



# **Sydney Desalination Plant Price Review 2022-23**

**Response to IPART Draft Report  
May 2023**

Sydney  
**WATER**



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# Executive summary

Sydney Water Corporation (Sydney Water) welcomes the opportunity to respond to the Independent Pricing and Regulatory Tribunal's (IPART) *Review of prices for Sydney Desalination Plant Pty Ltd from 1 July 2023 Draft Report* (Draft Report), published in April 2023<sup>1</sup>.

Since the release of the Greater Sydney Water Strategy (GSWS)<sup>2</sup>, the role of SDP has seen a significant shift, from one of 'drought response' to more flexible, full-time operation in line with the needs of the wider water supply system.

Many of IPART's decisions in its Draft Report have taken this into account and made changes to SDPPL's<sup>3</sup> pricing framework to recognise and enable SDP's changed role under the GSWS. We support and welcome these decisions from IPART, including:

- Allowing Sydney Water and SDPPL flexibility to negotiate a minimum production level on an annual basis,
- Setting a simple two-part tariff for SDP, consisting of fixed water service and pipeline charges and a variable water usage charge, over the coming determination period,
- Clarifying cost sharing arrangements between third-party customers and Sydney Water, which appear to be sufficiently flexible to cater for a range of scenarios, including volume supplied and number of customers, and
- A range of changes to SDPPL's incentive mechanisms, such as the removal of the SDPPL's existing abatement mechanism and amendments to the Energy Adjustment Mechanism (EAM).

While we are supportive of many of IPART's draft decisions for SDPPL's price review, we do have concerns that some of IPART's draft decisions may pose a risk to the long-term interests of our customers. In particular:



- We do not support IPART's proposed Sydney Water-requested zero production charge. As proposed, the charge can only result in increased costs to customers due to any period of zero production, with no recognition of offsetting costs savings potentially achievable by SDPPL in many situations or the possibility that costs may not be higher for very short events. The proposed price may further preclude other operational responses that could result in a more efficient outcome for customers.
- We have some concerns with IPART's proposed benchmark approach to energy costs and reductions to SDPPL's chemical costs and pipeline maintenance, and

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<sup>1</sup> IPART (2022) *Review of prices for Sydney Desalination Plant Pty Ltd from 1 July 2023 Draft Report*.

<sup>2</sup> NSW Department of Planning and Environment, *Greater Sydney Water Strategy*, August 2022.

<sup>3</sup> In this submission, we make a distinction between the Sydney Desalination Plant assets (SDP), including the plant and distribution pipeline, and the entity that is licensed to operate and maintain those assets, Sydney Desalination Plant Pty Ltd (SDPPL).

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- We believe an abatement mechanism is required to incentivise SDPPL performance under its new operating conditions and ensure it is well-placed to respond effectively to all production requests.

We consider that taking a different approach to the above issues will help to protect the long-term interests of end-use customers and ensure that SDPPL continues to deliver additional value to customers over the coming future.

We would be happy to provide IPART with clarification or additional information that could be of assistance in their review.

## Structure of this submission

We have structured our submission to generally follow the order of issues in IPART's Draft Report. Accordingly, the rest of this submission is structured as follows

- **Section 1** covers IPART's draft decisions on SDPPL's service levels,
- **Section 2** covers IPART's draft decisions on SDPPL's expenditure,
- **Section 3** covers IPART's draft decisions on SDPPL's prices,
- **Section 4** covers IPART's draft decisions on SDPPL's risk mechanisms, and
- **Section 5** covers IPART's draft decisions on SDPPL's incentive mechanisms.



# 1 Service levels

## 1.1 Minimum production

Sydney Water supports IPART's draft decision to not set any 'fixed' minimum level of production, and to provide flexibility to Sydney Water and SDPPL to negotiate a minimum production level on an annual basis. As noted in our response to IPART's Issues Paper, we consider that a flexible approach will provide opportunities for SDPPL and Veolia to develop a better understanding of operational and maintenance requirements and risks associated with low flow operations, and remove the risk of a 'take-or-pay' arrangement.

We note we are working with SDPPL to agree a process for setting a minimum baseline volume, which needs to consider the Decision Framework for SDP operations developed by Sydney Water in consultation with the Department of Planning and Environment (and endorsed by the Minister for Water). As part of the process of developing an Annual Production Request (APR) under the Decision Framework, we will have regard to a range of factors, including operational strategies proposed by SDPPL that may require a specific volume of water across the year.

## 1.2 Average production

We consider IPART's approach to estimating a 'representative average production' level, equivalent to 68.4%, for SDPPL's capital expenditure and depreciation profiles to be relatively reasonable for the purposes of setting SDPPL's revenue allowance over the coming determination period.

We note that in any case, deviations in SDPPL's actual production level from IPART's 'representative average production' level of 68.4% can be addressed by an ex-post capital expenditure review at SDP's next price review to ensure that SDPPL is able to recover all its efficient costs of providing services but, equally, does not over recover.

Sydney Water would also like to clarify how the average production scenario used to derive SDPPL's revenue allowance may interact with Sydney Water's next price determination. Clearly, Sydney Water's next price proposal must reflect the fixed charges embodied in the final SDP determination, which have been built-up based on an assumed production profile. However, we assume we will retain the flexibility to propose an alternative production forecast based on application of the Sydney Water Decision Framework for SDP operation, and that this forecast may be above, below, or equal to the average production scenario adopted by IPART in the SDP determination.



## 2 Expenditure

In general, we support IPART's approach of assessing the efficient costs of utilities providing services to ensure that utilities have sufficient funding to maintain their assets in good condition, while delivering reliable services and long-term customer value.

We provide some specific comments below on some of IPART's draft decisions regarding SDPPL's operating and capital expenditure.

### 2.1 Operating expenditure

#### 2.1.1 Energy costs

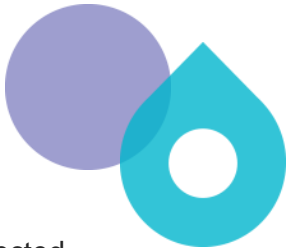

In our response to IPART's Issues Paper, we suggested that IPART consider the totality of assumptions being made in relation to energy (both volume and cost), so that the package of measures provides sufficiently strong incentives for SDPPL to continuously improve energy efficiency. We also note that the pricing framework should not inadvertently provide incentives that may work against SDPPL achieving on-going compliance with its Network Operators Licence and the flexible role envisaged under the GSWS.

In its Draft Report, IPART has decided to:

- Continue using a benchmark energy price methodology
- Adopt energy use assumptions (kWh / kL) that imply a higher level of efficiency than proposed by SDPPL
- Apply a continuing efficiency assumption of 0.7% a year across all opex items
- Accept SDPPL's proposal to narrow the core band of gains and losses under the EAM, but not accept the proposed change to gains and losses outside the core band
- Not accept SDPPL's proposal to pass-through various energy-related charges that may be applied to participants in the National Electricity Market (NEM)
- Suggest that SDPPL could pursue opportunities to explore trading surplus energy more actively in the new operating framework, noting that this is not a mandatory expectation and that IPART will no longer assess the prudence of SDPPL's energy trading strategies.

In relation to SDPPL's energy contracts, Sydney Water considers the contracts were an efficient response to the conditions of approval for SDP, uncertainty about future production and therefore energy use, and a highly uncertain policy and regulatory environment for matters such as climate change and carbon pricing.

IPART has decided against setting prices to reflect SDPPL's energy contracts, in part due to a concern that passing on these costs may weaken the incentive for SDPPL to seek the most efficient purchasing arrangements when they next go to market for the supply of energy.



We note that a potential consequence of IPART's approach is that utilities may be discouraged from seeking contract terms for goods and services that exceed the expected length of the next regulated pricing period, even if longer contracts are in the interests of customers. In effect, IPART's benchmark price approach (whether applied to energy or to other goods and services) means a utility can be exposed to what amounts to a retrospective review of contract efficiency at a future price review, based on information that was either speculative or unknown when the contracts were executed. This may discourage regulated utilities from pursuing opportunities that may be efficient and in the long-term interest of customers, due to a concern that costs could be disallowed at a future price review. In the case of energy specifically, the benchmark price approach may also result in end use customers paying 'above cost' for the services provided by SDPPL, creating a windfall gain for SDPPL that may undermine incentives to pursue on-going efficiencies in energy use and/or for other cost items.

### **2.1.2 Insurance costs**

As set out in our response to IPART's Issues Paper, we support the principle applied to SDPPL of the scope and level of insurance being determined by a prudent service provider acting efficiently in line with Good Industry Practice – as required under SDPPL's NOL.

We have considered the business interruption (BI) insurance options included in IPART's Draft Report and maintain our position that SDPPL should maintain full BI insurance cover, including to fund the costs of recovering from a force majeure event coverage. We have discussed this view with SDPPL management and consider that such insurance coverage, excluding the impact of any abatement or Service Level Incentive Scheme (SLIS) is in the best long-term interests of our customers.

We are also considering a proposal from SDPPL to incorporate a mechanism into the Water Supply Agreement (WSA) that reduces SDPPL's fixed charges to Sydney Water in a force majeure event by the extent to which insurance coverage indemnifies SDPPL.



### **2.1.3 Chemical costs**

In its Draft Report, IPART rejected SDPPL's proposed forecast escalation in chemical prices over the 2023 determination period, and accepted Atkins' recommendation to adopt FY22 costs. This was because Atkins noted there was insufficient information to support a likelihood of continued above-CPI chemical price increases.

We note that in our own experience, chemical costs have been increasing over the last few years, at a rate significantly higher than CPI. Since 2018, we have faced increases of between 10% to 45% on range of different chemicals used at our water treatment plants. We are aware many of these chemicals are also used by SDPPL and consider it is likely that above-CPI chemical price increases will continue for some time into the future.

### **2.1.4 Pipeline maintenance**

SDPPL's water distribution pipeline is a critical piece of infrastructure, as it is the only connection between SDP and the wider Sydney Water drinking water network.



We note that SDPPL proposed an increase in costs for the maintenance of this critical asset in its Price Proposal, and Sydney Water supported this increase. It appears that the proposed increase in expenditure was also supported by Atkins as part of their expenditure review<sup>4</sup>. In IPART's Draft Report, however, the allowance for pipeline maintenance appears to be inconsistent with Atkins findings on this point and we can find no discussion in IPART's draft report setting out a justification for not accepting SDPPL's proposal and/or Atkins' findings.

We seek further clarification from IPART on how IPART has determined the draft allowance for pipeline maintenance and where relevant, the reasons for departing from Atkins' findings.

## 2.2 Capital expenditure

### 2.2.1 Additional capital projects

As noted in our response to IPART's Issues Paper, Sydney Water is in-principle supportive of SDPPL's proposed additional capital projects as required to enable SDPPL's continued and increased future role in supporting greater whole of system resilience under the GSWS. This includes SDPPL's proposed second drinking water storage tank, which will provide additional site storage capacity and assist the plant to reliably respond to emergency requests.

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<sup>4</sup> See, for example, Atkins Updated Final Draft Report – SDP Expenditure Review, p. 9.





## 3 Prices

### 3.1 Price structures

We support a simple two-part tariff consisting of fixed water service and pipeline charges and a variable water usage charge. Based on the analysis conducted by Atkins, it appears efficiency does not vary materially with the volume of water produced. As such, we are prepared to support a single water usage price that applies at all levels of production. The simplified tariff structure will help provide flexibility, simplify the task of administering our payments to SDPPL and increase the clarity of the determination for other stakeholders.

### 3.2 Sydney Water-requested zero production charge



The 2017-2020 drought confirmed that SDP plays a critical role as a rainfall-independent supply that can be used to slow dam depletion. Events since the drought have also provided a practical demonstration that SDP can play a critical supporting role outside drought, increasing the resilience of the whole water supply network.

Under the new operating framework, we anticipate SDP will play a major role in reducing risk during the implementation of WaterNSW and Sydney Water's Joint Asset Management plan and capital infrastructure upgrades. While multi-year shutdowns are no longer likely, there may still be periods where the SDP will be asked to remain offline for weeks or months.

Under previous determinations, periods of zero production were managed with IPART determined cost-reflective shutdown and restart charges. SDPPL's proposal noted that the move to flexible operation presents substantial challenges for calculating a cost-reflective set of charges that would be suitable for all (or even most) potential shutdown and restart scenarios. Rather, SDPPL proposed that IPART allow for negotiated (unregulated) agreements between SDPPL and Sydney Water, where the parties would agree on the costs and cost savings that would apply given the unique circumstances of each request.

While we consider that unregulated agreements are permissible in the current framework, Sydney Water does not support them for the determination period commencing 1 July 2023. In its Draft Report, IPART has created a 'Sydney Water requested zero production day' charge to deal with this issue. The charge would be payable for each full day that Sydney Water has requested no water from SDPPL. In part, this was based on advice from Atkins that SDPPL would incur additional costs to keep the plant in a state of readiness, and these costs would not be recovered in either fixed or variable charges.

However, we understand from SDPPL's proposal that the costs referred to by Atkins are annual costs incurred as part of an operational strategy that seeks to maintain the plant in good working order at all flow levels (e.g., through asset rotation). Indeed, the charge proposed by IPART is ultimately based on the annual cost of that operational strategy but converted to a daily rate (with some other adjustments).



The zero-production day charge proposed by IPART is positioned as an additional charge that sits on top of the normal daily fixed charge. While we acknowledge that additional costs may be needed to maintain a high degree of 'readiness', we expect that SDPPL would be able to achieve offsetting cost savings by not maintaining the plant in a high state of readiness during longer periods of zero production (i.e., weeks to months). Indeed, this was the premise behind the set of shutdown charge contained in previous determinations, where the final charge was the net outcome of both additional costs and cost savings. Atkins have also acknowledged the likelihood of material cost savings where SDPPL has sufficient notice of a request for zero production of a longer duration.

We also question whether it is appropriate to convert SDPPL's annual cost into a daily rate. This presumes that very short duration shutdown events (e.g., 24 hours only) would necessitate a comparable operational response to maintain the plant in a high state of readiness. Evidence from other desalination plants (e.g., Adelaide) suggests this is unlikely to be the case.

Sydney Water therefore does not support the proposed zero production day charge, as it is not in the best interests of customers. As proposed, the charge can only result in increased costs to customers due to a period of zero production, with no recognition of offsetting costs savings potentially achievable by SDPPL in many situations. This may also violate the financial indifference principle, given SDPPL would fully retain the benefits of cost savings. The charge may also preclude other operational responses that could result in a more efficient outcome for customers.

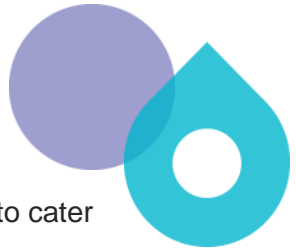

The ability of SDP to recover costs is essential to the flexibility envisaged in the Greater Sydney Water Strategy. We therefore support an allowance for the cost of maintaining a high degree of operational readiness being included in the daily service charge for the plant, along the lines of that proposed originally by SDPPL.

### 3.3 Third-party customer pricing

There are no legal restrictions on the ability of SDPPL to enter into contractual agreements for the supply of drinking water to customers other than Sydney Water.

In addition, while SDPPL must comply with annual production requests issued to them by Sydney Water, Sydney Water can adjust annual production requests to recognise that water may be taken by other customers. For example, suppose that SDPPL has arrangements in place to supply 25 ML a day to a large water user that is not Sydney Water, but the customer is located within Sydney Water's area of operations. In a drought situation, there is no presumption that such an arrangement must be terminated or suspended so that Sydney Water can issue an annual production request for 250 ML a day.

Provided the volume supplied is not exported from Greater Sydney, the identity of the customer receiving water from SDPPL is largely irrelevant from a system yield perspective. In this example, the customer can continue receiving 25 ML a day during drought (and/or at other times) and Sydney Water would issue a production request for the difference to equate the total volume supplied to all customers with the nameplate capacity of the plant (in drought) or, outside drought, the total annual volume generated under the decision framework.



The cost sharing arrangements proposed by IPART appear to be sufficiently flexible to cater for a range of scenarios, including volume supplied and number of customers.

That said, we were unclear about Table 9.9 of the Draft Report which, despite purporting to show the cost sharing outcome on a day where Sydney Water had requested a shutdown, shows Sydney Water receiving 150 ML of water on that day. We assume the table should instead have shown the customer taking 150 ML and Sydney Water 0 ML, with 100% of costs therefore being attributed to the customer.

# 4 Risk mechanisms

## 4.1 Cost of debt true-up

IPART's draft decision is to not accept SDPPL's proposal to apply an annual true-up (price adjustment) to reflect changes in the Weighted Average Cost of Capital (WACC) that occur when applying IPART's WACC calculation methodology.

Consistent with our submission to IPART's Issues Paper for this review, Sydney Water remains prepared to support an annual cost-of-debt true-up for SDPPL. Our position is also consistent with submissions on this question in previous IPART reviews, most notably in our response to IPART's draft report on the 2017 WACC review<sup>5</sup>:

*In reference to the impact on private equity firms, we acknowledge that while our bulk water suppliers may not face the same challenges we face in implementing annual price updates to retail consumers, they may have commercial and financial targets such as maintaining minimum levels of credit metrics and meeting financing covenants. These may require them to pass on immediately the cost/benefits of updated debt allowances rather than at the end of the regulatory period. It may also be the case that such immediate pass-through could reduce the costs to private equity firms, and hence the cost to Sydney Water's customers. We believe we can do this relatively simply, based on extending the existing pass-through arrangements for bulk water costs. Overall, in the interests of flexibility we would support an annual [cost-of-debt] pass-through for bulk water suppliers based on the following views:*

- *Private equity firms may in fact pass-through lower [cost-of-debt] amounts annually.*
- *Existing pass-through arrangements for bulk water costs can easily be accommodated as part of existing regulatory and administrative arrangements (see section below for more detail).*
- *Price impacts from bulk water suppliers (average residential customer bills is +/- \$1-1.2 per annum in nominal prices and less in real terms), relative to those derived from Sydney Waters RAB.*
- *Absent any unequivocal customer evidence for a preferred approach to cost pass-through/price changes, it would not be principled to deny bulk water suppliers their position (given small customer impacts)."*

Any variances introduced by an annual true-up are likely to be immaterial in the context of SDPPL's total bill to Sydney Water, for a line item that is (1) less than 10% of end-use water customer bills, and (2) is already likely to vary from year-to-year depending on the volume of water ordered.

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<sup>5</sup> Sydney Water's submission to IPART's WACC review draft report, 8 December 2017, p.12.



## 4.2 Cost pass-throughs and other true-ups

IPART has not accepted the various pass-through mechanisms and true-ups proposed by SDPPL, noting that:

- Some of the items nominated can be reasonably estimated in advance
- Many items are not material in the context of total O&M costs
- Material variances can be managed by determination re-openers, depending on the potential impact of requiring SDPPL to absorb the additional expense.

As noted in previous submissions to IPART<sup>6</sup>, Sydney Water considers that pass-through arrangements can be in the long-term interests of customers by ensuring the regulated utility recovers efficient costs and that prices paid by customers are cost-reflective of the services provided.

The use of targeted pass-through mechanisms can also reduce the incentive for regulated utilities to adopt large contingencies in their forecasts of future costs (noting that this risk is potentially low, given IPART must review the prudence and efficiency of forecast costs).

On balance, we support IPART's draft decisions to not accept the pass-through mechanisms proposed by SDPPL. If material variances do occur in the upcoming determination period, Sydney Water notes that SDP is expected to play a critical role in the wider water supply system, which now extends to both drought and non-drought situations. An inability to recover material variances in cost could provide an incentive for SDPPL to not fully respond to certain production requests, such as emergency flow requests, an outcome that may not be in the interests of customers.

We support IPART maintaining a flexible approach, including not setting pre-defined criteria for re-openers. However, a flexible approach may also require the use of other measures, such as a letter of comfort, similar to what occurred during the 2017-2022 determination period.

## 4.3 Expansion principles

We agree with IPART's comments that the expansion principles proposed by SDPPL would constrain the ability of IPART to assess whether costs are efficient, and therefore support the decision to not accept or formalise SDPPL's proposed principles.

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<sup>6</sup> For example, our response to Discussion Paper 3 issued by IPART in 2021 as part of their review into the regulation of water utilities.



# 5 Incentive mechanisms

## 5.1 Abatement and Service Level Incentive Scheme (SLIS)

In its Draft Report, IPART has removed the existing abatement mechanism that applies to SDPPL. We support this change, as we believe SDPPL's existing abatement mechanism is not suited to the new operating conditions that will apply from the commencement of the 2023 SDPPL determination. IPART has also not accepted SDPPL's proposed Service Level Incentive Scheme (SLIS), with a view that the scheme was unlikely to deliver incremental benefits beyond the incentives that SDPPL's new network operating licence (NOL) is expected to provide.

SDPPL's new NOL measures operational performance principally via the achievement of the APR, with a +/- 10% tolerance. SDPPL is only required to use best endeavours to meet all non-APR requests. We believe, notwithstanding these licence requirements, that an abatement mechanism is required to incentivise SDPPL performance under its new operating conditions and ensure it is well-placed to respond effectively to all production requests.

Specifically, Sydney Water would be supportive of the introduction of an abatement mechanism in this regulatory period by IPART that incentivises SDPPL to ensure the continuous availability of SDP to respond to emergency water security and quality issues.

Sydney Water expects to work closely with SDPPL over the coming regulatory period to ensure the learnings from SDPPL's new flexible operating model inform the design of potential new Outcomes Delivery Incentives (ODI) during the next regulatory period.

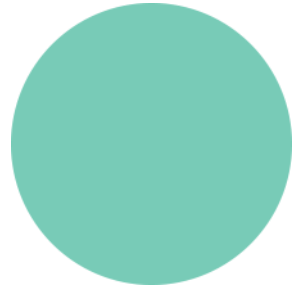
Given SDP's increasing role in Sydney's water supply, we believe the addition of more frequent performance reporting by SDPPL is appropriate. This reporting could be conducted on a weekly or monthly basis (i.e., in addition to SDPPL's annual NOL reporting requirements) to ensure SDP is continually available to meet Sydney's water security needs.

## 5.2 Energy Adjustment Mechanism (EAM)

We note and support IPART's proposed retention of the EAM and its proposed amendments, namely:

- Its application to any surplus energy under the Iberdrola energy contracts, consistent with the Terms of Reference, and
- The reduction in the core band (from 5% to 2.5%) retained by SDPPL, whilst retaining the 80%:20% split of gains or losses outside of this band between customers and SDPPL.

We believe the amended EAM will incentivise SDPPL to manage the gains and losses from surplus energy where these are controllable, and provide opportunities for SDPPL and its customers to work together to minimise energy use.



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