

Hydro Tasmania Submission on Declaration of Raise FCAS

April 2015

Introduction

Hydro Tasmania has been providing regulated pricing for raise FCAS since February 2011. In this time several contracts have been sold to Aurora Energy Tamar Valley whilst it was owned by Aurora Energy.

There has been no other interest in the regulated product.

The criteria for revocation of the declaration of FCAS turns on four issues. They are:

Criteria	Comment
Market power	Some major customers are able to provide raise FCAS but choose not to. In markets in other countries customers provide a significant share of the FCAS equivalent. Hydro Tasmania does not have market power as there are several potential suppliers
Promotion of Competition	Hydro Tasmania also pays for FCAS and would welcome cheaper competitive sources but none have been forthcoming. In the last 4 years, two new sources have been developed by Hydro Tasmania to reduce the costs of raise FCAS. Regulation does not increase the promotion of competition.
Efficiency	It is not efficient to administer a process that has no customers. The availability of market hedges and the threat of re-introducing regulation are sufficient to facilitate market outcomes.
Public interest	The public interest is not served by having inefficient processes that create costs for zero benefit.

Hydro Tasmania proposes that the Regulator should revoke its declaration from 1 February 2016.

Background

In January 2010, the Regulator announced his decision to declare:

- Fast raise contingency frequency control ancillary service;
- Slow raise contingency frequency control ancillary service;
- Delayed raise contingency frequency control ancillary service;

to meet the Tasmanian local requirement as declared electrical services. There was a subsequent pricing investigation and Hydro Tasmania has been required to offer hedges at regulated prices since 1 February 2011.

Tasmanian Environment

The Tasmanian environment has changed significantly since December 2009 with the major changes being:

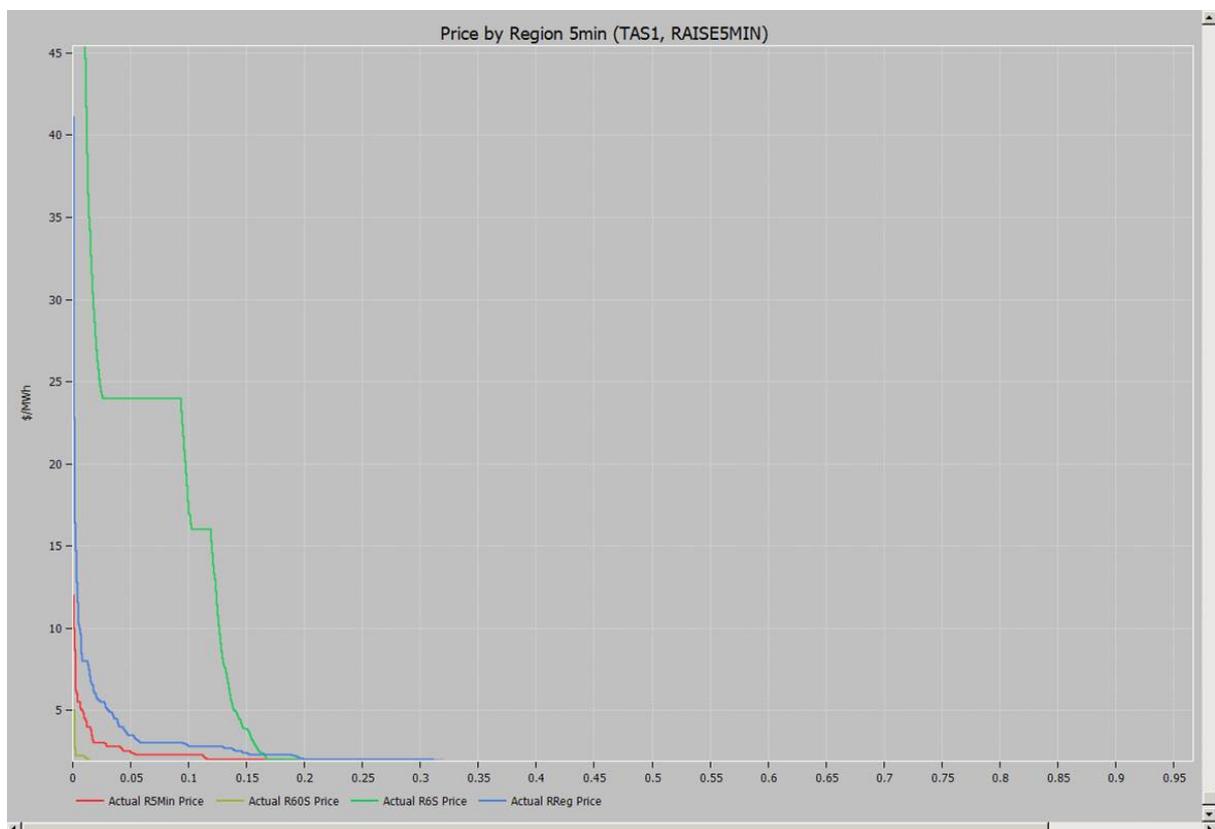
- Musselroe 168MW wind farm commissioned January 2014
- AETV transferred to Hydro Tasmania on 1 June 2013
- New services of FCAS developed

Current Situation with FCAS

FCAS contracts have now been offered for over four years. Several contracts have been sold to Aurora Energy Tamar Valley with the final contract being entered into on 15 March 2013 when it was owned by Aurora. Since then there have been no sales. No other party has purchased a contract during the period that the contracts have been offered.

The spot prices for raise FCAS have been very stable during this period. Figure 1 shows the prices for 1 Jan 2010 to 1 Jan 2015. Excursions to higher prices have been caused by network constraints or sudden changes in the system. They are typically of short duration and disappear as soon as plant can be dispatched to address the issue.

Figure 1: Cumulative Spot prices for Raise FCAS in Tasmania for 1 Jan 2010 to 1 Jan 2015



FCAS Pricing

The FCAS services are co-optimised in the dispatch engine. Generators offer energy bids and FCAS bids to AEMO. AEMO choose the cheapest way of meeting the forecast demand using the bids provided. Typically, if a generator is dispatched for energy, this will affect its ability to provide FCAS. AEMO may need to choose a more expensive energy provider in order for a lower cost FCAS service to be provided or vice versa. AEMO is concerned with overall costs so is willing to accept a more expensive service as long as the overall costs are minimised.

Hydro Tasmania prices FCAS in order to achieve optimal dispatch outcomes. FCAS is dispatched to meet global (NEM wide) requirements and Tasmanian dispatch outcomes are consequently impacted by the Victorian (and other regions) offers for FCAS, energy pricing, transmission constraints and Basslink's no-go zone (+/-50MW) limitations (FCAS cannot be transported when Basslink flow is in the no-go zone). Importantly it is not referenced at all to the regulated price of FCAS. The table below illustrates the average prices for the last 4 years.

Table 1: Spot prices compared with Contract Prices

Service	1 Jan 10 to 1 Jan 15	1 Jul 13 to 1 Jan 15
R6 \$/MWh	5.52	4.14
R60 \$/MWh	0.75	0.77
R5 \$/MWh	1.49	1.45
Total Spot \$/MWh	7.76	6.36
Contract \$/MWh	12.20	13.34

Note: It is not technically correct to add prices as the volumes for each product will be different but it provides an indicative figure

There are sometimes price spikes in the price of raise FCAS. . The typical reasons for these are sudden increases in requirement for FCAS due to lightning or Basslink flow level. These issues usually require synchronisation of further plant in the region to increase the level of supply. In the last 4 years, none of these price spikes have been as the result of high priced offers for raise FCAS by Hydro Tasmania.

Criteria for Revocation

The criteria for the Regulator to revoke a declaration¹ are:

- (a) That no electricity entity providing the declared service has substantial market power in respect of the declared service; or
- (b) That the declaration is no longer required for the promotion of competition, efficiency or the public interest.

Hydro Tasmania submits that it does not have market power and that the declaration is no longer required for the promotion of competition, efficiency or the public interest.

¹ Electricity Supply Industry (Price Control) Regulations 2003 Section 21

Market Power

The possible sources of raise contingency FCAS that could be made available via eligible market bids fall into three main categories (all with different cost implications):

- generators who have registered to provide a particular type of raise contingency FCAS (by reserving part of their energy production so they can, if required for system security, provide an increase in MW output within a specific period of time;
- customer loads registered to provide a particular type of raise contingency FCAS (by providing fast load reduction, if required, based on frequency deviation triggers); and
- stand alone technologies registered to provide equivalent mitigation (such as flywheels).

In Tasmania there are some large loads that could potentially be registered to provide raise FCAS for generator contingencies. This means that there are other providers who could potentially provide a large proportion of the R6 requirement for certain contingencies.

Other providers could participate if it made commercial sense to do so without creating unacceptable plant risk. This has not happened to date. Hydro Tasmania believes that this is due to the lack of value in the market.

Promotion of Competition

Several participants in their submission to the Regulator's issues paper noted that they "cannot continue to operate in a market which presents such risk" as high raise FCAS prices. None of these parties have shown any interest in the regulated FCAS hedges and have chosen to take the risk of high spot prices. It is interesting to note that spot prices have turned out to be cheaper than the regulated hedge recently.

Hydro Tasmania has internally approved customised FCAS hedges which it is able to offer to customers or generators who want to manage their FCAS risks. These hedges are priced based on a regulated methodology to reflect the actual cost of provision.

The "new entrants" for raise FCAS in Tasmania since the Regulator's declaration have all come from work Hydro Tasmania has undertaken in order to try to reduce the costs of raise FCAS. During the last 5 years, Hydro Tasmania has undertaken the following projects:

Modification	MW benefit	Cost to implement	Date Modification Completed
Arthurs Lake Pump	9MW	\$50k	February 2011
Reece 2 Governor Upgrade	20MW	\$1.8M	June 2012

Hydro Tasmania is strongly incentivised to reduce the cost of raise FCAS as it is a self serving product. A number of initiatives are under consideration to further reduce costs to Hydro Tasmania.

Promotion of Efficiency

It is clearly not an efficient process for a business to offer products which nobody buys. In addition, this is a regulated product which has an additional regulatory overhead making it even less efficient. In relation to raise FCAS, an extensive exercise was undertaken in order to develop a pricing mechanism. Should this methodology need review, further costs will be incurred.

The threat of declaration is an effective deterrent to any excessive prices in the future and represents a much more efficient way of addressing the issue.

Average prices over the period have been below the regulated price, which is evidence that an efficient market outcome can be achieved without regulation.

Public Interest

One aspect of public interest is in the development of competition and in efficiency gains. In the previous section we have shown that there are several potential suppliers who have chosen not to enter the market to date. The efficiency of the current arrangement is poor as the products are not being bought. Participants are choosing to take the risk of higher prices so, whilst it is a risk, their lack of action demonstrates that they do not perceive it as a material one. And in any case non-regulated hedges are readily available.

In its decision to declare the service, the Regulator noted² “If Hydro Tasmania’s pricing of FCAS deters new generators from entering the market, the future security of supply in Tasmania may also be affected which is not in the public interest.” With the declining energy demand and available sources of energy, this does not appear to be valid.

In the same section, the Regulator also commented on the high price of FCAS in Tasmania. This is caused by the very different technologies between hydro-generating plant and thermal plant. We noted earlier that the regulated price is in fact higher than the average spot price over the last 4.5 years.

Basslink is also able to transport raise FCAS from the mainland when it is not on constrained import or in the no-go zone. This facility is done through Basslink’s Frequency Controller which is a feature funded by Hydro Tasmania.

Summary

Hydro Tasmania’s position is that the declaration of raise FCAS should be revoked from 1 February 2016.

Raise FCAS prices are set by market forces in the NEM dispatch and without reference to the regulated price. Over the period the spot prices have been much lower than the regulated prices.

² Declaration of FCAS – Statement of Reasons page 34

Since parties have chosen not to purchase regulated FCAS hedges, they are still exposed to FCAS spot prices. The market outcomes over the period do not show any evidence of a market power issue.

Competition has not been enhanced by having a regulated product as there has, effectively, been no purchase. Since regulated FCAS hedges have been offered from 1 February 2011, contracts have only been sold to AETV, which is now part of Hydro Tasmania. Although several potential customers for the product expressed concern at the risks which raise FCAS exposed them to, all have chosen not to purchase a hedge.

Efficiency is not served by this declaration as it is very inefficient to have a product which nobody purchases and the additional costs of establishing a methodology and creating regular regulated prices. Customised FCAS hedges are available from Hydro Tasmania.

The threat of re-regulation following the revocation of this declaration will serve as a deterrent to any uncompetitive outcomes and will be a much more efficient and cost effective approach.