### Sub-group of Members of the Australian Water Association Water Efficiency Specialist Network

Review of the Sydney Water Corporation Operating Licence Issues Paper

Response by a sub-group of members from the AWA Water Efficiency Specialist Network

September 2018

### Introduction

The Australian Water Association (AWA) is Australia's largest member based association covering the water sector. The AWA has 14 Specialist Networks, with each network providing a platform for members to share knowledge and expertise linked to a particular area of water management and to promote aspects of sustainable water management. Specialist Networks are led by committees of volunteers elected from and by AWA's membership.

This submission has been developed by a sub-group of members of the AWA Water Efficiency Specialist Network committee with an interest in this topic, hereafter referred to as the Authors of this response. The response does not seek to represent the views of the other members of the Specialist Network committee nor the AWA as a whole.

The Water Efficiency Specialist Network has adopted an aim of leading the national conversation on water efficiency; "We believe that reduced water wastage is key to keeping water affordable for all users and providing resilient water systems for all communities. Our position is that water efficiency is not just a crisis response, but that maximising the utility of available water resources should be part of any approach to water planning or management that seeks to be prudent from an engineering, economic, environmental or governance perspective" (AWA 2018).

In considering water efficiency, the Authors take a broad view seeing water efficiency from a systems perspective. This means water efficiency refers not just to the efficiency of specific end uses but equally to the efficiency of water usage at other system scales. For urban water systems, this means water efficiency can be considered at the scale of a building, a precinct or suburb, or a whole supply system as well as for individual appliances or fixtures. Seen through this lens, water efficiency therefore encompasses issues such as the productive use/reuse of rain-water, stormwater and wastewater at a range of scales as well as water efficiency issues relevant to scheme water supplies, such as leakage.

### **Specific Responses**

The Authors thank the Tribunal for the opportunity to comment on the Review of the Sydney Water Corporation Operating Licence and makes the following specific comments in response to the questions raised in the issues paper (IPART 2018).

## Q1 What are your views on whether we have applied the Best Practice Licensing Framework appropriately for this review?

The Authors contend that the current Sydney Water Corporation Operating Licence and suggested amendments do not provide a sufficiently robust framework to ensure a secure and affordable water supply or water services for the customers of Sydney Water Corporation.

Meeting the objective of a secure and affordable water supply is the first objective of the NSW Government's Metropolitan Water Plan for Greater Sydney (NSW Government 2017) and should be the key objective for Sydney Water's operating licence. We believe the Tribunal need to ask: How does the operating licence support the provision of secure and affordable outcomes for customers? What specific obligations, performance measurements and reporting will the Tribunal require to ensure that this objective is met?

Sydney Water Corporation has a financial imperative to sell more water and therefore has a disincentive to engage in activities, such as demand management programs, which would improve the water use efficiency of its customers or conserve water. This imperative exists even where water efficiency is more economically efficient that additional supplies.

The operating licence therefore needs to have mechanisms that promote water efficiency and demand management that are strong enough to counter Sydney Water Corporation's financial interest and thereby meet the objective of secure and affordable water supply and water services.

Providing such mechanisms, through specific requirements, performance measurement and reporting, aligns with IPART's role as described in its Act. This states that the Tribunal give "considerations of demand management (including levels of demand) and least cost planning" in its deliberations (NSW Government 1992).

## Q2 Do you have any suggestions for how we can improve our effectiveness and efficiency in administering the licence?

The Authors suggest that the Tribunal give consideration to providing a dedicated and independent resource that could aid stakeholders in collating and developing submissions to its reviews. The specialist network is a voluntary committee and as such has very limited resources to engage with IPART processes. An independent resource provided by IPART could be expected to improve the quantity and quality of submissions by ensuring thorough community representation and providing the time required to develop the evidence base for substantive submissions.

# Q5 Do you agree with our preliminary view that the substance of, and intention behind, the licence authorisation clauses are sound? Do you agree that the existing drafting should make clearer that Sydney Water is authorised, but not required, to construct stormwater drainage systems?

The question of stormwater management is an area of concern for the specialist network. There is a need for a contemporary regulatory process in NSW around managing stormwater that sees it as part of integrated water cycle management (IWM). To this end, the operating licence should be amended to require Sydney Water to either manage stormwater directly in areas where it has current responsibility or to support and facilitate stormwater management by local government across its area of operations. The obligation should be that all stormwater management is conducted in a context of IWM.

## Q7 Do you agree with our preliminary view for a 5-year licence term? Do you have any views regarding the sequencing of licence and price review cycles?

The Authors are concerned about the proposed five-year term for the licence. Five years is too long a period for poor policy to be in place without opportunity for review and improvement. This is particularly important with the potential of a very severe drought impacting Sydney's water security during that period of the licence. A licence period of two or three years should be considered by the Tribunal in order to allow for the likely need for significant adaptation in the next five years.

Q11 What are your views on imposing licence obligations on Sydney Water to service WIC Act licensees or potential competitors, such as specifying minimum service standards, prescribing a negotiation process with or without a dispute resolution process, and requiring Sydney Water to disclose certain information? What are the long-term benefits to end-use customers?

The Authors believe that the water sector should be transparent, much like the electricity sector and that Sydney Water should have a requirement to disclose all potentially significant information on their assets and networks - not just to WICA utilities but to the broader market and general public.

Like the electricity sector, the provision of opportunity maps would inform the market about locations where investment in demand management and distributed supply could reduce the need to invest in large network assets. This would support the uptake of local sustainable options and reduce costs for all consumers.

The requirement should be to provide all relevant information required for network opportunity maps. This will include, but not be limited to, estimates of current and projected demand, avoidable costs, energy use and the like across all assets and networks, spatially.

Please see http://nationalmap.gov.au/renewables/ for the spatial data platform provided by the Australian energy industry to facilitate demand management and distributed supplies (AREMI, 2018).

Q 14 Do you agree with our preliminary view to maintain the requirements to implement and report on water conservation program consistent with its economic level of water conservation in accordance with the ELWC method, but to remove fixed targets for water usage and water leakage (which were phased out in the existing licence term) and remove the obligation for Sydney Water to notify and obtain IPART's approval of any proposed significant change to the ELWC method? Should the licence contain any additional obligations relating to water conservation activities?

The current ELWC method does not work to promote the economically efficient level of water efficiency and water conservation nor come close to promoting investment in demand management in line with least cost planning. The method does not adequately represent a whole of society perspective nor account for key components of the value of conserved water. These include the:

- Scarcity value of water in drought
- Spatial value in a network
- Externality values of leaving water in rivers

For scarcity value, the current ELWC method only accounts for the costs of operating the existing desalination plant and water restrictions (see Sydney Water 2016 page 12). Critically it does not account for the large capital cost of triggering the second stage of the Sydney Desalination Plant nor the other significant capital costs associated with contingency drought supplies (such as temporary desalination plants, regional desalination plants or new groundwater fields) as included in the Metropolitan Water Plan (NSW Government 2017). By excluding these real and significant costs that represent billions of dollars in capital, the ELWC significantly under values the scarcity component of the value of conserved water. This risks under investment in water conservation and substantial bill impacts for Sydney Water customers in the future.

The current method also does not account for spatially varying avoidable costs in Sydney Water networks. In specific locations, these costs will be orders of magnitude higher than the short run cost of supply currently incorporated in the ELWC. Including these network avoided costs would allow Sydney Water or others to target and avoid asset augmentations (driving down costs that are passed on to customers). The requirement for Sydney Water to provide the network

opportunity information as described under question 11 would also allow this information to be included in the ELWC.

Finally, the current method does not appear to account for externality values of conserved water. While the Sydney Water initial ELWC framework mentioned externality costs (Sydney Water 2016), these do not seem to be included in current estimates. Externality valuation could include avoidance of negative impact on river health as well as the specific positive externality associated with options such as wastewater reuse and stormwater harvesting. Values for these externalities have, for the most part, already been developed in the Sydney context.

As described under question 1, Sydney Water has a material conflict of interest in developing the ELWC method and in searching for demand management and water conservation options against this method. Put simply, attaining an economically efficient level of water conservation is not in Sydney Water's financial interest.

Having an economically efficient level of investment in water conservation and demand management is critical to maintaining affordability for customers and water security for Greater Sydney. It is also the only mechanism the Tribunal has of ensuring that demand management and least cost planning are being given due consideration in the licence (in line with IPART's enabling legislation). The method and approach therefore needs to be transparent, independent, fail safe and auditable. The Authors therefore urge the Tribunal to require of Sydney Water:

- an independent evaluation and redevelopment of the ELWC methodology, taking a whole of society perspective and considering all components of the value of conserved water from a systems standpoint.
- an independent study of the water conservation potential of Greater Sydney against the ELWC benchmark(s) and an audit to evaluate whether Sydney Water activities in water conservation and demand management are reasonable and proportionate given that potential.
- a backstop water use target set at 300 Litres per capita per day (LCD), the level that LCD has been at (or below) since 2011, to ensure water security for Greater Sydney from rapidly rising per capita demand.

Finally, we believes Sydney Water should have an obligation to promote and demonstrate innovation in water conservation and water efficiency in its licence. While only a minor cost in the short term, such an obligation could generate significant savings over the medium to longer term, allowing water security to be provided at least cost.

## Q18 Do the existing System Performance Standards measure the most appropriate and relevant service outcomes? Are they specified in the best way to provide cost-effective service outcomes?

## Q19 Do you agree with our preliminary view that we should use an economic approach to setting System Performance Standards that takes account of the value that customers place on the level of services?

Questions 18 and 19 are considered together.

The existing performance standards relate to water pressure, water continuity and wastewater overflows. However, performance standards related to providing a secure and affordable water supply should also be included in the licence. We recommend standards for:

- Least cost planning;
  - That when considering asset augmentation, Sydney Water must demonstrate it has considered demand management options in a manner equivalent to any augmentation. This would include consideration of improved water efficiency of end-uses and alternative water sources.

- That economic evaluations of assets for augmentation (over a reasonable threshold) should have a requirement for demand–side options to be considered in order to ensure that services are provided at least cost. The evaluations should include a holistic evaluation of costs and benefits for the whole urban water system and be made public. A market based tendering process should also be considered for demand management. This would be similar to the demand management requirements placed on electricity network operators in the Australian electricity market.
- Affordability of water services;
  - That household water bills are no greater than 2% of available household income (an international KPI used the US EPA).
  - That household water bills are no greater than 10% of available household income for low income households.

### Q31 Do you agree with our preliminary view to:

### - Remove the obligation for Sydney Water to maintain a cooperative relationship with the Department of Planning and Environment (DPE)?

The Authors oppose the removal of this requirement. Sydney Water must be required to cooperate with DPE on the Metropolitan Water Plan for Greater Sydney. If there is no requirement to cooperate, what is Sydney Water's obligation to maintain water security for the city?

We believe this requirement should be retained and enhanced to cover not just the Metropolitan Water Plan but also BASIX. The BASIX scheme is a critical mechanism for promoting water efficiency in new dwellings and Sydney Water should have a requirement in the licences to cooperate on BASIX with DPE and facilitate performance improvements in the scheme.

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