Revenue Transfer Methodology to Unbundle Asset Restoration Reserve Balances

Background

Seqwater is setting irrigation tariffs for the next pricing period (2014-17) on an unbundled basis to separately price bulk supply and distribution services. Irrigation tariffs have historically been set on a bundled basis with ARR Balances maintained at the total scheme level. The historical irrigation tariff structures have set distribution tariffs on a combined or bundled basis to include both bulk supply and distribution services so that a distribution customer paid the distribution tariff and a river customer paid the bulk supply tariff.

The unbundling of tariffs will involve a discrete and separate tariff being set for bulk supply and distribution services with the total tariff for distribution services being the sum of the bulk supply and distribution tariffs. Under an unbundled tariff scenario, the river customers continue to pay the bulk supply tariff however as the bulk supply charge is not included in the distribution charge, the distribution customers charge is the sum of the bulk supply and distribution tariffs. The unbundling of tariffs is essentially about setting a separate price for each service and does not in itself change the total tariff paid by distribution customers.

A consequence of the unbundled tariff structure is the need to establish ARR Balances for each tariff group (bulk supply and distribution) to enable a renewals annuity to be calculated for each tariff group. The ARR Balance is a key input into the renewals annuity calculation which is a cost component in developing the revenue requirement to determine tariffs.

Objective

The recording of renewals expenditure occurs at the tariff group level so the expenditure can readily be allocated to either bulk supply or distribution. The recording of revenue also occurs at the tariff group level however the bundled tariff structure results in a portion of the bulk supply revenues being collected as part of the distribution tariff. This requires the separation of bulk supply revenues within the distribution revenues to enable the ARR Balance to be unbundled on a tariff group basis.

The objective is to effectively unbundle the ARR Balances so that each tariff group (bulk supply and distribution) accurately accounts for its respective renewals revenues and expenditures. The need to transfer revenue between bulk supply and distribution tariff groups arises due to the bundled nature of the tariffs with the distribution revenues consisting of both bulk supply and distribution revenues.

Water Supply Schemes

The Seqwater schemes which are impacted by the bundled tariff arrangement are:

- Central Lockyer
    - River & Groundwater (bulk supply)
    - Mortonvale (distribution)
- Mary Valley
    - River (bulk supply)
    - Pie Creek (distribution)

Methodology

Indec has developed a simplified methodology to unbundle the tariff structures to determine the bulk supply revenues captured as distribution revenues.

The methodology calculates a revenue transfer from distribution to bulk supply to capture the portion of bulk supply revenues recorded as distribution revenues, including any Community Service Obligation (CSOs) payments from Government.

The methodology to separate bulk supply revenues within distribution revenues involved the following steps:

1. Determining the Part A bulk supply revenues accounted for within the distribution revenues;
2. Determining the Part B bulk supply revenues accounted for within the distribution revenues; and
3. Determining any bulk supply CSO revenues accounted for within the distribution revenues.

This required the following information.

1. Annual tariffs for those schemes with bundled tariff arrangements;
2. Community Service Obligation Payments (CSOs) for the relevant bulk supply tariff groups; and
3. Water allocation and water usage data for the distribution tariff groups.

As part of the 2007-11 Irrigation Price Paths, the CSOs were established at the tariff group level. For the purposes of the revenue transfer calculation, only those CSO revenues relating to bulk supply are subject to transfer from distribution to bulk supply.

A working example is included below to demonstrate the methodology and its application in the ARR Balance calculations.

Working Example

For the working example outlined below, Table 1 details the bundled tariffs and CSO arrangements:

Per ML	Bulk Supply	Distribution
Part A	$5.00	$15.00
Part B	$1.00	$5.00
CSO	$2.00	$6.00
TOTAL	**$8.00**	**$26.00**

Table 1 – Bundled Tariff & CSO Details

The CSO payment from Government is shown on a per ML basis to clearly demonstrate its treatment in Indec's methodology.

For the purposes of the working example, Table 2 details the unbundled tariffs including CSOs that would apply:

Per ML	Bulk Supply	Unbundled Distribution	Bundled Distribution
Part A	$5.00	$10.00	$15.00
Part B	$1.00	$4.00	$5.00
CSO	$2.00	$4.00	$6.00
TOTAL	**$8.00**	**$18.00**	**$26.00**

Table 2 – Bundled & Unbundled Tariff & CSO Details

Table 2 shows that the sum of the bulk supply and unbundled distribution tariff equals the bundled distribution tariff.

Table 3 below outlines the nominal water allocation and water usage data assumed for the working example:

ML	Bulk Supply	Distribution	Total
Water Allocations	100	50	150
Water Usage	75	25	100

Table 3 – Water Allocation & Water Usage

Table 4 shows the bundled revenues which arise from the working example:

Bundled Revenues	Bulk Supply	Distribution	Total
Part A	$500.00	$750.00	$1,250.00
Part B	$75.00	$125.00	$200.00
CSOs	$200.00	$300.00	$500.00
TOTAL	**$775.00**	**$1,175.00**	**$1,950.00**

Table 4 – Bundled Revenue Details

Table 5 shows the revenues to be transferred from distribution to bulk supply, including details of the calculations applied to derive the revenues to be transferred. Table 5 also shows the percentage of distribution revenues to be transferred from the distribution tariff group.

Revenue Transfer		Details of Calculation
Part A	$250.00	Bulk Supply Part A Tariff x Water Allocations (Distribution)
Part B	$25.00	Bulk Supply Part B Tariff x Water Usage (Distribution)
CSOs	$100.00	Bulk Supply CSO/ML x Water Allocations (Distribution)
TOTAL	**$375.00**	
Percentage of distribution revenue transferred	32%	Revenue Transfer / Total Distribution Revenue

Table 5 – Revenue Transfer Details

Table 6 below details the revenue on an unbundled basis after the revenue transfer has been made. Table 6 is derived from Table 4 and Table 5 with the revenue transfer outlined in Table 5 deducted from the bundled distribution revenues outlined in Table 4 with the revenue transfers from Table 5 added to the bundled bulk supply revenues outlined in Table 4.

Unbundled Revenues	Bulk Supply	Distribution	Total
Part A	$750.00	$500.00	$1,250.00
Part B	$100.00	$100.00	$200.00
CSOs	$300.00	$200.00	$500.00
TOTAL	**$1,150.00**	**$800.00**	**$1,950.00**

Table 6 – Unbundled Revenue Details derived from Bundled Revenues and Revenue Transfer

Table 7 calculates the unbundled revenues from a first principles basis by calculating the revenues from the unbundled tariffs In Table 2 rather than netting the bundled revenues in Table 4 with the revenue transfers in Table 5.

Unbundled Revenues	Bulk Supply	Distribution	Total
Part A	$750.00	$500.00	$1,250.00
Part B	$100.00	$100.00	$200.00
CSOs	$300.00	$200.00	$500.00
TOTAL	**$1,150.00**	**$800.00**	**$1,950.00**

Table 7 – Unbundled Revenue Details derived from Unbundled Tariffs

Table 7 proves that the methodology is mathematically sound and demonstrates that the unbundled revenue details calculated from first principles or an unbundled tariff basis are the same as the results in Table 6 which has been derived from the Table 4 Bundled Revenue Details and adjusting for the Table 5 Revenue Transfer details.

Data Limitations

Indec has applied the above methodology for the 2007 to 2013 period as all the required data was available to undertake the calculations outlined above for each particular year.

For the 2001 to 2006 period, Indec was unable to adopt the outlined methodology in its entirety as not all the required data was available to undertake the annual revenue transfer calculations. Rather, Indec has applied the average percentage of revenue transferred for the respective tariff groups over the 2007 to 2013 period to the 2001 to 2006 period to get around the issue of missing data.

The percentage of revenue transferred across the 2007 to 2012 period was relatively stable whereas the absolute level of revenue transferred varied significantly due to the volatility of Part B revenues.

Under the circumstances, Indec believes that the approach adopted for the 2001 to 2006 period was the best alternative available.

Comparison to QCA SunWater Methodology

Indec is unable to comment if its approach to unbundle ARR Balances is superior to the methodology applied by the QCA to SunWater's ARR Balances. Indec is not in a position to make any informed comparisons between its approach to that of the QCA as Indec is not fully across the detail and methodology of the QCA's approach to unbundle ARR Balances,.