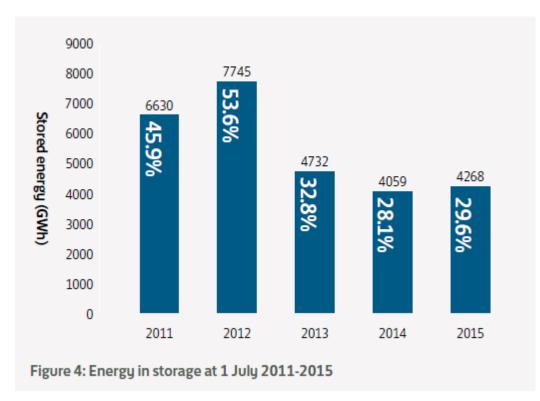
## Submission to the Inquiry into the financial position and performance of Government owned energy entities.

Graeme Wells

Wells Economic Analysis PO Box 3195 West Hobart Thursday, 26 May 2016

## Hydro Tasmania: Accounting for water in storage

Water in storage is a major asset for Hydro Tasmania (HT), and its energy value is reported annually<sup>1</sup>. The chart below shows recent fluctuations in this energy value.



Not all stored water has energy value – some is released for irrigation and other downstream uses under agreements or specific legislation. The associated water licences for downstream users are tradeable personal property rights.

Standard practice for commercial enterprises is to account for changes in the monetary value of all assets and liabilities in financial reports. Investment and dividend policy rely on an accurate assessment of financial position. A sustainable enterprise is unlikely to maintain dividends, for example, in the face of large downward asset revaluations.

It is not clear why HT practice in valuing assets does not conform to this standard commercial practice as in the case of, say Forestry Tasmania.

<sup>&</sup>lt;sup>1</sup> Hydro Tasmania, Annual Report 2014-15, p.32.

Unlike the more difficult valuation problem facing Forestry Tasmania's assessment of forest growth, there is evidently no difficulty for HT in establishing the quantum of stored energy. Given the pricing signals provided by the National Electricity Market, and ASX futures and options, together with contracted prices for many users, it should also be possible to provide an acceptable monetary value of energy in storage.

It may be that there is no directly applicable accounting standard.

- Treating stored energy as inventory is inapplicable as accounting standards prohibit carrying inventories at amounts greater than cost. The 'cost' of inflows to HT storages is zero, but its value is not.
- The standard for biological assets on which Forestry Tasmania appears to rely is not directly applicable.
- Volumetric accounts analogous to standard general purpose financial reports have been developed for a number of water catchments in Australia; recent reports are available at <a href="http://www.bom.gov.au/water/">http://www.bom.gov.au/water/</a>. This standard has not been extended to monetary valuation.

In the absence of an existing standard, it is **recommended** that HT develop a methodology for valuing energy in storage providing details as to

- Volumetric inflows and outflows of water, and
- Annual end-year monetary values of energy in storage, with changes broken down into volume and price effects.

If these measures cannot be incorporated formally into the regular financial statements, then they could be included as a satellite account.