13 August 2020

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**Submission Upon Productivity Commission Issues Paper (May 2020)**

This is a private submission and is not intended to represent the views of any organisation that I currently have involvement nor previously have had involvement. I have worked in the water sector for 15 years with a focus upon regional water supply. The purpose of this submission is twofold, in the context of the Commission’s review of the National Water Initiative (NWI):

* To seek recognition and support for the concept of regional water grids and provide guidance upon their optimal configuration; and
* To seek clarification upon the intended meaning of certain provisions of the NWI that impact the formation of Regional Water Grids.
1. **Regional Water Grids**

Water Grids are widely recognised as an efficient means to improve water security, where there is sufficient economic capacity for their development. At a conceptual level, a grid requires the capability to move water across multiple catchments by a pipeline network where these catchments are not otherwise naturally connected (for example by river). Essentially, security of supply to users is improved via access to an aggregated catchment area.

It is recommended that the Commission consider recognition of the potential benefits associated with Regional Water Grids.

1. **Statutory Water Entitlements**

Currently, the NWI is silent upon the extent to which water allocation rights are required to be held by end users. I have experience of the NWI being interpreted as requiring end users to hold water allocation rights. I see value in a more explicit position on this issue.

The NWI does not provide any particular guidance on the distribution arrangements that should be applied to water entitlements. Paragraph 28 and 31 of the NWI come closest to the present issue.

Paragraph 28 states that:

*The consumptive use of water will require a water access entitlement, separate from land, to be described as a perpetual or open-ended share of the consumptive pool of a specified water*

Paragraph 31 specifies the characteristics of water access entitlements, including being exclusive, able to be traded, subdivided and mortgaged and be recorded in public registers.

In my view the better interpretation of these provisions is that the supply of water must be supported by statutory water entitlements, but not to mandate that such rights must be held by the end user.

The overarching policy requirement is that water is not over-allocated from its source that is, for all water use to be backed by a statutory water entitlement. Regardless of whether the right is held by the users themselves or by intermediaries such as a Regional Grid Managers, water supply could be supported by an statutory water entitlement that specifies the portion of water able to be captured and held at a storage facility.

It is recommended that change to the current wording of the NWI be made explicit on the issue to promote certainty around the potential creation of Regional Water Grids.

1. **Institutional Model**

On the basis that statutory water entitlements are capable of aggregation into a statutory entity (as an example) such an entity could operate to supply users with water through contracts with specified levels of service. The expertise of such entities could be focussed upon the greatest utilisation of the grid to meet the specific level of service requirements of its customers. Such a model would promote scale to support greater integration of technology and science by such bulk water service providers.

These institutional arrangements are consistent with the model that has evolved in the urban water sector but not broadly in the regions. This inconsistency ultimately can be seen to disadvantage regionally based population and the agricultural (and industrial) sectors by limiting access to improved security of supply.

Under the proposed model, statutory water entitlements are disassociated with the ownership of land and can be traded from one form of consumptive water use to another – in keeping with the requirements of the NWI. For completeness, trading would still be possible (and indeed encouraged) under this model. Instead of statutory water entitlements, long term contractual entitlements would be traded thus ensuring compliance with NWI para 31.

The above is premised on a aggregated contractual model, but it is recognised that there are alternative models to facilitate grid operation that may produce similar benefits.

It is recommended that guidance be given around institutional arrangements to recruit the benefits associated with the operation of a grid, consistent with existing NWI imperatives. Guidance should also be provided upon characteristics of the institutional arrangements for an optimal Regional Grid Manager assessed by reference to NWI imperatives.

1. **Economic Benefits**

A recurrent criticism of government investment in the water sector, especially regionally, is a failure to transparently demonstrate a positive cost-benefit analysis. Indeed, the existence of such criticisms is recognised in the present terms of reference (at p24). Such arguments contend that this inefficient use of public funds can result in “wealth transfer” to those who acquire the statutory water entitlement.

By consolidating such holdings into a publicly owned entity that issues long term (say 20 year) water supply contracts government has the potential to absorb the financial risk in the short term, whilst retaining the ability to receive a financial return should and when developing agricultural markets becomes more profitable. A publicly owned statutory water entitlement aggregation entity, such as a Regional Grid Operator, could be as an appropriate medium to have allocated such risk.

Assumptions around the capacity for agricultural markets to support higher prices into future have basis. Australia (and particularly Northern Australia) is geographically close to growing Asian markets for high-quality food. Moreover, Australia enjoys a premium reputation for its agricultural produce due to the perception with Asia of the purity of its environment. Over the coming decades, I suggest that there is a strong basis to forecast transition of the use of water from relatively low value crops to higher value products.

In such circumstances there is potential to uplift water prices should these markets (as an example) exceed nominated profitability benchmarks (that could be set and supervised by an independent economic regulator).

Another potential benefit of a publicly owned allocation aggregation entity relates the potential to support private investment in new dams and other bulk water suppliers by providing a single counterparty with whom agreement must be reached to achieve a Final Investment Decision.

Notwithstanding the potential public policy attributes, the necessary change to recruit these benefits needs to be the subject of careful consultation (on matters including compensation) with exiting statutory water entitlement holders.

In my experience agricultural prodcuers prefer statutory water entitlements to contractual entitlements because such statutory entitlements are viewed as real and tangible as opposed to a right under a contract which is intangible. Another reason is that statutory water entitlements do not require a counter party, the introduction of an intermediary is seen to introduce avoidable risk and inefficiency.

It is recommended that the Commission consider the potential to capture broader economic benefit when describing the characteristics of the institutional arrangements it may advocate for Regional Grid Managers. It is also recommended that the Commission provide guidance around the process to equitably support the establishment of Regional Water Grids.

Yours faithfully

**Jim Grayson**