Pioneer Valley Water
Co-operative Limited.
A co-operative formed under the *Cooperatives Act* 1997.
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Ref: GD :

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Queensland Competition Authority
GPO Box 2257
BRISBANE QLD 4001

Dear Mr Page,

RE: Rural Irrigation Price Review 2020-24

Thank you for consulting in relation to the above pricing investigation. This submission expands upon Pioneer Valley Water Co-operative Limited (PVWater)'s submission of November 2018.

Introduction

PVWater is cognisant of the Queensland Competition Authority (the authority)'s obligation under Part 3 Division 3 Section 24 of the *Queensland Competition Act 1997* (the Act) to comply with Ministers' Directions in relation to investigations into pricing practices.

We note however under Section 33(2) of the Act, the authority's report to the Minister may include anything about the investigation the authority considers appropriate. We note also that under Section 26, there are a range of matters which must be given due regard in the conduct of such an investigation, and we encourage the authority *not* to be tempted to give those matters perfunctory service. We draw the authority's attention to the following matters specifically:

> **"26 Matters to be considered by authority for investigation**
>
> (1) In conducting an investigation under this division, the authority must have regard to the following matters—
> (c) the protection of consumers from abuses of monopoly power;
> (g) the impact on the environment of prices charged by the government agency or other person carrying on the monopoly business activity;
> (h) social welfare and equity considerations including community service obligations, the availability of goods and services to consumers and the social impact of pricing practices;
> (j) the need for pricing practices not to discourage socially desirable investment or innovation by government agencies and persons carrying on non-government business activities;
> (m) economic and regional development issues, including employment and investment growth;"

Further, we encourage the authority:

- to include in the authority's report to government, detailed outcomes in relation to the authority's consideration of the above matters;

- to view irrigation pricing in the context of those outcomes, not merely in the context of cost recovery; and
- to make full use of the discretion allowed under paragraph C (1.4) (a) of the Minister's Referral and Direction Notice in relation to moderation of bill impacts, by recommending a commensurate reduction in volumetric (Part B) prices.

Affordability

Background

PVWater is a not-for-profit, locally owned and managed small business, operating in the Pioneer Valley, which extends westward and inland from Mackay.

The business is registered as a service provider under the *Water Supply (Safety and Reliability) Act 2008* and holds a distribution operations licence (DOL) under the *Water Act 2000* for the Pioneer River Water Supply Scheme (PRWSS).

PVWater is responsible annually for distribution of up to 47,390 megalitres of water (including losses allocations) for irrigation across an area of around 22,000 Ha. Usage is devoted overwhelmingly to the production of sugar by PVWater's approximately 250 customers. Crop diversification is minimal due to the negative impacts of climactic variations in this region on small crops and on alternative permanent plantings.

The negative regional economic impacts associated with losses in agricultural productivity stemming from these climactic variations was noted by government in the early 1990s. By 1997 the Teemburra Dam Project, including construction of Teemburra Dam and associated irrigation reticulation schemes, was completed with funding on a two-thirds government / one-third industry basis. The industry's one-third was in-turn funded two-thirds by Mackay Sugar Limited / one-third by irrigators through a QTC loan subsequently paid off over 17 years by irrigators through their distribution water charges.

The Teemburra Dam Project commenced with an 80-year infrastructure outlook, and proceeded only after *government provided indicative subsidised pricing* designed to:

- make water affordable for supplementary irrigation, providing for ongoing drought proofing, and improved productivity outcomes in the agricultural sector;
- deliver downstream regional economic and development benefits including employment and investment outcomes for the Mackay region; and
- encourage irrigators to take up allocation and to make significant investments in on-farm irrigation infrastructure.

Farmers entered into a tacit contract with government, with the not unreasonable expectation that government policy would see pricing continue to be subsidised, most particularly for those inputs over which government has pricing control through Government Owned Corporations (GOCs) such as SunWater and Ergon Energy. Instead, in what may be perceived as an abuse of power implemented through their GOC's, successive Queensland governments have adopted a strategy to transition the agricultural sector towards cost recovery for critical irrigation inputs. This strategy:

- disregards the long-established premise that subsidising critical input costs enables productivity gains required by agricultural businesses to compete in a sector where commodity returns are dictated by world markets;
- conflicts with the original design premise of the Teemburra Dam Project, disingenuously failing to recognise that irrigation schemes were constructed to support the regional economy on the back of increased productivity, were never intended to recover costs, and would not have proceeded for irrigation on a cost recovery basis; and
- has no regard for the lack of capacity within supplementary irrigation schemes to affordably disperse the resulting water charges.

It is critical to recognise that supplementary irrigation in a low-value crop environment, is incapable of supporting a cost recovery agenda for infrastructure. It is equally important to recognise that this is true not just for allocation creation infrastructure operated by SunWater but extends to scheme distribution infrastructure, and on-farm distribution and application infrastructure.

Impacts of historic price increases

SunWater's Bulk Water charges (Parts A and B combined) for High Priority - B allocation in the PRWSS have increased at an average of 4.53% per annum (compounding) over the last 15 years. Even *unsubsidised*, the inflation rate for the same period has averaged far less at 2.43%. Based on 50% usage, the difference amounts to $248,039 per annum unavailable to irrigators to pursue the original purposes of the Teemburra Dam Scheme. Moreover, increases in Bulk Water Charges ought not be viewed in isolation, rather in the broader context of flat-lining commodity prices for the prevalent agricultural crop (sugar prices are currently at similar levels to prices a decade ago), and increases in other irrigation inputs, particularly those within the state government's purview such as electricity (140% increase over the last 11 years!).

There can be no doubt at this point that the cost recovery model for critical irrigation inputs into the agriculture sector has failed water allocation holders in the Pioneer Valley, where pricing increases have:

- overseen a curtailing in irrigation practices, which have moved away from a crop promotion basis to one of crop survival. This has effectively: banished the opportunity for irrigators to offset on-farm infrastructure costs resulting from uptake of allocation associated with the Teemburra Dam Project; sabotaged envisaged economic and development benefits including employment and investment outcomes for the Mackay region; and increased risk around the potential environmental implications of run-off from agricultural land for the Great Barrier Reef Marine Park (GBRMP);
- caused changes in irrigation methodologies, which have moved away from high-pressure irrigation (efficient use of the natural resource and of electricity network and irrigation scheme infrastructure) towards less efficient low-pressure practices; and
- overseen the demise of the regional water market, with water allocations now seen as a deterrent to farm transfers, and many entitlement holders regarding their allocations as a financial burden rather than as an asset. Some farmers literally cannot give their allocations away and enquiries are being fielded regarding handing back of individual allocations, and procedures around scheme mothballing. It is interesting to note that SunWater advises costs for the PRWSS would not be significantly reduced by cessation of irrigation, and that revenue *would* be reduced by the irrigation contribution of $1.01M from 2020. While the option to surrender allocations exists under the *Water Act 2000*, it requires agreement by the state to assume payment of associated ongoing water charges, and agreement from the DOL holder.

These outcomes are not speculation. They are already being realised. Looking at irrigation allocation usage in the two adjacent supplementary irrigation schemes in the Pioneer Valley in 2003 and again in 2015 (two years with 100% allocation availability and similarly low rainfall (958mm and 906mm)):

- Irrigation allocation usage in the PRWSS reduced from 89% of nominal allocation to 34%. That translates to 25,750Ml not applied;
- Irrigation allocation usage in the adjacent Eton Water Supply Scheme (EWSS) reduced from 108% of nominal allocation to 55%, being 27,087Ml not applied.

At 6 tonnes of sugar cane production per Ml applied, this reduction in allocation usage amounts to 317,022 tonnes in lost production. At $62.54/tonne (to the industry) this translates to around $20M per annum lost revenue direct to the industry, or an estimated $80M per annum (EM 4.0) lost to the regional economy.

Far from being able to afford an *increase* in SunWater's Bulk Water Charges, allocation holders in the PRWSS need price *relief*!

SunWater's projected pricing increases for holders of High Priority – B (irrigation) allocations in the PRWSS total 48% over the four-year price path, including a 21% step increase in the first year.

Non-Routine Expenditure and the Annuity

At the end of the 2012-2017 price-path, the balance of the annuity reserve for the PRWSS stood at -$4.082M against -$1.783M envisaged by the QCA at price-path inception. An estimated $395K of the difference is attributable to interest charged on the additional debt, leaving an annuity overspend in the order of $1.9M. This overspend against QCA estimates expands to $2.9M in the extension of the price path to include 2017/18 actuals. There is quite obviously a need for thorough independent investigation to determine the prudency and efficiency of overspends of this magnitude.

SunWater's 2017 Annual Performance Report for Pioneer Bulk indicated that $448K of the $535K annuity spend was associated with inspections and documentation review … an appalling ratio against works undertaken, even allowing that associated works might be conducted in subsequent years. The largest reported item designates $268K to "*Study 20 Year Dam Safety Review – Teemburra Dam (work to be carried out in FY 2015 & 2016)*". Given that this is contained in the 2017 report, the reference to 2015 & 2016 is most likely a cut and paste error from an earlier document, but it begs the questions … is this the first time this study has been undertaken? … and will this study again postpone works pending a further expensive study?

PVWater is concerned by apparent inefficiencies in project delivery, including overspend in options analysis, project mismanagement, and failure to ensure contractor accountability. A known example for scrutiny in this regard is the installation and testing of a replacement telemetry system for Teemburra Dam and associated works. Project implementation on the ground took place in May and June of 2016. Discussions with SunWater staff during finalisation of the detailed project specification with the contractor, indicated that the original budget had already been exceeded by that stage. Additionally:

- shutdowns for project implementation were initially underestimated, when adjusted were miscommunicated, and ultimately failed to adequately consider timing with respect to customers' irrigation requirements;

- project implementation and testing appeared unsatisfactory, resulting in numerous unsuccessful attempts by the contractor to resolve issues, *and yet the contractor was ultimately released from accountability*; and
- expenditure carried over into 2016-2017, and issues remain unresolved almost three years later in 2019.

PVWater contends that these issues are not indicative of an organisation operating in a prudent and efficient manner, and the ongoing costs associated with these issues across the spectrum of SunWater's project management need to be quantified and removed from the Annuity bottom-line.

There is a significant step-change (almost a doubling) of the required Non-Routine (Renewals) Annuity contribution from 2020/21 in the PRWSS. The cost of materials as a percentage of overall expenditure is only about 3%. Each of these items individually seem to indicate a need for independent assessment of SunWater's Asset Management System (SAMS), and particularly the cost build-up used for projects.

There have been attempts on the back of previous reviews to address some of the above issues. There appears to be a need for oversight of *implementation* of the authority's recommendations in this regard. Two recommendations coming out of previous pricing investigations have been: the introduction of Network Service Plans (NSPs); and the use of options analyses for major projects. These are conceptually good, and NSPs *have* enabled a basis for greater communication between SunWater and their irrigation customers. However, in practice NSPs have historically not provided enough detail to allow real scrutiny by customers, and options analyses appear to have been overused, consuming a disproportionately large percentage of the annuity budget over the previous price path. Although PVWater applauds SunWater for taking positive steps to attempt to address these matters, it is disappointing that these adjustments are occurring only as the GOC gears up for discussions around the incoming price path.

Headworks Utilisation Factor (HUF)

Changes to the PRWSS HUF as recommended by SunWater are welcomed by PVWater, however they do not go far enough. While the change in storage volumes associated with removal of inflatable rubber dams (IRD)s from Dumbleton and Mirani Weirs has been considered, the impacts on system yield and associated reduction in reliability of supply appear to have been overlooked. This requires modelling, as the method of operation of the IRDs was intended to capture run-of-the-river flows several times in each water-year. It should be noted that storage capacities for Dumbleton Weir and Mirani Weir, as shown in SunWater's NSP, have not been adjusted for removal of the IRDs and should not be relied upon.

In a similar vein, the reduction in system yield resulting from operational constraints at Marian Weir, and the reduction in supplementation efficiency associated with downgrading of the Palm Tree Creek Outlet release mechanism (from cone valve to pepper-pot valve) require modelling and adjustment of the HUF.

Under water sharing rules for the PRWSS, changes in system yield and operational efficiency impact High Priority - B allocation holders *far* more significantly than High Priority - A allocation holders and should be evaluated and reflected in the HUF.

Insurance

There can be no doubt that insurance costs have increased significantly across all sectors, however, insurance costs for SunWater against the bottom line for the PRWSS are running at 350% against QCA predictions!

This increase is unsustainable, and argues for:

- scrutiny of policy documentation to confirm the insurability of all items insured;
- assessment of the value for money associated with insurance of items insured;
- scrutiny to ensure that insurance costs benefiting the general community are not being met by irrigators, and
- exploration of options for self-insurance moving forward.

Flood Monitoring and Reporting

PVWater contends that Inspector-General Emergency Management (IGEM) costs commencing in the PRWSS from 2018/19 at $90K, benefit the wider community and should be borne by that community accordingly.

Irrigators do not create the need for IGEM costs. In fact, the infrastructure associated with allocation creation, and the use of that allocation by irrigators, is far more likely to mitigate flood impacts than to contribute to them.

While it makes good sense to have the GOC responsible for allocation creation infrastructure and stream monitoring involved with IGEM, there is no basis for IGEM costs to be passed through SunWater. Costs should be borne either by those whom specific IGEM infrastructure and monitoring is designed to protect, or by the whole of the community as with other costs associated with monitoring of natural disasters and weather-related emergency events.

Dam Safety

As with flood monitoring and reporting, PVWater contends that costs associated with dam safety upgrades, should be borne by the broader community as the beneficiaries of the associated risk mitigation. Water allocation holders are not disproportionally responsible for the climactic changes driving dam safety upgrades.

The impacts of these costs are also likely to be more significant than currently shown in NSP forward estimates. Costs indicated represent only 50% of the current cost estimates, which SunWater has advised remain underdeveloped at this time. Previous upgrades have also run well over budget.

Thank you for the opportunity to submit to the 2020/24 irrigation pricing review for SunWater schemes. Please do not hesitate to contact the undersigned to discuss any aspect of this submission, or to obtain further information.

Yours sincerely,

GREG DAWES
MANAGER.