

Mark Patterson
Energy Security Board

24th July 2020

Submitted via e-mail to: info@esb.org.au

Dear Dr Mark,

Essential System Services – FTI Consulting Draft Report

The Australian Energy Council (the “AEC”) welcomes the opportunity to comment on the draft of the FTI Consulting (“FTI”) Report *Essential System Services in the National Electricity Market*.

The Energy Council is the industry body representing 22 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia, sell gas and electricity to over ten million homes and businesses, and are major investors in renewable energy generation.

It is understood there were delays in providing the FTI Consulting draft report to the Essential System Services (“ESS”) workstream. It was ultimately provided on 14th July 2020 to the ESS workstream members and presented on 16th July. As comments were required by 24th July, there has been insufficient time to develop these comments in consultation with our full membership. Therefore these comments should be taken only as initial reflections prepared by the AEC secretariat.

Introduction

FTI has prepared a comprehensive and thoughtful discussion on this broad and complex area. FTI clearly holds an excellent understanding of international electricity market economic concepts as well as grasping the principle features and challenges of the National Electricity Market (“NEM”).

It is pleasing that FTI calls out most strongly the glaring omission in the current NEM design of an explicit reward for several ESS’, which, as they are no longer produced as a byproduct of energy, are, predictably, in dangerous shortage. FTI focusses on ways to directly procure the unpriced ESS’, rather than proposing changing the energy market to ahead/central commitment, which seems extraneous to the missing ESS markets problem.

FTI’s presentation of three approaches to acquiring ESS is a very helpful characterisation. The report shows a preference by FTI to move up the options from one to two to three wherever and whenever such a shift is practical. The AEC would largely agree with FTI’s preferences, however for the most immediate ESS shortage, System Strength, there is some doubt as to whether fully relying on three will ever be reasonably practical.

Although not directly relevant to the ESS work, FTI has in several places referred to the advantages that an operating reserve market, such as one being presently contemplated in a rule change¹, could

¹ <https://www.aemc.gov.au/rule-changes/operating-reserve-market#:~:text=On%202020July%202020%20the%20Australian%20Energy%20Market,respond%20to%20unexpected%20changes%20in%20supply%20and%20demand.>

have to assisting the scheduling of ESS. This is an interesting new observation that should be shared with that rule change process.

Discussion

Themes for procuring ESS

FTI has correctly identified that there is considerable evidence that the first approach (Directed ESS/self-provision), which is presently being relied on for purchasing system strength and inertia, is unsatisfactory. It is also being temporarily relied upon for the purchase of narrow-band Primary Frequency Response. The immediate goal of the ESB's work should be to move ESS procurement out of this category wherever possible and as soon as possible.

The paper's discussion then extends to the merits of purchasing under option two (centralised contracts with networks or market operator) or three (spot markets). FTI's attractions to using option three wherever possible is entirely consistent with the AEC's philosophy of preferring competitive markets, and we would agree that where competition is likely to be feasible, it tends to produce more efficient and innovative outcomes than relying on option two.

The NEM has successfully acquired frequency control services from spot markets for twenty years, and we believe that narrow band Primary Frequency Response ("PFR") can similarly become a market arrangement. This was made mandatory in response to perceptions of an emergency, but the obligation is fortunately sunsetted for 2023 by which time a market is intended to be in place. (Note that FTI paragraph 2.31 has overlooked this sunset). The AEC is presently investigating just such a market mechanism for narrow band primary frequency response².

It is not clear that system strength can easily be procured through a spot market arrangement. As FTI notes, requirements are very localised and the supply of it is not easily described in the form of a commodity, which will be necessary for competitive real-time recruitment.

FTI's views that centralised long-term contracts may lead to over-purchase and network asset preferences, which are inefficiencies ultimately paid by customers, are understood. However the size of the potential inefficiencies of over-procurement of the exotically ESS' are not necessarily large in the scale of the NEM, particularly in comparison to energy costs. Option 2 has the advantage of being simple (at least from the perspective of an energy investor, if not a central procurer) and therefore will have spill-over benefits for customers by reducing complexity and risk to new entrants in energy. This observation is consistent with that in paragraph 17 of the executive summary.

FTI may have over-stated the attractions of moving from option 2 to 3 in some ESS', for example:

- FTI has noted that option 2 obliges the central procurer to forecast well in advance the likely need for the ESS, whereas option 3 allows it to be bought "just in time" to only the amount actually required. However this forecasting risk is not removed by option 3, but transferred to the competitive market who must anticipate what the need is likely to be and speculatively invest to supply it. For a well-understood commodity, like energy, this is actually beneficial as competitive forecasters are putting their own money at stake. However it is an open question as to whether a competitive market could be sophisticated enough to speculate on exotic services such as system strength. And, if they under-estimate, it can have very adverse consequences for the much more significant energy market.
- In order for option 3 style recruitment to be reasonably investable without having to entirely rely on speculation, decentralised forward contracting against a commodity price is required. The NEM achieves this very effectively for energy where a fungible central-clearing price can be calculated, and buyers and sellers understand very well their offsetting exposures. It is

² Information on Double-sided-causer-pays as a way of procuring narrow band PFR can be found at <https://www.energycouncil.com.au/analysis/paying-for-primary-frequency-response-double-sided-causer-pays/>

not clear that a spot market regime that can support decentralised forward contracting can ever be created for the exotic ESS'.

Long versus Short-term Procurement of ESS

The concerns listed above on relying on Option 3 for exotic ESS' relate mostly to the investment timeframe. This provides the potential of something of a mix between Options 2 and 3. Option 2 could be relied upon to provide the investment signal, for example it could provide a long-term capacity-style payment to ensure the suppliers are in place. Short-term (Option 3) style markets can then be created to deal with service commitment, dispatch, day to day payments and so forth, which should drive productive and allocative efficiencies including for management of optimisation.

Any questions about this submission should be addressed to the writer, by e-mail to Ben.Skinner@energycouncil.com.au or by telephone on (03) 9205 3116.

Yours sincerely,



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