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1 February 2008

Review of developer charges for metropolitan water agencies
Independent Pricing and Regulatory Tribunal
P O Box Q290
QVB Post Office NSW 1230

E-mailed to: ipart@ipart.nsw.gov.au

Dear Sirs,

Following is a submission on behalf of the Association of Consulting Surveyors NSW INC (ACS) in response to the *Review of developer charges for metropolitan water agencies*. The submission has been prepared with the assistance of Mr Peter Price, Economic Planning Advocacy, Honorary Member of ACS.

ACS represents the private sector of the spatial information industry in New South Wales. All of our members are private practice firms with approximately 50% of them based in the Sydney metropolitan region.

Yours sincerely

Diane North
Executive Officer

SUBMISSION

IPaRT

Review of Developer Charges

for Metropolitan Water Agencies

Water - Issues Paper

November 2007

prepared for the
Association of Consulting Surveyors NSW ('ACS')

by P M Price
Economic Planning Advocacy

January 2008

1. INTRODUCTION

The ACS made a submission to Sydney Water for the exhibition of the Draft 2006 DSPs. A copy is attached. It contains points that are still relevant including:

Methodology	– manipulation of the apportionment to reduce the ETs used in the calculation of the per ET charge; - abandonment of the 1996 system approach; - new users paying a disproportion of the total cost;
Reticulation	- inclusion of a reticulation charge for DSPs such as Gerringong and Picton.
Industrial and Commercial Charges	- the ET classifications for these uses are grossly excessive and not justified.

Rather than repeat the matters contained in our SWC submission and the comprehensive submissions to be made by UDIA, the ACS wishes to follow up on some practical application issues. These have their source in the DSPs and the SWC interpretation of the Determination as applied to charges made for ACS members and their clients. ACS members represent a substantial proportion of developers including many small developers across NSW, and especially in Sydney.

The issues include, BASIX, developer provided assets, works in kind, reticulation charges, negative net revenue and industrial and commercial developments.

2. BASIX

A major unresolved issue is the application, (or lack of application) of the BASIX requirements to the capital charge and the reduction amount.

Sydney Water argues in their submission for a delay in resolving the BASIX effect, as either:

- there is uncertainty about the water savings;
- there is uncertainty about the completion timing of BASIX compliant dwellings;

Neither argument has any substance as in the first instance the 40% reduction in demand for potable water is a State government mandated requirement on all new dwellings. Either the requirement is complied with or a certificate is withheld. It is not an open question for SWC to challenge. It seems that the SWC's point is speculation which has no basis and until there is any evidence to the contrary, a 40% reduction must be adopted.

In the second instance all lots in 'greenfield' areas ought to get the benefit of BASIX as all dwellings subsequently built must have a BASIX certificate. The presumption for greenfield areas must be that the reduction will be achieved. The charge will have been pre-paid and the new dwelling has the right of access to the water supply at any time in the future, without any further charge.

For 'brownfield' areas the future dwelling or dwellings will need BASIX certificates. We agree there may be some delay between approval and delay after 1 July 2004 (the BASIX threshold). However we agree with UDIA who have suggested 1 July 2006 as a reasonable starting point.

In summary the BASIX effects should have been taken into account for the current 2006 DSPs, and should be applied to any new DSPs.

3 Transfer of Assets Provided by a Developer (not in effect free of charge)

An ACS member from Campbelltown relates that for a development in South Camden, his client entered into a Memorandum of Understanding ('MOU') for the provision of assets prior to 2006.

The arrangements included:

- SWC provide an offset for the cost of the works against the DSP charges to be paid. It will not it seems however, be offset against what has been estimated in the DSP but at the developer's contract rate, which is generally lower. This is contrary to the generally agreed principle for s94 - the value of the asset being offset is to be not less that the value attributed to it in the developer charge. This is the Growth Centre's Commission term 'attributable cost'.

- In addition no allowance/discount is made for the interest attached to the asset cost being provided in the DSP charge. Clearly having provided the asset up front the interest should deleted from the offset calculation.

- The developer provided assets have been <u>included</u> in the subsequent 2006 DSP contrary to the IPaRT Determination.

- The charges also increased in part as a consequence of BASIX.

Comment:

We agree that the assets should be included in the DSP as otherwise the developer is disadvantaged by comparison with other developers in the same DSP. The cost for which an offset has been given however, must be at the

value in the DSP otherwise SWC will gain the benefit of the developers efficiency. The amount must be the full cost which is the saving to SWC and the DSP.

In 2006 however the DSP charge was INCREASED because of BASIX rather than decreased. No reduction in cost for capital works and maintenance has been given either. A BASIX reduction must be given to lots created post 1 July 2001 because the requirement will apply to all subsequent new dwellings.

4. Reticulation Charges

A client in Picton was asked to pay a reticulation charge for the whole of Picton while only needing 100 metres of existing line to connect part of his estate. The cost was subsequently reduced to a share of the cost of the connecting line. The rate was however excessive. This is just one example, where the negotiations were protracted and tedious in order to get a decision. There remain other issues to be resolved on the site.

Another example is at Gerringong where not only did the client pay exorbitant charges for a small light industrial complex, but the means to avoid the reticulation charge was also part of a tedious negotiation. The situation ought not have arisen. The introduction of reticulation charges contravenes the arrangement as agreed with the stakeholders for the 1995 Determination.

5. Industrial and Commercial Charges

Members occasionally manage development approvals for industrial and commercial development. The charges applied have forced abandonment of the project in some instances. SWC have adopted a worst case scenario for the ET classifications which is not justified and results in a windfall gain to SWC. It also distorts the allowance made for existing developments which may be a cause of distortion between eastern and western areas.

In principle however, SWC should make an average allowance in the DSP. Then a nominal charge per lot should be made at the subdivision stage. A subsequent DA for the use of the land is the appropriate time to determine the water and sewerage demand.

We are advised that it is unlikely that SWC have done the investigative work to enable it to properly investigate the various demands. Why can this be achieved by many of the larger Regional Councils but not SWC?

6. Net Revenue Allowances

As pointed out in the submission to SWC in 2006, ACS favours a postage stamp approach based on average net revenue over 3 years from audited operational financial statements.

7. IPART ISSUES PAPER - COMMENTS

Assets Transferred Free of Charge 3.5.3

Issue 15: Are there arrangements in place for funding developments that fall outside IPaRT's current developer charge determination?

As indicated above the concept of exclusion of developer provided assets from the DSP is flawed.

1. The most common scenario is that the asset being provided is already included in the DSP.
2. This asset remains part of the system which will be used to determine the charge for other developments.
3. For the subject development the offset is calculated as:
   - The cost as included in the DSP;
   - The ET offset based upon a DSP calculation that does not include interest for the relevant asset;
   - The balance of the ETs are paid for at the full rate.

This provision needs to be better articulated and matched in the MOU provisions for works in kind.

Peak ETs v Average ETs 3.8.1

Issue 20: How and why do agencies use ET peaking factors to calculate, and ultimately to allocate, the capital charge and reduction amount?

The agencies use average and peak selectively leading to a confusion and distortion of the outcome. The capital charge is maximised while the net revenue is minimised.

The example of Narellan Water illustrates the point:

The average takeup for 2010 is 1194
The maximum takeup for 2010 is 1167
The takeup used at 2010 in the capital charge calculation is 1116.
The takeup used at 2010 for the net revenue calculation is 1194.

Why this DSP has a third basis for an ET is not explained.

There is only cost for a system for which a design peak may have been used for part of it, but which peak (day, hour or instant) doesn't matter to the Determination as only the system cost based upon those design concepts is relevant.

The cost is to be recovered on the basis of average ETs or by comparison with average ETs for all other uses. The calculation should mirror the basis of how

it is actually finally charged.

Issue 21: Is a new definition of ETs and/or re-expression of the developer charges formula required to incorporate use of peaking factors?

It is a self evident fact that there can be only one definition of an ET. All other uses are rated according to their equivalence to a standard ET. Any other definition of an ET cannot be 'equivalent'.

The persistence with peak ETs merely reveals that the authorities either do not understand the process or are using peaking factors merely to maximise the charges.

SWC have abandoned peak for sewerage charges but persist in using it for water. The persistence is justified on the basis of a muddled engineering concept not an economic or demographic one.

The link between the development charge and the system designed using various parameters (peak day, instantaneous, average etc) is the cost. The design to serve 1 ET (equivalent standard dwelling of known occupancy), is created and the system constructed for a cost.

For example, a reservoir must have sufficient capacity for say 1800 l/d per ET, but the dam may have sufficient capacity for 700 l/day per ET. The ET is the same for both, a demographic, and the total cost per ET, is the combined cost per ET of these. The question of a design basis does not arise once the cost is established. After all, the aim of a development charge is to recover the cost for an ET, the numbers of which have been worked out as a demographic as required by the Determination.

As pointed out in the DEUS Inquiry, the Water Directorate Technical Guidelines make no reference to peak when listing conversion factors for a myriad of uses by comparison with an AVERAGE ET.

Therefore there is no question of having a new definition. It is irrelevant.

ET Multipliers (or ET Classifications) 3.8.3

Issue 24: How should agencies determine the ET multipliers for varying development types?

All regional water authorities publish ET classifications similar to that provided by the Water Directorate. While the document has a number of shortcomings it does make comparisons between other uses and a standard dwelling (1 ET) with average demand.

Its shortcomings lie in the apparent reliance on merely surveying members and averaging those as a first pass. Much further work is required to make it a

viable document. There are substantial differences with those prepared by Councils which have the facility and ability to undertake flow analysis (using telemetering on assets). Two Councils which it is understood have undertaken such work are Shoalhaven and Coffs Harbour.

As previously noted the Sydney Water conversion or ET classifications are excessive and well in excess of the provisions of the Water Directorate factors.

It is not necessary to invent a system as water authorities have their versions of the Water Directorate system. The Water Directorate's in principle laudable work was to provide some standardisation as not all authorities have carried out proper analysis. Indeed the basis for most is rudimentary only.

Consumption and BASIX 3.92

Issue 27: ***For each agency, what is the current consumption (in kilolitres) for both pre- and post BASIX average residential dwellings? In addition on what basis should the consumption parameter be calculated when DSPs are reviewed? (For example, should the consumption parameter be set using recent data or using an average over a longer period?)***

Developers are not merely concerned that '*developer charges potentially could increase'*, the fact is that the 2006 DSP rates DID INCREASE as a result of BASIX. This is because SWC used the claimed reduction in revenue to reduce the revenue offset. What they failed to address was that fact that the share of operational cost and the share of capital cost must also reduce. As previously indicated the current Determination was deemed by SWC as being unable to accommodate BASIX. SWC does not use system capacity as required which is the reason SWC cannot accommodate BASIX in the current DSPs.

The problem is how to solve this dilemma in the short term to give SWC sufficient time to recast their DSPs. The simple solution would be for the DSPs to revert to a pre BASIX DSP (full operational revenue) and then the post BASIX DSP charges could be:

Pre BASIX DSP Sewerage Charge - 20% = post BASIX DSP Sewerage Charge
Pre BASIX DSP Water Charge - 40% = post BASIX DSP Water Charge

The data to be supplied by the agency should include:

- *Current consumption data per ET (residential only)*
- *Projected 5 year (2011) consumption data per ET*

For sewerage this would be the average flow in l/day to the STP and for water this would be the average consumption in l/day.

Because the SWC and HWC DSPs are not capacity based a 'consumption

parameter' is impossible to apply. For this reason a short and mid term solution to how the DSPs are to be amended and applied should be considered.

Issue 28: Should there be two consumption paramaeters: one for pre-BASIX ETs and one for post BASIX ETs, or a post-BASIX only?

In any assessment of capacity there has to be two consumption parameters as while the existing housing stock will continue to use less water, it is unlikely to catch up with post BASIX housing stock.

Issue 29: Has reduced consumption in post-BASIX developments been reflected in the allocation of assets in water systems and therefore reflected by reduced capital charges?

As mentioned above the reduced consumption in post BASIX housing has NOT been reflected in the 2006 DSP Charges.

Issue 30: Are there any additional impacts from BASIX or recycling initiatives on developer charges for water supply (including recycled water), sewerage and stormwater?

The BASIX Group in the Sustainability Unit of the Department of Planning have no idea what the net economic effect their initiatives might be. As usual they know some of the costs but little of the value (in economic terms). These people need to be engaged in useful dialog to understand where they are up to in the process and what further requirements may come in the future. For example the storage of grey water was put on hold I understand. If that were introduced the effect on the sewerage treatment volume would change again.

It is noted that IPaRT went to some trouble to gauge the additional benefits of recycled water and the savings. That SWC can only see $1 per ET benefit raises a concern about what IPaRT expected compared to what was not achieved.

Wyong Council's 15% Discount 3.9.3

Issue 31: What are the impacts that the 85 percent cap on developer charges has on Wyong Council's business?

It is the wrong question based upon a false view as to why the discount was applied in the first place.

Should Council be able to demonstrate that they have amended their demographic analysis to properly reflect the ABS statistics then consideration to abandoning the discount might be possible.

It was not imposed because of the concern about possible impacts!

The easy answer for Wyong is they have 15% less income. That was not the

issue. The rate was discounted on the basis of the flawed demographic assumptions that could have resulted in a 15% overcharge.

Issue 32: What are the possible impacts of removing the 85 per cent cap on Wyong Council's charges?

The only charge that can be acceptable cannot be tested by way of impacts. No such test applies to any other authorities.

An acceptable charge is one which complies with the Determination. 15% was the quantum of the non-compliance.

SWCs Proposal for a Change in the Formula

The principal view ACS must have is that as SWC haven't understood the principles contained in the 1995 and 2000 Determinations properly. Therefore any change is also bound to fail. It is already evident that the proposal will not manage the process uniformly given the adjustments needed for greenfield areas.

Further, abandonment of large elements of existing assets (post 1996) will also result in distortions for brownfield areas which currently comprise more than 70% of the new development.

The most important missing element in their presentation is how the apportionment is to be calculated. As this is one of the current major issues, it is most likely that a new 'dinky' system will also be unsatisfactory.

Guidelines

It is evident that the current determination provides little guidance and this has allowed the metro authorities considerable scope for interpretation. While the DEUS Guidelines contained a number of false and misleading facts, it is nevertheless not such a bad template for a set of guidelines that could have state wide application. We recommend that Guidelines be considered as a necessary tool for implementation of any Determination.

Summary

The SWC proposals cannot be considered a serious alternative as there are too many unknowns.

The ACS therefore seeks consideration of the changes necessary to make the DSPs a fairer basis of the determination of development charges.

Per
Diane North (ACS EO) and Peter M Price (EPAd)
1 February 2008

Preliminary Comments on the Sydney Water 2006 Draft DSPs

by Peter M Price
Economic Planning Advocacy
Nowra NSW

7 October 2006

Preliminary Comments on the SWC 2006 Draft DSPs

by Peter M Price
Economic Planning Advocacy
7 October 2006

1. Introduction

The 2006 Draft DSPs have been placed on exhibition for comment, and the opportunity to review these has been provided to Peter Price, who has represented his profession in the past, most significantly on the IPaRT Water Industry Forum in 1995.

It should be noted that this review can only be 'preliminary' as the issues are complex and only limited background information is to hand at this stage. The comments are not limited to the DSPs but also consider the process problems, the influence of policies such as BASIX and the role of IPaRT for example. In effect the approach taken is to review the issues as a whole.

This submission has been prepared for the peak surveying consultant body, the Association of Consulting Surveyors Australia (NSW). The surveying profession in NSW is a significant stakeholder in the housing industry, being widely involved in the planning, civil design, surveying and management of development in both the metropolitan and regional areas. As a profession it also has a concern about the balance between public and private interests, the economy, viability of development and affordability. Access to and the affordability of land are currently high on the political and public agenda.

Consequently the proposed development charges for the Blue Mountains, Western Sydney and the Illawarra must be matters of concern. As put by the Department of Planning in its submission to the GPT in 1994, full cost recovery is a balance between annual and development charges. Also their analysis showed, that development charges affect those urban areas most, were there is less likelihood that the additional costs will be affordable.

In addition the impact of the charges upon business/employment generating developments, have gone from bad to worse. The 2001 charges were generally unreasonable. The draft 2006 charges are doubly so.

There are some positive changes that are welcome and in part seem to pick up on recent submissions by the UDIA (the Rolyat Report).

These include:

.1 There is an apparent improvement in the net revenue offsets. The only criticism is that it is too variable across Sydney and the reason is not apparent.

.2 The SWC have also adopted the same takeup for the capital charge calculation as the net revenue calculation. This is also an improvement.

.3 The change in the calculation template or model from a 1996 to 2030 model for the 2001 DSPs, to a 2006 to 2035 model for the 2006 DSPs. This improvement takes on criticisms I made in 2001 and included in the recent UDIA/Rolyat report. The previous model which started at 1996, used 2001$ values. This was a false financial management principle.

.4 The SWC are still claiming 7% interest on post 1996 assets, but from 2006, which is technically correct as per the Guidelines in my opinion. What is in dispute is the % of the cost which is apportioned.

In summary while there is evidence of increases in the net charge, it is essential to examine the components (especially the capital charge and net revenue) as these are far more revealing. The effects in Gerringong are the most marked.

The evidence we have now would support a strong demand of IPaRT that a public review be held prior to the adoption of the charges.

2. Methodology

It is also evident that where anomalies appear in the DSPs, the methodology is at fault. There are three main elements.

.1 Pre 1970 ETs

The SWC leave the pre 1970 ETs out of the apportionment. This has no basis in the Guidelines . The only requirement of the Guidelines is that asset costs which are "sunk", ie pre 1970, should not be included.

There is no basis in logic or in fact as represented by the Guidelines, that the system costs for the catchment should not be apportioned over all ETs in the catchment. The claim that excluding the pre 1970 ETs is some sort of "balancing" is an arrangement without any sanction.

.2 "System Approach"

The combination of the remaining existing costs and the new costs, is the net cost for assets which serve the whole catchment, and therefore ought to be apportioned over all ETs.

As identified in the transcript of a workshop for the 2002 Mid Term Review of the Operating Licence for SWC, Mr Peter Hamilton indicated that 70 percent of new dwellings occur in established areas. This was observed to be the outcome of government policy which would continue. Therefore the whole of system approach is appropriate, as it is quite difficult to predict in which part of the catchment development is to occur. Development may be "greenfield" or isolated "brownfield", or both.

As identified in the first series of DSPs (following the 1995 Determination #9), the "*system approach*" was the basis of the inclusion of "*a collection of assets (which) operate in an integrated way to deliver an adequate supply to all parts of the system*".

As SWC neither supply the capacity of the asset elements in the system, nor the remaining capacity of the system, the only alternative is to include the whole system, which is then apportioned over all demand as user ETs. Since 2001, the DSPs have been flawed, as the demand has been selectively apportioned. Either the actual demand of the DSP catchment has been reduced or a percentage share of the cost has been used which does not reflect a proper apportionment of the cost for the period of the DSP.

It has already been identified by the Centre for International Economics, in their review, that SWC does not adhere to a core requirement of the Guildelines. This is to calculate the charge relative to the remaining capacity. As no capacity information is provided this is not surprising. However the industry accepted that the 1996 to 1999 DSPs at least used the whole of system approach as a generalised solution to the problem. In theory the whole cost divided by the whole demand in ETs would approximate the Guideline intention.

It was expected however, as promised in the SWC submission to IPaRT in 1999, that the question of "*Surplus Capacity and Useable Capacity*" would be addressed. It was stated that "*Sydney Water has agreed to amend its approach to meet this requirement*". The Draft 2006 DPS have not realised that promise.

.3 New ETs Pay for all New Costs

In the Current DSPs, SWC charges new costs only to new ETs, regardless of any consideration of fairness. This is also contrary to the "whole of system" approach which was the basis of the test DSPs used in development of the Guidelines. As indicated above, it was also a concept used for the 1996 DSPs.

When last challenged, Mr Tang Nguyen of SWC advised that he was not prepared to charge any other than new users for new assets. This was it seems a matter of SWC policy which was based upon an attitude rather than any rational reading of the Guidelines.

In the 2006 Engadine Wastewater DSP for example, which only had existing assets last time, now has additional new asset costs. It appears that no reduction in the existing asset cost share has been given as might have been expected based upon SWC's claimed principle. In fact the cost of one existing asset has been increased by 56% or $1 million.

Note: All three variations from the Guidelines increase the capital charge unreasonably.

.4 There is also a minor problem with the NPV algorithm. The formula used calculates the NPV for 2005 in most cases (4 out of 5), not 2006. The first algorithm which calculates the PV of the existing cost is usually correct. The essential problem is that the PV should be for the period 2007 (Year 1) to 2035 and then the value in 2006 (Year 0) is added to the end of the algorithm. This problem has been around for many years and can only be addressed manually.

The following few DSP examinations reveal most of the principles with which the housing industry should be concerned.

3. Gerringong-Gerroa Wastewater

The 2001 DSP was significantly different. The differences and issues are as follows:

.1 The capital cost in the 2001 DSP was $57,000,000 which has now risen to $63,037,052 (an increase of 10%). It should be noted that this cost includes <u>all of the reticulation, which should be excluded</u>. I have the program of payments to Vivendi and these show that the total cost was $53.3 million of which $8.8 million was reticulation.

Reticulation by definition is not headworks. In greenfield development and some brownfield redevelopment, developers are required to provide these at no cost to SWC. The same rule ought to apply to SWC, acting in backlog areas such as this, on behalf of the existing users, in the same way as developers provide for future users.

The definition provided by the WSAA Codes adequately defines reticulation for this purpose.

.2 The capital charge has risen from $8,839 to $20,898 (an increase of 136%). This has occurred for two reasons.

.1 The basic model has changed.
.2 The takeup has been substantially reduced.

The most significant reason why the charge has increased is that the ET takeup has decreased from 6786ET in 2030 (on the 2001 DSP), to 3463ET in 2035 (In the Draft 2006 DSP). In part this seems to be because of an error in the 2001 DSP takeup. It is apparent from examination of the Kiama DSP that the combined ET data (with Gerringong and Gerroa) approximates that reported by the ABS.

.3 The development charge for light industrial wastewater in the Draft 2006 DSP is an overwhelming $911,269 per pure net hectare. This is an increase of about 200%. One reason is that the previous rate was 27 x 1 ET per pure net hectare, which was also excessive. It is now 55.3 x 1ET per net hectare. The 2006 factor is the conversion factor for other draft wastewater DSPs.

The Water Directorate Technical Guidelines January 2005, recommend 15 ET per gross hectare for both utility services to light industry. This rate is generous, but never the less is only about 20% of the SWC rate.

It is clear that further examination of the basis of these ET Classification rates needs to be examined as illustrated by Martin Burke in our recent meeting with SWC.

This problem highlights the general issues for commercial and industrial development which are considered in further detail below.

.4 The net revenue offset has gone from minus $2,253 to plus $4,419. This significant variation is the most surprising as it also reveals that the previous operational costs must have been grossly overstated. This is

particularly so given the reduction in ETs. Further explanation is requested.

.5 There is also an error in the NPV algorithm. It is similar to the error in the previous DSP.

It should be noted that by removing the reticulation, the charge would be about $17,400 per ET. Further examination is warranted to determine what a reasonable charge may be. In addition the use of MEERA rates which include contingency, for a recently tendered contract scheme must also questioned. Further discussion with SWC and IPaRT on this issue is also necessary

These figures raise serious concerns about the ability of SWC to prepare a credible DSP. The differences for a scheme for which they must have precise design and demand data are difficult to fathom. What in fact is the schemes capacity? This data should also be examined.

Detailed explanation of changes will be sought.

4. Warriewood Wastewater

While Warriewood was not one of the DSPs included, the typical type of concerns identified in the UDIA/Rolyat Report of 2005 remain (see Sections 6-7 which were provided by EPAd). These and other issues have been identified as follows:

.1 Exclusion of the pre 1970 ETs. Consequently the share of the cost is distorted. As indicated above, this is not sanctioned by the IPaRT Guidelines.

.2 Asset data and % share in DSP is nearly illegible. However the usual problem is evident. New users pay a share of existing cost (% of growth from 1970 - ie pre 1970 ETs not counted). New users pay 100% of any new works. On a whole of system approach this is unreasonable. When last confronted it was claimed that some adjustment was made to overcome any double dipping. It is clear from the % of share applied that is not so.

.3 Lack of reference material to check the tables. This includes the MEERA rates, asset capacity data and the demographic data, and their basis.

.4 Demonstration of nexus to development.

.5 The basis of the apportionment (ie takeup) is contrary to the provisions of the Guidelines. The takeup is based upon SWCs assessment of demand flows converted to ETs. The likelihood of this being in accord with the actual planning demand is small in the writer's experience.

.6 There are 6 NPV algorithms in the capital charge calculation - 5 are wrong. The error is common to many DSPs.

.7 The differences are as follows:

	2001	2006
Capital Charge	$5,736	$4,885
STP Charge	$1,569	$2,904
Net Revenue	$1,392	$1,731
Net Charge	$5,913	$6058

SWC claim current charge is $6,765

The light industrial charge is 55 x 1ET (334,963)

The asset charges table for the STP is nearly illegible.
The capital charge has been reassessed at $2,595

5. Penrith Wastewater

The 2001 DSPs were critiqued in point 4 on page 30 of the UDIA/Rolyat report.

The differences are as follows:

	2001	2006
Capital Charge	$2,527	$4,679
STP Charge	$1,569	$3,782
Net Revenue	$553	$349
Net Charge	$3,543	$8,112

SWC claim current charge is $4,052

The light industrial charge is 55 x 1ET (448,583)

The claim that there are increased costs is not the whole story. The new costs are added at 100% to new development. This is entirely unreasonable. The capital charge has been reassessed at $2,188.

6. Picton Wastewater

The two main problems with the Picton DSP are:

.1 The charge unreasonably includes reticulation which adds significantly to the charge (estimated at about $3000).

.2 The net revenue is negative (-$1,968) and this is added to the charge. It was minus $848 in 2001. In effect the capital charge in increased to cover the inefficient maintenance costs.

It is evident that the whole approach to the distribution of net revenue appears to be discriminatory and will be examined separately.

It is noted that at Gerringong the net revenue was -$2,253 in 2001 and is now +$4,419. An examination of the net revenue may reveal why a similar PPP (private/public partnership) scheme in Picton has negative net revenue, compared to Gerringong substantial positive one.

In regard to the capital charge, the writer recalls there were a number of errors found in previous examinations including:

- Double counting of the administration and SID allowances.
- Calculation methodlogy

The non-retic charge was reduced in about 2002 to approx $7,900 per ET.

The wastewater DSPs have had a checkered history, being originally about $17,000 per ET. It is apparent that examination of original costs and ET assessments are warranted. Like the Gerringong/Gerroa DSP, rather than MEERA, the application of the tender cost plus CPI may be a more reasonable option, as discussed on the 5th of October.

7. Wollongong Sewerage

The same basic criticisms of the Wollongong DSP which were made in the UDIA/Rolyat report remains. Attributing the cost of new works only to new users is a denial of the whole of system approach, which was accepted in 1995 as a fair one, is ignored here.

In this instance the additional burden of meeting costs for a rearrangement of the sewerage treatment, its collection at one STP and the environmental upgrades

appear to have been retained, and unreasonably are attributed to new users principally. Further consideration whether this cost ought to be included, being an environmental upgrade should be considered. See 4.6.2 of the IPaRT Determination #9, 2000.

8. Kiama Sewerage

This DSP is another puzzle. The following facts are evident:

	2001 DSP @2031	2006 @2035
System DSP	$2139	$2750
Net Revenue	$1,218	$652
Demand/capacity	7478	8505
STP Costs	$13.5 million	$21 million
STP Charge	$809	$6,555

Part of the reason is the % share of cost which seems to have been wrongly applied in the 2006 DSP. Discussion with SWC and analysis of digital data is the only way to resolve these apparent anomalies.

The other usual errors regarding cost allocation and apportionment also seem evident.

9. Water DSPs

The issues with the methodology principles in the water DSPs as outlined in the UDIA/Rolyat report remain.

It should be noted however that the SWC headworks calculations have been incorporated as appropriate to each of the local DSPs.

- The current headworks charges range from $1 to $624.
- The previous headworks charges ranged from $442 to $1,338.

The Shoalhaven system has been removed from the DSPs.

The Water DSPs have a larger number of negative net revenue amounts. The same concern about the variability and negative amounts raised above applies.

10. Engadine Water System

This DSP is one of the good examples of the problems. While data is difficult to decipher, it is apparent there will be a number of issues to resolve.

As indicated above the apportionment will be one of these. That is the allocation of new costs 100% to new users. In this case one can examine the basis of the 2001 DSP and make comparisons. In particular the same existing assets are included but the distribution of these costs in the 2006 DSP must be a matter of dispute. While one of the costs have been increased by 56%, overall the share to new users, being different to the allocation of cost of new assets, is not in my opinion in accordance with the Guidelines. This DSP is transparently unreasonable in its calculation of the capital charge.

The reassessed capital charge is $690 compared to $2,748 by the DSP.

It can also be observed that the net revenue has been halved, which also requires further investigation.

11. 1996 Threshold

The time has come to consider that the 1996 threshold needs to move forward as a 10.5 year period (Jan 1996 - Jun 2006) is sufficient to have paid for a 1996 asset (ie reduce the discount rate to 3%).

Therefore a 2010 DSP should have a threshold between the 3% and 7% at 2000 (not 1996) or similarly for any date before or after 2010. Also logically the date should be for a financial year to align with the DSPs' approach, particularly as I don't think the authorities took much notice and worked to Jun 1995. Certainly SWC's 2001 DSPs calculated their charges on that basis.

Representations to IPaRT to incorporate this change will be made as regional DSPs are also affected.

12. Industrial/Commercial Charges

The charges for light industrial wastewater are based upon the assumption that the demand will be 55.3 ET per PNHa. This is unreasonable for a number of reasons.

.1 As indicated above the conversion rate is likely to be wrong when compared with the employment levels. SWC refused to consider my

submissions for a development in Penrith on this issue. This is despite the fact that when I investigated the average employment for a number of LGAs in the some years ago. For 60%-70% of industry employing up to 20 persons, the average number was only 5 -6 persons.

It was the case then and probably the same now that SWC seemed to use a worst case scenario.

.2 The rate for is applied on a ground area basis and does not take height of any buildings into account. It therefore understates the demand for multi storey buildings.

.3 The Water Directorate estimated rate for light industrial is 15 ET per gross hectare. This rate is still generous and only about 20% of the SWC rate.

.4 The submissions by Martin Burke suggest that the technical basis of the charge may be flawed. This supports the contention regarding low employment levels and consequently low demand.

Note: The light industrial water system charges are 28.3 x 1ET which is also excessive.

For both Commercial and Industrial:

.5 The application of a one charge fits all approach regardless of ultimate demand, particularly for multi storey developments is unreasonable. This is also the case given the wide variation in demand between developments.

.6 The problem of attempting to match design standards to the DSPs is wrong in principle. These standards, (average, peak, instantaneous etc) support the assets selection and cost. The apportionment should be a separate exercise based upon only one definition of an ET, not two.

.7 BASIX does not apply to commercial/industrial development yet conversion factors are used and applied it seems.

.8 There is a need for a two stage certificate process. A base rate can apply at subdivision, for clean dry trades for example. A further charge, may already apply in some instances according to SWC sources, at the construction certificate for a particular use. The wider application of this process, albeit using a lower benchmark, is sought. That is calculating

the demand for each development, in most instances, when the actual use of a lot or parcel, shown in a development application, is revealed.

This methodology, for all commercial and industrial, will enable a more precise assessment of the demand to be made. Penalising all developments for the high demand by a few is unreasonable, and inefficient.

Regardless of the size of the enterprise the SWC charges will have a significant effect upon employment opportunities. Small business provides a substantial part of any employment growth as only 1 extra person is a 20% increase in employment in a multiplicity of these sized businesses.

The importance of the commercial/industrial sectors to the economy are self evident. In past negotiations with SWC, the prime concern of UDIA was residential development. The recently expressed concern by the UDIA about the draft 2006 charges for commercial/industrial development, which I understand will be made in their submission, is supported. Further investigation and negotiation is warranted.

13. Apportionment of Costs

As mentioned above the apportionment methods need to be examined more closely. This includes:

1. Checking the demographics of the catchment areas to see how these accord with the demand assumptions. SWC have advised that the Department of Planning data is used (Transport Population and Data Centre). The factors which have been used to convert system flows to ETs are not explicit however. An ET based upon a demand driven design allowance is rarely reflective of the demographic facts in my experience.

2. The pre 1970 users should be included (for the reasons provide above).

3. The costs should be assessed on a whole of system approach. That is, all asset costs should be apportioned over all users. When the first DSPs were prepared after the 1995 Determination, this term was used and applied.

A detailed examination of the SWC and DoP data is warranted. It is common with other water authorities that while the population estimates may be agreed, the conversion to ETs is not. This is as:

- ABS occupancy rates derive only occupied dwellings.
- Vacant dwellings are routinely ignored.
- Vacant lots may also be a factor in greenfield areas.
- % growth in dwellings generally exceed the % population growth. This is caused by a movement of persons from existing to new dwellings. This may be a source of overstatement of the EP demand, but understatement of the dwelling growth (ET). Net Occupancy Rates (NOR) can be significantly less than the ABS rates. In Ku-ring-gai the net occupancy rate is only 1.66 persons, for each new dwelling. The gross rate remains at 2.9 (ie 43% of the persons in new dwellings have migrated from existing dwellings as evidenced by reducing ABS occupancy rates).
- Non-residential ETs which can be 20% to 50% of demand are not properly assessed (ie understated). The effect on apportionment is significant.

14. Net Revenue

.1 The first significant issue is the addition of negative net revenue to the capital charge (normally a reduction using a positive net revenue). This is in effect transferring maintenance cost to development charges.

.2 Revenue is collected on a postage stamp basis across Sydney. It is understood that there is a high cost for renewals in the existing areas in the East, yet the maintenance costs in new areas are higher than older areas. The consequence is that large net revenues are generally applied to small charges in existing areas which results in $0 charges.

One possible reason flows from the SWC approach to the capital works. It is possible that SWC calculate the maintenance cost in the same way. That is 100% of the maintenance of the new system is attributable to new users share of OMA.

Also paying a disproportionate amount of the maintenance cost by removing pre 1970 users could also help to explain the problem. At this stage, this is only informed speculation. It would fit mathematically however, as older DSP areas tend to have a higher proportion of existing users, post 1970.

I have examined the net revenue overall in 1996, 2001 and 2005 from the SWC financial reports.

In 2005 the net revenue was $582.6 million. That is $346.8 per property for an estimated 1.68 million properties or $4,604 if amortised over 30 years at 7%. The average combined allowance in the DSPs appears (without detailed analysis) to be acceptable. However it is suggested that in any further representations to IPaRT, this matter should be more closely considered. This would be to smooth out the allowances and eliminate the negative amounts. The current approach seems far too academic.

15. MEERA Rates

The SWC MEERA rates have obviously been increased. In the interest of accountability and transparency, it is requested that the full MEERA rates manual be made available. Further consideration should be given to publishing same on the SWC website. This data is the core material upon which millions of dollars are collected from the housing industry and therefore should be a public document.

A request should be made to IPaRT that both SWC and HWC manuals should be publicly available either at print cost or in digital format published on the respective web sites. The HWC Manual seems to be the most comprehensive manual and may be the benchmark which should apply, if a state based manual is considered.

The NSW Reference Rates for the valuation of water and sewerage assets published by DEUS are available for purchase. It is not as comprehensive as the HWC manual.

16. BASIX

The SWC's response to BASIX is confusing and may be unacceptable, in part because it is not adequately explained. The SWC advice in the DSP may also seems to conflict with IPaRT's view that the current Guidelines don't accommodate BASIX. In general however, the logic that the charges should go up because the demand goes down is unfathomable.

Given that new development is such a small part of the system, this seems an unreasonable response, as it ought to be able to clearly differentiate between the pre and post BASIX users. If a 40% reduction in water use does nothing to

reduce upfront charges, and the BASIX compliance cost being as high as $15,000 per dwelling, the socio-economic assumptions to support BASIX have come to naught.

It is compounded by the non-potable water supply to residential areas initiative. BASIX seems to be based upon the same fuzzy thinking. The outcomes for the non-potable water initiave are being targeted to the wrong set of users. Agriculture is where the real savings can be made and benefits achieved. In addition potable water for non-residential uses (including public spaces and facilities (ie toilets etc)) in regional NSW for example varies between 20% and 50%. While there are initiatives by some metropolitan Council's to re-use effluent, it remains a small part of the demand. Much more can be done without public angst.

The re-use costs for residential development are excessive, and in view of the likely treatment of this resource to make it potable, the process is very short sighted. In a number of respects the BASIX provisions and aspects of water sensitive storm water design overlap the non-potable water supply intentions. Both may be used to replace or supplement some existing uses of potable water.

With the benefit of hindsight BASIX should have simply required that ALL dwellings provide a 2,000 litre water tank on the property. A real 40% saving by say 3% of the all users could have simply been achieved by at least a 1% saving on 100% of the users. Non-potable water ought to have been targeted at non-residential users where real economic benefits can be achieved. All that is being achieved at Rouse Hill is green grass, using a valuable resource which has had to be topped up with potable water in the drought.

These issues deserve strong representation by the industry and serious consideration by IPaRT to resolve a conundrum to a technical problem which has been confused by the politics.

17. IPaRT

A matter of significant concern is that Sydney Water Corporation is self managing the review. There are a number of issues to be resolved which, more properly ought to be referred to IPaRT. I note that SWC would also be comfortable with IPaRT providing assistance to resolve interpretation issues.

While IPaRT has a basic role as regulator in setting the parameters, we have been previously advised that the application of these (Interpretation) has not been regarded as a matter for them by IPaRT. Given that IPaRT register the DSPs

submitted to them by the water authorities, a lack of scrutiny at this stage has been of concern to the industry.

In 2006 Hunter Water Corp (HWC) have advised that IPaRT has "recently reviewed Hunter Water's calculation templates". IPaRT has it seems "has endorsed them as compliant with the Determination". This is a surprising revelation given the concerns expressed in previous submissions to IPaRT about the implementation. The representations in 2000 resulted in major changes in the Guidelines. There have been a number of small anomalies in the Guidelines and three major issues of implementation which are yet to be addressed and resolved. Representations to IPaRT should be sought to invite submissions and discussions with the water authorities about compliance with the Guidelines.

Both SWC and HWC used the same model up until recently. The question now is, given that the calculation templates for SWC and HWC are different, what is IPaRT's response to compliance? The industry view is that the SWC's change has amended what were false financial management principles and a mis-application of the guidelines. This was the change to a 2006 start date for the model using 2006$ and not 1996 using 2006$.

The industry's opinion is that the HWC template remains non-compliant.

18. Preliminary Conclusions

- The DSPs plainly contain numerous anomalies which will have serious socio-economic effects in discrete areas.
- The light industrial charges are particularly harsh and the unreasonable.
- The template or methodology used by SWC, particularly when major upgrades are proposed, adds excessive cost.
- The exclusion of the pre-1970 ETs from the apportionment is a major concern
- The net revenue calculations and the variations are hard to fathom. A postage stamp net revenue should be considered until a more rational outcome is achieved.
- Discussion with SWC about the methodologies in a workshop setting is necessary.

- IPaRT should be urged to conduct a workshop to try and resolve the implementation issues which may require a number of substantial changes to the Draft 2006 DSPs.

The writer also wishes to thank SWC for the opportunity to comment and the recent productive discussion.

Peter M Price
7 October 2006