16 April 2021

EnergyAustralia
LIGHT THE WAY

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Review of Water NSW rural bulk water services
Independent Pricing and Regulatory Tribunal
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Dear Tribunal Members

Review of WaterNSW's Rural Bulk Water Prices – Draft Report – March 2021

EnergyAustralia is one of Australia's largest energy companies with around 2.5 million electricity and gas accounts across eastern Australia. We also own, operate and contract a diversified energy generation portfolio across Australia, including coal, gas, battery storage, demand response, wind and solar assets, with control of over 4,500MW of generation capacity.

We appreciate the opportunity to provide feedback on IPART's draft report and WaterNSW's pricing from 1 July 2021. We note that IPART's decision would result in price increases being materially less that those proposed by WaterNSW, and its view that price increases would bring bills into line with other jurisdictions. However, these increases are still significant and need to be fully justified to all users.

In the case of Fish River, where EnergyAustralia effectively pays half of WaterNSW's costs, we are unable to understand the specific drivers of increases in the prices from the information published by IPART. We request that release detailed modelling which illustrates how specific costs for each valley are changing over time and how these translate into price increases.

As was evident from IPART's recent public forum, a lack of transparency on how costs are allocated and prices have been derived are a common concern for many stakeholders. IPART should not be complacent in presuming dissatisfaction is arising because of changes in price levels – we believe customers would be accepting of the proposed increases where these can be explained and there is sufficient underlying data to support these explanations.

Our comments below reflect considerable effort and difficulties in trying to reconcile data from NSW Water's proposal, Aktins' report and IPART's draft report. We recommend IPART publish summary tables for each valley on building block items, including how values relate to prior period expenditures and allowances.

Drivers of expenditure and price increases for individual valleys are unclear

IPART has stated that it considers the increases in WaterNSW's spending and prices relative to the current period are justified, and would bring them in line to more sustainable and acceptable levels of service delivery.[1]

Our question is whether this high-level explanation applies equally across all valleys, noting that price increases from 1 July 2021 would vary dramatically, from 0.8 per cent to 76.2 per cent depending on the valley and charge type.[2] As it relates to our costs of operation, which are ultimately passed onto electricity customers, we are primarily interested in understanding the drivers for the price increases at Fish River, which themselves still show large variations depending on the charging component, of between 2 and 31 percent. In our dealings with various regulatory and government agencies, we expect stakeholders and the general public to be furnished with information in proportion to the impact of change, which in these cases is significant. We also sympathise with those water users facing the prospect of what appear to be disproportionately high price increases and recommend IPART increase the amount of detail it publishes with its final determination.

For Fish River, combined data from WaterNSW's Customer Advisory Groups presentation[3] and from Aktins[4] suggests price increases are largely attributable to the changes in the following building block items:

- a 59 per cent increase in operating expenditure (opex) allowances
- a 15 per cent increase in the return of capital
- a 44 per cent decrease in return on capital (which in absolute terms is more than offset by the above two items).

We are unable to find information that explains any increase in opex specifically for Fish River. From the outset, the 59 per cent increase relative to the current period allowance is double the 28.6 per cent increase in total opex for WaterNSW that IPART has set.[5]

Information we have gathered elsewhere in published materials suggests the amount of opex allocated to Fish River may be disproportionate. Specifically, opex to be recovered from Fish River is appropriately $20 million, or 10 per cent of WaterNSW's total.[6] This 10 per cent appears overstated with respect to the following high-level comparators:

- the relative proportions of regulated asset values — Fish River's regulated assets are valued at $94.5 million as at 2024-25[7], or 6.8 per cent of WaterNSW's total RAB value of around $1,400 million. As the majority of opex is incurred in the maintenance of assets, this is a strong indicator that Fish River opex is overstated
- opex as a proportion of total revenue requirements — WaterNSW's total notional revenue requirement is $461 million, with opex making up 43% of this (or 50%

[1] IPART, *Review of Water NSW's Rural Bulk Water Prices from 1 July 2021 to 30 June 2025*, Draft Report, March 2021, p. 2.
[2] ibid, p. 3.
[3] WaterNSW, *Rural Valleys Pricing Determination 2021-2024 Engagement Fish River – operating expenditure Jan 21*, Presentation for Customer Advisory Groups, slide 9.
[4] Atkins, *Expenditure review of WaterNSW Rural Bulk Water Services and Corporate Cost Allocation*, Final Report, 19 February 2021, p. 234.
[5] IPART, p. 27.
[6] Aktins, p. 91.
[7] WaterNSW, slide 10.

when excluding MDBA payments etc).[8] Opex as a proportion of Fish River's revenue requirement is much higher, at 55%[9]

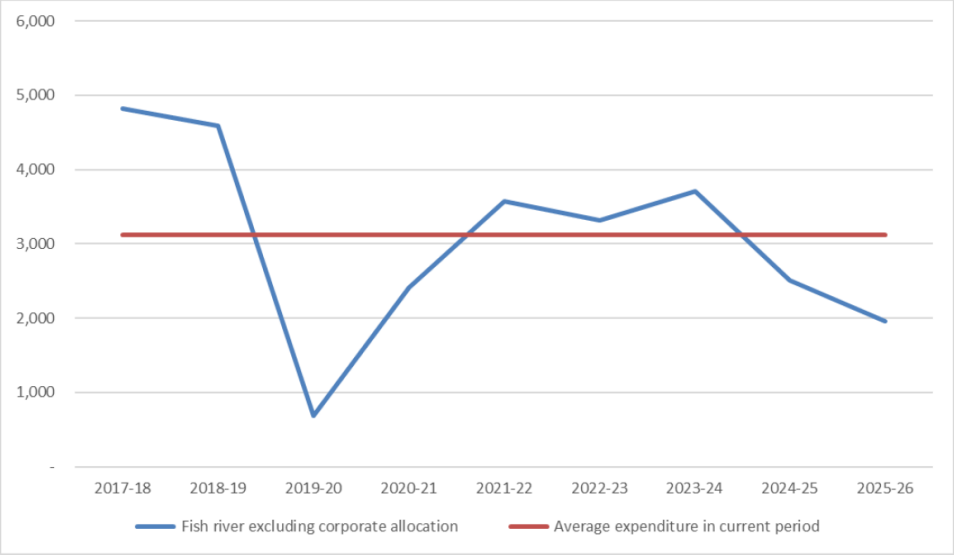
- relative to the proportions of entitlements or sales/ water usage volumes — while not a proper indicator of cost drivers, Fish River volumes contribute less than 1 per cent of totals for WaterNSW.[10]

We appreciate that WaterNSW's opex costs "appear to be allocated to the different valleys based on various assumptions"[11] however further investigation of how opex is attributed across valleys seems warranted. WaterNSW did not provide explanations for the range of increases in proposed opex across different valleys to Aktins[12], who identified various issues in WaterNSW's methods of allocating indirect costs. While several expenditure adjustments adopted by IPART appear to correct for this, overall we do not have confidence that regulated opex allowances on a per valley basis have been set in a robust manner.

We similarly do not consider that depreciation allowances for individual valleys has been calculated in a robust manner. We have not been able to find an explanation for the increase in depreciation for Fish River (for amounts proposed by WaterNSW or as determined by IPART). Asset life assumptions do not appear to have changed, and IPART states its depreciation methods are consistent with previous determinations.[13]

We do expect an increase in WaterNSW's total allowed regulatory depreciation given the amount of capital expenditure (capex) overspend in the current determination period. The spending profile for Fish River, however, does not follow the increasing trend in total capex, and instead appears to be in line regulatory allowances i.e. decreasing in 2019-20 and 2020-21. Forecast Fish River capex is also in line with historical averages, suggesting forecast depreciation allowances should also be relatively steady.

Figure 6-16 Fish river scheme capital expenditure excluding corporate allocation ($000k $20/21)



Source: Aktins, p. 125.

[8] IPART, p. 73.
[9] WaterNSW, slide 9.
[10] IPART, tables 9.1 to 9.4.
[11] IPART, p. 105.
[12] Atkins, p. 80.
[13] IPART, pp. 78-80.

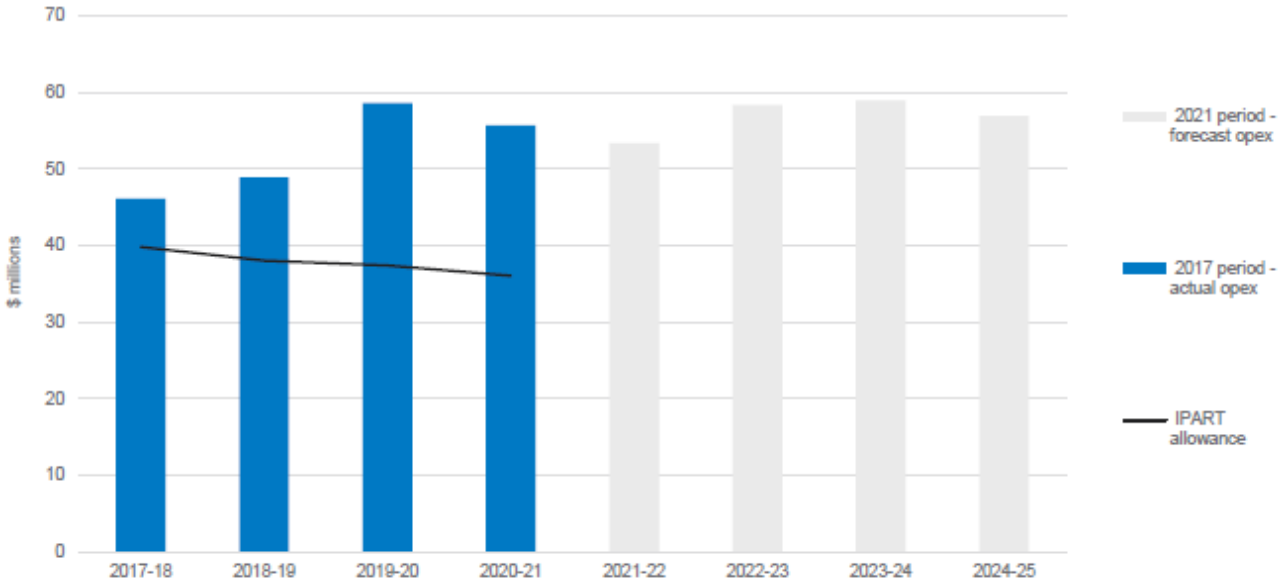
IPART sets a standard average life of new assets of 58 years[14], hence a 15 per cent increase in depreciation for Fish River (or around $0.3 million per year) would be equivalent to an asset increment (e.g. capex overspend) of around $17 million, which is implausibly large.

We have requested further details on asset calculations from IPART staff and recommend this information be published for all valleys to allow stakeholders to examine them and have confidence in IPART's determination.

Spending profiles and incentives

WaterNSW's proposal discussed the prospects of efficiency carry-over mechanisms for both capex and opex[15], however this issue does not appear to have been addressed in IPART's draft determination. The setting of expenditure allowances and incentives are inextricably linked. We recommend IPART give more consideration to this in making its final determination, including the extent to which it is constrained or otherwise guided by regulatory frameworks.

WaterNSW appears to basically adopt a trend approach to opex which is based on the most recent year's actual spending values, with various adjustments to reflect needs arising in the forecast period.[16] This approach creates an incentive to overspend allowances in the "base" year in order to inflate regulatory forecasts. While we do not suggest WaterNSW has done this, and note that Aktins appears to have undertaken a robust review of historic and proposed spending, WaterNSW's historic opex profile might otherwise indicate the outworking of this incentive.



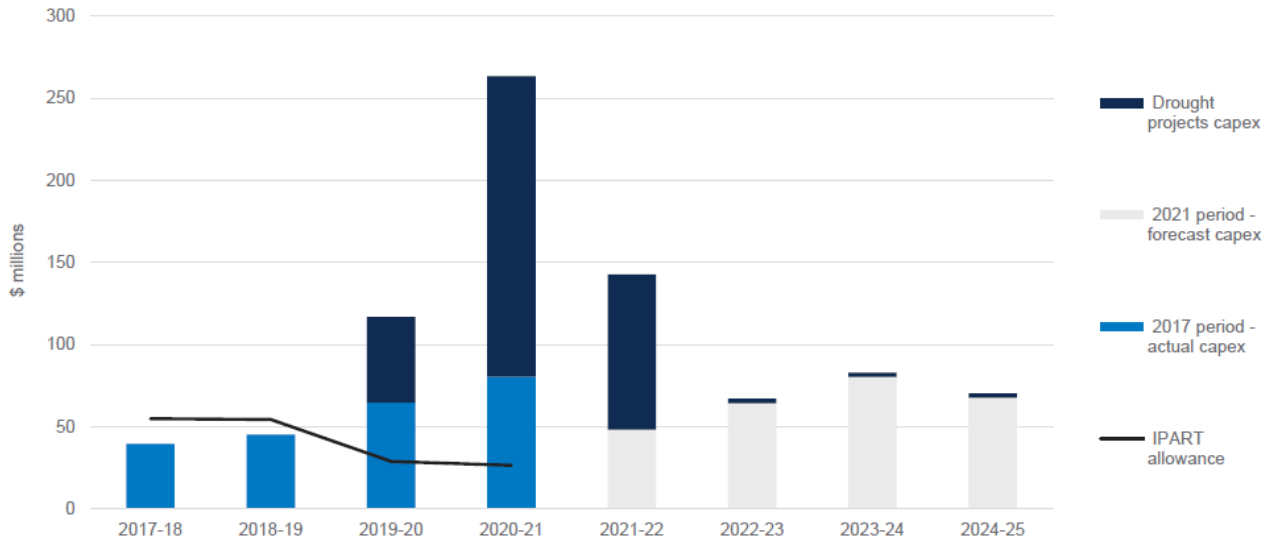
Source: IPART, online public hearing, 17 November 2020, slide 42.

[14] IPART, p. 80

[15] WaterNSW, *Pricing Proposal to the Independent Pricing and Regulatory Tribunal Regulated prices for NSW Rural Bulk Water Services 1 July 2021 to 30 June 2022*, June 2020, pp 46-47.

[16] Atkins, p. 76.

In the case of capex, and again noting that there appear to be valid expenditure drivers at play, WaterNSW's historic capex profile also aligns with what would be expected in the presence of a declining incentive power towards the end of the regulatory period. Namely, underspending in early years, with overspends in later years.



Source: IPART, online public hearing, 17 November 2020, slide 43.

It appears Atkins has devoted considerable effort to interrogating actual spending however ex post reviews are notoriously difficult, and on this basis we consider they do not provide a substitute for more substantive ex ante incentive arrangements. In the case of capex, Aktins recommended a reduction of $0.3 million out of total 2017-21 expenditure of $464.9 million.[17] This contrasts, at a superficial level, to Aktins identifying around $72 million of savings from WaterNSW's proposed capital spending of $363 million – an adjustment of 20 per cent.

The asset roll-forward approach administered by IPART creates the presence of windfall gains and losses in relation to using estimated "actual" capex amounts for the final year of the determination period, which should be corrected for with ex post adjustments in the same way as applied by, for example, the AER.[18] If this estimate and its impact on the RAB and subsequent revenues are not "trued up", there is an incentive on the regulated entity to overestimate capex and gain additional returns on and of capital. The large rise in capex for WaterNSW in 2020-21 (even when excluding drought projects) suggests any errors in this estimate would have quite a material impact on prices. It may be that IPART's models already account for this however they are not visible to stakeholders.

[17] Aktins, p. 138.

[18] https://www.aer.gov.au/system/files/Appendix%20F%20-%20Distribution%20roll%20forward%20model%20handbook%20-%20Electricity%20-%20version%203_1.pdf. See section 2.4

IPART's approach to determining fixed and variable pricing is not systematic

Cost-reflectivity in pricing is one of the cornerstones of good regulatory design, however it is challenging to define what this means in practice and moreso setting appropriate mechanisms to achieve it.

IPART's approach to determining pricing structures and cost recovery in practice are encapsulated in the following statements:

> In principle, we consider price structures should be cost-reflective, so the proportion of fixed and variable revenue Water NSW receives reflects its actual costs. This is more efficient as it minimises the risk that Water NSW will not be able to cover its costs, without shifting additional risk onto customers.
>
> Water NSW's main cost drivers, such as labour and materials, are the same regardless of the amount of water it sells in any given year. It is difficult to determine precisely what proportion of Water NSW's costs are fixed, but we estimate as a benchmark that 80% of costs are fixed and 20% are variable (i.e. increase proportionally with the amount of water sold).
>
> However, in many of Water NSW's rural valleys, we have chosen not to set cost reflective price structures (typically 40% fixed and 60% variable). This is because customers have historically preferred to pay charges based on the amount of water they use. This allows irrigators to match the charges they pay to periods where their incomes are higher, but creates a risk that Water NSW will not recover its full costs when water sales are lower than forecast.[19]

Basically all forms of regulated infrastructure, as they are highly capital intensive, arguably have predominantly fixed costs however usage charges are typically the primary means to recover costs. This is because customers prefer to be charged this way — they rarely see it 'fair' that they be charged without drawing some benefit from the assets being used. Another reason is that usage charges are sometimes taken as an approximation for the capacity of assets used. Further considerations around use of fixed versus volumetric charging include the relevant time horizon (with all costs being variable over the long term), whether customers are able to respond to variable pricing, and whether prices being used primarily to signal the cost of new or existing investment, or as a means to ration existing asset capacity in the short-term.

IPART's benchmark 80:20 fixed to variable split only applies in two of the twelve valleys for which its sets prices.

[19] IPART, p. 59.

Table 10.1 Draft decision on fixed to variable ratios and HS premiums

Valley	Fixed to variable ratio		HS premium[b]	
	2017 Determination	Draft decision	2017 Determination	Draft decision
MDB valleys				
Border	40:60 (with VA)	40:60 (with VA)	2.69	2.73
Gwydir	40:60 (with VA)	40:60 (with VA)	3.18	4.31
Namoi	40:60 (with VA)	40:60 (with VA)	2.15	2.87
Peel	80:20	80:20	10.35	10.55
Lachlan	40:60 (with VA)	40:60 (with VA)	5.63	6.76
Macquarie	40:60 (with VA)	40:60 (with VA)	4.75	5.11
Murray	40:60 (with VA)	40:60 (with VA)	2.04	2.27
Murrumbidgee	40:60 (with VA)	40:60 (with VA)	2.65	2.91
Lowbidgee[a]	100:0	100:0	N/A	N/A
Coastal valleys				
North Coast	90:10	90:10	1.29	1.29
Hunter	60:40 (with VA)	60:40 (with VA)	1.29	1.29
South Coast	80:20	80:20	1.91	1.91

a Lowbidgee has only supplementary licences.

b High security entitlement charges are calculated by multiplying the general security entitlement charge by the HS premium.

Source: Water NSW pricing proposal to IPART, June 2020, pp 126-130 and IPART analysis.

Source: IPART, p. 106.

IPART's latest draft decision and earlier 2017 determination offer a range of observations which explain why so many valleys are priced at a 40:60 fixed to variable ratio. In summary, the principle of cost reflectivity has been given much less weight, in favour of general stakeholder preferences to pay more via variable charges. Key considerations, including observations from stakeholders, appear to be:

- WaterNSW submitted preliminary analysis suggesting a cost-reflective tariff structure would be close to 100% fixed
- Stakeholders generally indicated that they prefer the lower proportion of fixed charges and higher proportion of variable charges as this gives them greater control in responding to water conditions and requirements.
- Some stakeholders were concerned that higher fixed charges would have potential cost implications for water users, particularly in times of reduced or zero allocations
- IPART considered that WaterNSW could undertake scenario modelling to demonstrate the impact of adjusting the fixed to variable ratio by valley (including how this relates to the need for a volatility price premium, given the allocation of volume risk)

- IPART's 2017 determination also flagged an intention to explore 'individual' customer tariff choice at the 2021 determination.[20]

With respect to Fish River, IPART has taken a different approach instead placing much higher weight on its 80:20 cost benchmark as well as concerns about revenue recovery in the face of changes in demand. EnergyAustralia previously raised concerns around application of a higher fixed proportion in terms of risk allocation, misalignment between the value of water used and prices paid, and hence incentives this creates for inefficient usage. IPART's responses to our views are as follows:

> We recognise that EA would face a higher charge as a result of the move to an 80:20 fixed to variable tariff structure. However, as outlined above, we generally favour an 80:20 price structure as we consider it strikes a reasonable balance between better reflecting WaterNSW's largely fixed cost structure and distributing risk between WaterNSW and its customers. In particular, the decision to move to an 80:20 fixed to variable tariff structure in the FRWS, combined with our decision to remove the UOM balance for the Wallerawang power station (see Chapter 8), is part of a combined package of measures to address a one-off structural change in demand.
>
> The UOM was originally designed to respond to variations in usage arising from variability in climate – ie, it is not suited to addressing large structural changes in demand. Our decisions on the price structure and the UOM will ensure that both EA and WaterNSW bear some of the costs related to the structural change. This will mean that while EA will bear most of the costs of the move to an 80:20 fixed to variable tariff structure (as its MAQ is unchanged due to contractual arrangements), WaterNSW will bear the cost of our decision to set the Wallerawang component of the UOM to zero. This effectively shares the costs of a major one-off structural change in demand in the FRWS across the relevant stakeholders….[21]
>
> In 2017 we increased the share of revenue coming from fixed charges across all customers in the FRWS from approximately 56% to 80%. This was a direct response to EnergyAustralia's decision to close the Wallerawang Power Station in 2015…. At the time we considered that if we maintained an even mix of fixed and variable charges, a large portion of the fixed costs for making water available to EnergyAustralia, which it had previously paid for through usage charges, would be shifted onto other customers' usage charges over the long-term. We did not consider this was fair to other FRWS customers.[22]

We recommend IPART explore the cost implications of reductions in EnergyAustralia's usage under its 'impactor pays' principle. We reiterate our prior comments that setting low variable charges creates perverse incentives regarding water usage and also highlight that, while allocations reduce for users during a drought, the marginal cost of water supply remains the same. This does not lead to economically efficient outcomes for all users which may value the entitlements differently. Applying a cost and scarcity-reflective pricing methodology will encourage users to conserve water during periods of drought.

Currently, EnergyAustralia funds approximately half of the costs associated with the Fish River scheme yet only uses around 1.2 GL of water per year, or around 20 per cent of total volumes. We consider such an allocation of costs to any one user is materially out of line with the benefits derived from the scheme and is not sustainable. Additionally, some costs such as secondary water treatment that only benefit some users (i.e. those

[20] IPART, pp. 105-108; IPART, *WaterNSW Review of prices for rural bulk water services from 1 July 2017 to 30 June 2021*, Final Report June 2017, pp. 116-122.
[21] IPART, 2017, p. 134.
[22] IPART, 2021, pp. 115-16.

requiring potable water) should not be borne by all users. For example, EnergyAustralia does not draw potable water from the Fish River Scheme. Furthermore, we note that there is no government contribution towards the costs for Fish River as arises in other schemes, again underlining the concern that EnergyAustralia as a large private user is being expected to contribute disproportionately to cost recovery.

Reflecting on IPART's comments on EnergyAustralia's demand reduction and impact on other users, our expectation is that over time this reduction will result in WaterNSW being able to realise cost savings in servicing Fish River, with commensurate price reductions for EnergyAustralia. As outlined earlier, we seek greater transparency on the cost drivers, pricing and building block calculations for Fish River and expect to be able to relate these directly to our usage patterns.

We are otherwise concerned that IPART is taking an inconsistent approach to cost recovery across users. In the case of Fish River, IPART appears to be primarily concerned about capacity to pay and the impacts of reductions in EnergyAustralia's usage, rather than the costs imposed by different users and efficient price signals. Over time our concern is that this might result in even more costs being recovered from fixed charges or other pricing distortions.

We note that other regulatory regimes, for example those relating to gas pipelines and electricity transmission[23], contain provisions to offer prudent discounts to very large users i.e. set prices below average costs, in order to discourage such users from by-passing the system. This discounting is 'prudent' as it avoids a situation of having to increase average charges for other users that would be required to recover costs where the large user exits or decides to significantly alter its supply or operations. We raise this concept as it may be better to consider how pricing incentives generally affect user behaviour and what this means for WaterNSW's revenue base over the long term.

The setting raw and filtered charges also warrants further scrutiny

We are concerned at the following statement from IPART:

> We note, however, that it is not transparent how these costs were allocated between filtered and unfiltered customers in the past. We consider that in the future Water NSW should better understand its short-run and long-run cost drivers in the FRWS and the relative impacts of filtered and untreated customers on these costs. We understand Water NSW does not currently have the required information to quantify these drivers.[24]

We accept that WaterNSW may not have sufficient information to justify charges in relation to cost drivers however consider this should be addressed for IPART's final determination. We note that IPART has been able to obtain information relating to the short-run marginal cost (SRMC) of filtered water, and we do not see the barriers in undertaking further investigation relating to other costs.

We finally question whether SRMC is a suitable basis for setting charges, and why prices are not reflective of fully allocated marginal costs i.e. long-run marginal cost, which is a core principle in setting prices in other regulatory settings.[25]

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[23] See rule 96 of the National Gas Rules and rule 6A.26 of the National Electricity Rules.
[24] IPART, p. 116.
[25] See for example, clause 6.18.5(f) of the National Electricity Rules.

If you would like to discuss this submission, please contact me [redacted]

Regards

Lawrence Irlam
Regulatory Affairs Lead