



SUBMISSION TO THE INDEPENDENT PRICING AND REGULATORY TRIBUNAL OF NEW SOUTH WALES ON THE REVIEW OF METROPOLITAN WATER AGENCY PRICES

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Submission to the Independent Pricing and Regulatory Tribunal of New South Wales on the Review of Metropolitan Water Agency Prices

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1. Introduction

Review of Metropolitan Water Agency Prices - Issues Paper

The Urban Development Institute of Australia (NSW Division) (UDIA) is grateful for the opportunity to provide a submission, and offers the following by way of general comments that we hope will be of assistance to the Independent Pricing and Regulatory Tribunal (IPART or the Tribunal). UDIA asks that the opportunity be given to address the Tribunal on 28 November to better explain and illustrate some of our concerns.

UDIA represents members involved in meeting the housing needs of the community, principally in the metropolitan areas. The Tribunal would know the industry and its consultants have wide experience in the design, construction and financing of utility infrastructure requirements and are thus well placed to contribute this submission. In addition, the sorts of issues we raise have substantial potential to reduce costs and thus reduce annual and periodic fees and charges to all customers.

The key issues are:

- Peak Wet Weather Flows (PWWF);
- Demand Management;
- Performance comparisons: and
- Capital costs and Return on Investment.

In preparing this submission, UDIA has had regard to the Issues Paper, submissions by Sydney Water Corporation (SWC) and Sydney Catchment Authority (SCA), and the Water Industry Overview 2001 report. We note the many matters raised in the SWC and SCA submissions. This submission will principally concentrate on the above issues and refer only in general terms to other issues.

2. Peak Wet Weather Flows (PWWF)

This is a matter of long standing concern to the industry. It has implications for questions asked by IPaRT in Clause 7.1.3 (operational expenditure) and Clause 6.2.3 (capital expenditures). UDIA presumes the Tribunal understands that sewer design requirements in the past have been to design assets, such as pumping stations, to cope with capacity for at least eight times the Average Dry Weather Flow (ADWF), because of infiltration and illegal connections. It will also understand that the cost of providing for those flows is substantially

more than necessary, if the system had been constructed to current standards. The same problem will apply to the design of sewerage treatment works (STPs).

While UDIA accepts that SWC have reduced the basic design requirement to about four times ADWF in standard residential areas, it is apparently still too high. One consideration is that recent Environmental Protection Authority (EPA) requirements mean that additional storage is now required at pumping stations to deal with failure of a pump or electricity supply. UDIA understands that no adjustment has been made to the pump design requirement to accommodate this change.

UDIA's concern about this matter was heightened by the reference to the requirements of the EPA for the Blue Mountains. The limited SWC response was not encouraging given the generalised reference to "refinements" and "ongoing maintenance". Further, the EPA's expectation being limited to the Blue Mountains is unsatisfactory. While that general area has local sensitive environments, the broader question of what is happening in the rest of the SWC catchments is obviated.

The problem has been that the extra cost of sewer pumping stations and STPs has been, in effect, hidden in the design. The cost of the Northside Storage Tunnel project, for example, represents to a large extent the most obvious cost of the failure to deal with the problem in the past.

The WWF problem has far reaching consequences:

- It adds to the capital cost of all new assets (in designs effectively based upon the performance of old assets);
- It perpetuates the high cost of management and maintenance of contained flows (i.e. in pipes, pumps etc). SWC submission has principally been concerned about overflows; and
- It adds substantially to the running costs of pumping stations and STPs.

The industry's concerns are also obviated, as it is required, when providing sewage reticulation assets, to meet stringent standards that include:

- UPVC pipes with proper bedding;
- Rubber rings and root retardant chemicals in sealants; and
- Pressure testing prior to acceptance.

The development then links to sewage assets that may not have the same efficient design or construction standard.

It should also be noted that new developments include inter-allotment drainage to take roof and yard water, often illegally connected to the sewer in the past.

The solution the industry suggests is for the whole wet weather flow problem/process to be examined in a scientific way, and a financially supported technical review group involving industry bodies be given the task of applying the findings to design standards. The very

conservative standards used by SWC appear to have no demonstrable technical, financial or environmental benefit.

3. Demand Management

UDIA supports the view of Hornsby Council that demand management of potable water should be “a major goal of this review”. It is as important, as wet weather flow management of waste water. Our concerns go to the question of demand assumptions asked in Clause 7.1 of the Issues Paper.

SWC have clearly failed to achieve the demand management target set for it. The consequences are:

- Financial windfall gains to SWC;
- No relief likely from further capital expenditures to meet this burden; and
- Imposition of summer restrictions on users.

UDIA notes the discussion about the use of pricing as one of the mechanisms for managing demand. We disagree that these cannot be effective. We note the Tribunal’s discussion in Section 7. We also note the sums that suggest the poor demand responsiveness (Table 7.3). However, after discussion with a former Hunter Water officer, where demand pricing WAS effective, it seems that the Tribunal needs to look harder at what HWC achieved.

UDIA suggests that effective demand pricing cannot be achieved relative to one factor alone. It should be noted that HWC has lower consumption threshold and a lower access charge and thus their charges are possibly more sensitive to water use. It also seems that HWC were successful in gaining the support of their community to join them in this endeavour. This is probably the most important missing ingredient in SWC’s case.

We recognise that IPaRT is in an invidious position of trying to control prices and at the same time manage the water demand. The IPaRT Issues Paper has shown that in some respects the two are not necessarily achievable using financial tactics alone. Examination of a number of options show that savings in water only give customers modest rewards for reductions in usage from 250Kl to say 215Kl pa. An alternative of having an access fee of \$0 and the use charge of \$1.43 would realise the same revenue at 215KL pa.

The carrot and stick approach might be a second alternative. This approach would set the user charge as if SWC will achieve their demand management goal, i.e. at a lower net revenue. A \$25 access fee and a \$0.93 charge would put the pressure on to reduce the use and make the savings in both capital and operating costs. This may use some of the surplus but would be a real incentive to get the process under control.

The first alternative has inter-generational risks. If the demand continues unabated, there is a substantial windfall to SWC and we presume that families will bear the burden.

However, what is important about a reduction in the access charge, is the psychology of conveying to consumers that they pay for each litre, and as users, they choose to use and pay

as little or as much as they can afford. This must then be underscored by active support for a water conservation ethic in the community.

There is no doubt that Australians are receptive to environmental initiatives. It seems that SWC are unable to provide them. We thought it a typographical error that stated only “60 business customers have agreed to introduce savings initiatives”. The take-up of water saving devices by residential is also relatively poor, by comparison with the number of customers.

The SCA’s water sales graph (Fig 5) illustrates the general problem. The forecast profile is not supported by any data to show how the next three years will be any different to the current high demand. The SWC’s poor efforts to date will undoubtedly continue unless drastic and dramatic action is taken.

IPaRT also states that consumers have little idea about the “marginal price of their current consumption”. In UDIA’s view, this may be because the information communicated is insufficient. Some electricity providers and telephony providers go to some trouble to provide numeric and graphical data to explain consumption, and as a consequence consumers use that information to reflect on their service use. Water providers can also use this approach.

In summary, demand management has obvious and substantial impact upon the capital and maintenance costs of SWC. These costs also flow to all customers. The demand management strategies outlined by SWC in 1995 have not worked since their introduction.

Finally, we would like to make one more observation on this section. We note a statement contained in the fifth paragraph on Page 16, outlining a \$20 million surplus, which is attributed to new users. We wish to know how this is to be returned to those users who have already paid their way, by paying full costs through development charges. We have often expressed our strong disagreement with the way SWC calculate the net revenue aspect of the charge. It is, in part, based upon the supposition, false in our view, which new assets cost more to maintain than old ones. The surplus seems to add considerable weight to our claim.

4. Performance Comparisons

UDIA notes the Tribunal’s reference to performance comparisons in regard to Gosford and Wyong Councils conducted by the Department of Land and Water Conservation (DLWC). UDIA agrees that this document (now available) is a valuable tool for public scrutiny. UDIA suggest that a similar annual analysis be provided by SWC and HWC to also allow public scrutiny.

Ancillary to the comparisons are comprehensive asset valuation tables, similar to the Reference Rates prepared by the DLWC, referred to later.

Getting information from SWC is difficult as we found in the negotiations regarding the latest round of DSPs. We were promised access to files containing capital cost and other data. One

draft report on the proposed MEERA valuations was issued but it contained generalised data and principles on a limited number of assets.

We also make the point in regard to the current submission, that preparation of such documents is an art form and not a science. Information on one aspect, for example revenue, is provided as a set of dollars and factors. With expenditure, the information set is provided in a form with different parameters and factors that do not allow comparisons to be made. It is akin to a jigsaw puzzle with the key pieces missing. It is virtually impossible to compile a co-related data set for serious analysis.

UDIA notes that a number of reviews are proposed by IPaRT and Treasury. One is considering capital requirements. How such a review to be undertaken without a set of performance comparisons is difficult to perceive. It appears to UDIA that the reports IPaRT receive contain only limited verifiable real data.

UDIA urges IPaRT to instigate an audited process where the agencies (SWC and HWC at least) provide annual data for comparisons in a similar format to the DLWC comparisons.

5. Capital Costs and Return on Investment

The following are general comments on the aspects covered in Part 6 of the IPaRT Issues Paper.

- In a similar vein to above, the public needs audited data sets on capital costs similar to the DLWC Reference Rates that statistically examine costs incurred on actual construction projects, and indexes them over time.

This would also be valuable data for both IPaRT and Treasury when examining SWC's submissions, particularly capital requirements.

SWC will have such data. Industry members also have this data for minor to mid range works and have contributed to the DLWC reviews.

- UDIA notes from the Industry Overview and from the SWC and SCA submissions, a number of issues of concern. First, the disproportionate net earnings of SCA (46%) compared with SWC (23%), which represents a transfer of revenue to SCA to the disadvantage and cost of customers.

This is illustrated in Figures 5.1 and 5.2 of the Water Industry Overview report.

It is also noted that not only are major expenditures deferred but also the total costs for the period have been reduced by \$20 million (Table 6 SCA submission).

In these circumstances, a reduction in the prices SCA charges SWC seems warranted to relieve SCA of some of their surplus and also to give some relief to SWC customers.

UDIA also notes the discussion on step pricing which is designed to put some commercial pressures on SWC. We do not favour this, as it seems more likely to merely add to the cost to customers and increase an already excessive return to SCA. Further, it assumes that SWC can and will respond.

- UDIA has sought verbal advice from IPaRT regarding what capital values are to be used. It was indicated that this is an issue about which there is some debate. The IPaRT and SWC documents are confusing as the book value is also called the RAB (\$7 billion). Therefore we need confirmation on what the \$13 billion represents? Certainly both are in contrast to the MEERA valuation at \$16 billion.
- The rate of return is a matter for government, however UDIA would be concerned if the rate were set at more than is reasonably required to meet capital expenditures. The difficulty is that it is not obvious how prices are to be set for both operational and capital requirements, particularly as both existing and new users provide operational income. Also, new users pay the full cost of their capital works up front.

Clarification is required to make clear:

- Whether the pre 1970 assets are included in the RoC calculation;
- Whether the valuation excluded assets partly or fully paid for by new users. The simple analogy is, if you don't put the money in the bank, you don't get the interest;

Put another way, why should SWC obtain a return on capital expenditures contained in DSPs that include a ROI based on at least the full share attributable to new users. This share includes the nominal cost of borrowing, and a risk factor that is a defacto holding charge.

- Whether the values should be adjusted for surplus capacity when considering RoC for existing users;
- Therefore, in assessing capital acquisition requirements what is most obviously missing is any consideration of assets paid for by new users. That is the impact of this cost shift.

- The industry is also concerned by the distortions in the development charge process that exaggerate this shift. These include:
 - While pre 1970 assets have been regarded as sunk, SWC discount the population base by subtracting the pre 1970 users, thereby disposing of most of the beneficial effect of the Guidelines for those sunk assets. The net result is a further shift in capital costs of existing assets to new users because of the distorted apportionment.
 - SWC regard new assets as being for the sole purpose of meeting the needs of new users regardless of capacity. This is often not the case as many assets can operate within EPA licence requirements despite operating over design capacity. This occurs because of the conservative design standard. Upgrades will therefore have an existing user component, as the design standard is maintained. Therefore in many cases, new users also meet a disproportionate share of the value of all new assets.

In summary, the cost shift should be a matter of analysis by IPaRT when assessing capital requirements. Whether part of that cost shift is unreasonable should also be considered.

- We note the invitation of SWC in the last paragraph on page 30 regarding asset values etc, which the industry will take if offered.

6. Managing the Process of Pricing

One of the outcomes that the above analysis has revealed to the UDIA is that ignoring development charges in this determination is flawed. There are major issues such as capital expenditure and returns on that capital that cannot be examined without understanding what is being paid for by existing users and what new users are paying for.

The most significant questions are which assets and what valuation are to be used in determining a return on capital when determining annual fees and charges for existing users. Clearly assets fully paid for by new users are differently treated. For example discounts are applied where revenue is collected from new users to pay for assets provided to existing users (i.e. to avoid double dipping).

This is not an argument for abandonment of development charges or the Guidelines, as the aims of that process is purposeful and practical. However that process has financial consequences for SWC that cannot be merely put to one side.

UDIA is concerned however that the current developer charge regime does little to encourage SWC to remedy any design problems, such as wet weather flows. Further, the industry has not accepted the change from modern equivalent asset or MEA to MEERA. Not only are

MEERA estimates inflated, they are applied as if the existing works are the most efficient available. A simple example may be: if the existing pipe is 225mm dia, then that is what is valued for the DSP purposes. No consideration of asset capacity or efficiency is made. Indeed, contrary to the Guidelines no asset capacity information of any kind is provided in any of the DSPs.

In addition, the existing assets are valued as if all have 20% rock, substantial restoration costs (as might only be expected if the asset was built after development), and a contingency of at least 10%. UDIA has pointed out to SWC that they should know the construction conditions encountered for an asset already built (thus contingency is only relevant to future assets). In summary, there is a financial incentive not to improve the efficiency of the asset, because of over valuing the assets using MEERA.

SWC's claim that the DLWC assets valuations are at least 20% to 50% less than MEERA due to the superior design standards cannot be sustained. It can be easily proven that regional NSW has, for a very long time, been meeting high environmental standards, at a much lower cost than SWC. Is SWC suggesting that EPA have a double environmental standard? It is a well-known fact that even basic sewer reticulation costs double merely because a development is in the SWC's area. The claimed benefits of SWC standards are likely to be non-existent.

If the opportunity was provided, UDIA would be pleased to explore the problems of the parallel but different set of accounting standards that apply to the acquisition of assets, providing the same service to existing and new users.

7. Conclusion

UDIA thanks the Tribunal for the opportunity to contribute. Clearly, from our point of view, SWC has a way to go to meet the aspirations of IPaRT and the community it represents. UDIA has pointed to the two main issues, and sought support from IPaRT for better management of wet weather flows and demand. In addition we seek more public accountability using performance comparisons and asset value reference rates.

UDIA has also pointed to the remaining distortions in the development charge process. We have alluded to the affect that process may have upon any assessment of capital requirements and therefore prices. Further examination is required as to how developer and annual charges are managed and what financial management principles apply to each.