitments.