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Flavio Menezes, Board Chair
Queensland Competition Authority
Level 27, 145 Ann Street
BRISBANE QLD 4000

Dear Professor Menezes

Supplementary submission to the QCA as part of the 2020/24 Irrigation Price Review

Following on from Sunwater's submission in response to the referral and direction notice (the referral notice) published by the Queensland Competition Authority (QCA) late last year, Sunwater and the Queensland Farmers' Federation (QFF) have continued to work closely on issues of mutual interest, such as the electricity pass through mechanism first proposed by Sunwater in its November 6 submission to the QCA.

By working closely with QFF, we have come to better understand our customer's priorities and appetite for risk, and how we can reflect those in an amended electricity cost estimation methodology and annual pass-through mechanism. This letter, the approach outlined in Attachment 1, and the electricity cost estimates (based on version 3 of Sunwater's regulatory pricing model) in Attachments 2 to 11, revise Sunwater's previously submitted positions on these topics for the service contracts listed below. It could also be adopted in other service contracts, if electricity costs are considered to be a significant cost issue.

- Bundaberg distribution
- Burdekin Haughton distribution and bulk water
- Lower Mary River distribution
- Eton distribution
- Bowen Broken Rivers bulk water
- Mareeba-Dimbulah distribution
- Upper Condamine bulk water
- Dawson Valley bulk water
- Barker Barambah bulk water
- Three Moon Creek bulk water.

The rising cost of electricity, and the uncertainty of the impact of government policy and new technologies on future electricity prices, is the largest single area of concern for Sunwater's customers during this price review. We believe the approach described below provides a rare opportunity for regulated water charges to directly address these concerns and mitigate electricity price risk for both Sunwater and its customers, while ensuring that Sunwater is still accountable for proactively managing its electricity costs. We strongly recommend that the QCA accept and recommend our proposal to the Treasurer.

Should you wish to discuss our approach further, or require additional detail, please contact either Courtney Chester (Senior Pricing Advisor, Sunwater, 3120 0095).

Yours sincerely

Nicole Hollows
Chief Executive, Sunwater



List of Attachments

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| Attachment 1 | Electricity cost estimation methodology and annual pass-through mechanism (pp. 2-6) |
| Attachment 2 – 11 | Electricity cost estimation models (Commercial in Confidence) |
| Attachment 12 | Consultation with Sunwater's Customer Reference Group (21 August 2019) (p. 7) |

Attachment 1: Electricity cost estimation methodology and annual pass-through mechanism

Summary

Under our proposed approach, typical fixed and variable electricity costs will be calculated using historic water and electricity usage, and best available electricity tariff information. The basic fixed electricity cost will be included in fixed Part A/C irrigation water charges.

The basic variable electricity charge, although starting at the same level each year of the price period, will be adjusted annually by Sunwater to offset any over- or under-recovered electricity costs from the previous year.

We are proposing a number of changes to Sunwater's annual network service plans, which will enable customers and their advocates to monitor the energy efficiency of major assets and the prudence of Sunwater's energy strategy, without active engagement or oversight of the regulator.

Objectives

Our proposed approach to electricity cost estimation and an annual pass-through mechanism addresses concerns shared by Sunwater and its customers by:

- improving customer confidence and understanding of how Sunwater manages its electricity supply and usage
- minimising:
 - uncertainty about the changes to transitional and obsolete electricity regulated retail tariffs from 2021/22
 - year-on-year variability of Part B/D irrigation water prices
 - regulatory burden and cost borne by customers
 - over/under recovery of electricity costs carried over into the next regulatory pricing period.

Our proposed approach also creates an opportunity for customers to benefit from new tariffs and technology in real time, not just at the beginning of each regulatory pricing period. This may enable and incentivise customers to act collectively to optimise electricity use within their scheme (for example by agreeing to take water at times which allow Sunwater to minimise pumping during peak times); invest in renewable energy generation; or benefit from new tariffs and/or reductions in electricity regulated retail tariffs almost as soon as they occur.

Regulatory framework

Our approach requires changes to the regulated pricing framework that do not fall within the scope of the Treasurer's referral notice, but we consider that, in addition to being an innovation that benefits both customers and the regulated entity, the outcomes are consistent with the intent of the referral notice to:

- ensure that Sunwater is best able to manage material changes to costs that are outside its control
- provide an opportunity for Sunwater to transparently share, and improve, the prudence and efficiency of its electricity costs
- ensure that electricity costs are simple and transparent for customers
- deliver the most cost-reflective charges possible for electricity.

On this basis, we strongly recommend that the Queensland Competition Authority (QCA) accept and recommend our proposal, and that the Treasurer consider revisiting the requirements of the referral notice.

Step-by-step approach to Sunwater—QFF’s proposed electricity cost estimation methodology and annual pass-through mechanism

Step 1: Remove electricity costs from Part B/D tariffs

To initiate our proposed approach, Sunwater will remove electricity costs from Part B/D charges in the following service contracts:

- Bundaberg distribution
- Burdekin Haughton distribution
- Burdekin Haughton bulk water
- Lower Mary River distribution
- Eton distribution
- Bowen Broken Rivers bulk water
- Mareeba-Dimbulah distribution
- Upper Condamine bulk water
- Dawson Valley bulk water
- Barker Barambah bulk water
- Three Moon Creek bulk water.

In its November 2018 submission, Sunwater proposed that electricity costs should be treated as a variable charge in all service contracts¹, so by removing them will lower the Part B/D charges recommended by the QCA under the Treasurer’s referral notice, compared to the prices in version 3 of Sunwater’s regulatory model.

Step 2: Calculate basic fixed and variable electricity charges

Electricity cost estimates will be calculated, as per the models in Attachments 2 to 11.

Based on historical electricity and water usage, and current electricity tariffs, basic fixed electricity costs will be calculated for each service contract.

The *fixed electricity cost* is the minimum, unavoidable electricity cost for each service contract, even if there was no water delivered to customers. To get a per megalitre charge, the fixed electricity cost is divided by the adjusted water access entitlements²ⁱ (WAE) to become the fixed electricity charge per megalitre (ML). This basic fixed electricity charge will be added back into Sunwater’s estimation of the Part A/C charges, on which the QCA will be providing recommendations to the Treasurer (replacing electricity costs currently included in version 3 of the regulatory model).

The *variable electricity costs* are all other costs associated with delivering water (i.e. total electricity costs minus fixed electricity costs). To calculate the basic variable electricity charge for this pricing period, we’ve effectively divided five years of variable electricity costs by five years of water usage.

The basic fixed and variable electricity cost estimates will not change in real terms³ for the duration of the 2020–2024 price period (see Box 1).

The basic variable electricity charge will be treated as a standalone charge, independent from Parts B/D.

Box 1: Basic fixed electricity cost and typical variable electricity charge

For example, let us assume that the basic fixed electricity charge is \$25 per ML of WAE, and the basic variable electricity cost is \$30 per ML of usage, in real terms.

Practically:

The basic fixed electricity charge is included in the Part A/C price recommended by the QCA.

In year 1, the basic variable electricity charge is \$30 per ML of usage.

If water and electricity usage patterns and changes to electricity tariffs were to remain consistent with historical averages and pre-determined annual escalation factors for the duration of the regulatory price period, the fixed component of

¹ After consultation with customers, we subsequently revised our proposal for the Eton bulk water service contract, instead proposing that electricity costs should be fully fixed.

² Adjusted WAE = WAE minus distribution losses and specially adjusted volumes (i.e. GBA unpaid WAE).

³ Charges will be escalated annually, in line with agreed electricity escalators for each service contract.

electricity costs in Part A/C charges and the basic variable electricity charge should recover Sunwater's electricity costs over time.

That degree of certainty is unlikely to be maintained in the 2020 to 2024 price period, though, given the anticipated changes to electricity tariffs, water availability and water demand in the short to medium term. Even if electricity costs and water usage were consistent with historical averages, the electricity cost estimation methodology alone would not:

- achieve cost-reflective pricing
- allow Sunwater to manage changes to electricity costs beyond its control
- create an opportunity for customers to benefit from changes in tariffs or technology.

These are achieved by our proposed cost pass-through mechanism.

Step 3: Calculating annual pass-through discount/surcharge (begins in year 1 of the price period)

By May each year, Sunwater will compare its total actual electricity revenue (fixed and variable) with actual electricity costs and announce a pass-through adjustment to the basic variable electricity charge (i.e. a discount or surcharge) for the next financial year (see Box 2).

Box 2: Worked example of annual pass-through discount/surcharge

To continue the example above, let us assume the basic variable electricity charge is still \$30/ML each year.

At the end of Year 1, Sunwater has over-recovered \$5/ML (actual usage). The variable electricity charge for Year 2 will be the basic variable electricity charge minus the over-recovered amount:

$$\$30 - \$5 = \$25/\text{ML}.$$

At the end of Year 2, Sunwater has under-recovered \$3/ML (actual usage). The variable electricity charge for Year 3 will be:

$$\$30 + \$3 = \$33/\text{ML}.$$

The basic fixed electricity costs recovered in Part A/C charges and the basic variable electricity charge per ML remain constant in real terms. The announced adjustment (discount or surcharge) is in addition to those costs, and will be applied to the basic variable charge each year to offset over- or under-recovered revenue from the previous year, compared to the total forecast electricity costs. The starting point of the variable electricity charge does not change—the announced adjustment is applied to the same starting point each year. This is to provide Sunwater's customers with as much price stability as possible, while also only recovering actual electricity costs in the regulated price period.

At the end of the regulated price period, there will be a single year's worth of under- or over-recovered electricity costs to be passed through into the first year of the new pricing period (2024/25).

Step 4: Annual prudence and efficiency reporting

To ensure that Sunwater continues to manage its electricity accounts prudently, that service contracts operated efficiently and that assets are well-maintained, Sunwater will publish the following information in its network service plans for each service contract affected by the pass-through mechanism:

- pump efficiency (kWh/ML pumped/year)
- total kWh/year
- highest peak demand/month.

Each of these attributes will be associated with a minimum performance target based on its historical performance (i.e. highest kWh/ML pumped/year, highest total kWh/year, number of months that demand exceeds allowable thresholds and/or monthly averages).

Sunwater will also include an annual update to its energy strategy if relevant (i.e. tariff mapping, contestable market options and energy efficiency assessments).

Step 5: Targets exceeded: investigation, escalation and cost-allocation

If Sunwater has managed its electricity usage within the target ranges for the electricity attributes identified above, customers will accept the annual adjustment to the variable electricity charge without review.

If Sunwater has not managed its electricity usage within the identified performance targets, customers may request a review of the prudence and efficiency of the final volumetric electricity charge. To minimise the regulatory cost to Sunwater and its customers, the review escalation process will be:

- Sunwater to conduct an internal review, and publish the outcomes.
- If customers are not satisfied with Sunwater's explanation of its electricity usage, customers (via their Irrigation Advisory Committee (IAC), Sunwater's irrigation customer reference group (CRG) or QFF), may request that the Queensland Competition Authority (QCA) review Sunwater's electricity usage, and determine the prudent and efficient volumetric electricity charge.

Sunwater will bear the costs of its internal prudence and efficiency review.

Customers will bear the costs of a QCA review, to be included in the following years' variable electricity charge.

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Attachment 12: Consultation with Sunwater's Customer Reference Group (21 August 2019)

Sunwater presented the methodology outlined in Attachment 1 to its Customer Reference Group (the CRG) at the August CRG Meeting. The CRG advised that they broadly agreed with the electricity pass through proposal as long as the overs and unders adjustments were passed through to the same customers in as close to real time as possible.

Sunwater agrees that ensuring equity in applying the pass through mechanism is desirable. The CRG had a range of suggestions/adjustments to achieve this outcome. Its priorities were to ensure that the pass-through mechanism is:

- based on individual customer over/underpayments on what each customer actually over/underpaid in year n (not based on their variable consumption in year n+1)
- made either in, or as close to, the financial year that the over/underpayment occurred as possible
- accompanied by improved transparency around Sunwater's electricity prudence and efficiency.

Sunwater is committed to investigating with QFF and the CRG as we continue to refine the mechanism.

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