Grid access reform (COGATI) review – technical working group # 9
9 July 2020

The ninth technical working group meeting was held by videoconference on 9 July 2020.

The technical working group was formed by the Australian Energy Market Commission (AEMC) to provide advice and input into the progression of the transmission access reform (COGATI) (EPR0073).

All enquiries on this project should be addressed to Russell Pendlebury on (02) 8296 0620 or Tom Walker on 0410 764 175.

The attendees of the meeting are listed below.

Member	Organisation
Aden Fanning	InterGen Australia
Andrew Kingsmill	TransGrid
Angus Holcombe	Meridian Energy
Anh Mai	AusNet Services
Arista Kontos	Australian Energy Regulator (AER)
Ben Skinner	Australian Energy Council
Bill Jackson	ElectraNet
Dan Mascarenhas	AGL
Dr Darryl Biggar	Australian Energy Regulator (AER)
David Scott	Australian Energy Market Operator (AEMO)
Dean Gannaway	Aurizon
Donovan Marsh	Energy Security Board
Gloria Chan	Clean Energy Finance Corporation (CEFC)
Greg Hesse	Powerlink
Henry Gorniak	CS Energy
Jack San	Ausnet Services
Jean-Christophe Cheylus	Neoen
Jevon Carding	Lighthouse Infrastructure
Jill Cainey	Energy Networks Australia (ENA)
Joel Gilmore	Infigen
Jon Sibley	Australian Renewable Energy Agency (ARENA)
Kirsten Hall	Australian Energy Market Operator (AEMO)
Lawrence Irlam	Energy Australia
Lillian Patterson	Clean Energy Council (CEC)
Mike Chadwick	The Australian Financial Markets Association (AFMA)
Miyuru Ediriweera	Public Interest Advocacy Centre
Nabil Chemali	Flow Power
Panos Priftakis	Snowy Hydro
Peter Nesbitt	Hydro Tasmania

Rob Koh	Morgan Stanley
Robert Pane	Intergen
Ron Logan	ERM Power
Sam Ingram	Cleanco
Sarah-Jane Derby	Origin Energy
Stephanie Bashir	Representing Tilt Renewables
Tim Astley	TasNetworks
Tom Geiser	Neoen
Verity Watson	Energy Networks Australia (ENA)
Wayne Gagel	Westpac
Will Taylor	NERA Economic Consulting – Conducting a cost-benefit analysis of reforms for the AEMC

The AEMC's project team attended and is listed below.

Name	Position
Victoria Mollard	Acting Executive General Manager – Security & Reliability
Orrie Johan	Adviser – Transmission and Distribution Networks
Russell Pendlebury	Senior Adviser – Retail and Wholesale Markets
James Tyrrell	Senior Adviser – Transmission and Distribution Networks
Ella Pybus	Consultant – Cambridge Economic Policy Associates
Tom Walker	Senior Economist
Jessica Scranton	Lawyer
Tom Meares	Graduate Advisor
Peter Thomas	Digital Communications Manager
Declan Kelly	Senior Adviser – Security & Reliability

At the start of the meeting, the 'competition health warning' was read out, and copies of the protocol were sent out to each member of the working group in advance of the meeting.

After an introduction and recap to the project, the meeting focussed on two areas in relation to the impact of transmission access reform on liquidity:

1. how the implementation of FTRs and LMPs would impact on the contract market, including on the liquidity of trade in contract market instruments
2. how financial transmission rights (FTRs) could be traded, and considerations about how liquid this product may be.

Introduction

- The project team first gave an overview of an updated project timeline from the last meeting. The project team noted that there would be a number of upcoming technical working group sessions in July and August, including meetings on topics that members of the working group have suggested.
- In addition, there will be a round of formal consultation on the entire model in August, as well as several public forums (focussing on the modelling, and a simplified example).
- The project team introduced participants and outlined the purpose of the session, that is, to discuss the impact of transmission access reform on existing contract markets and its liquidity, as well as considering the market for FTRs.
- Stakeholder questions and comments following the introduction (and responses from the project team) included:
    - Participants asked for a number of terms to be defined. The project team noted these definitions will need further refinement, however a good assumption for the session today is that:

- the *primary FTR market* is defined as the market for FTRs transacted via the FTR auction run by AEMO (including where participants may sell back their FTRs to AEMO to be reissued in the auction); while the *secondary FTR market* refers to transactions of FTRs that occur outside of the AEMO auction.
- *physical participants* include those trading in the spot market (e.g. generators, retailers), while *non-physical participants* relates to those who trade outside the spot market e.g. traders or brokers.

Contract market liquidity

- The project team outlined the drivers of contract market liquidity and the key market structural characteristics that have a bearing on liquidity (in any market).
- The project team noted that stakeholders have raised concerns that the introduction of LMP will decrease contract market liquidity. Some stakeholders have suggested that this will occur since it will shift the existing volume risk (i.e. you get paid the same price no matter where you are allocated in a region, but either get dispatched or not) to a basis risk (i.e. rather than receiving the regional price, you will now receive the local price + a payout under the FTR). For contracts that will be struck at the regional price, a generator may have to bear the risk that the LMP that it is settled at is different to the contract strike price.
- The project team set out that holding FTRs will help generators manage congestion risk i.e. if generators are not dispatched due to constraints on the system, and hold an FTR they will receive a payout from their FTR. This will help generators manage any basis risk that may arise. This should give generators the confidence to preserve or enhance the amount of capacity they can offer into the contract market, thereby not affecting current liquidity levels, and at best, improving them.
- The project team noted that under the current specification of the reform, given that the payouts under the FTRs will be relatively firm, if a participant obtains sufficient amount of FTRs, then their risk position should be unchanged.
- The project team set out a number of elements of the current specification that also seek to preserve and enhance contract market liquidity, including:
    - retention of a regional price (whether it is the exiting RRP or a volume weighted average price) should encourage contract market liquidity at regional hubs
    - a transitional allocations of FTRs to existing generators
    - a four year implementation timeframe post the completion of the final rule change, beyond the timeframe of most ASX and OTC traded contracts, and providing time for other contracts to be adjusted where necessary.
- The project team outlined benefits of transmission access reform in relation to inter-regional trade, including that
    - inter-regional FTRs (i.e. those that pay out on differences in price between one regional price and another) will be firmer than the existing SRA units
    - therefore, not only will participants be able to buy FTRs that hedge the price difference between their local node and the regional price, they will also be able to hedge price differences that arise between any two regions. Given that these inter-regional FTRs are firmer than SRAs, market participants will be more likely to sell contracts into other regions, promoting inter-regional trade.
- The project team posed a series of questions to the technical working group:

- How does congestion impact what participants are able to offer in the contract market today?
- Given that FTRs are likely to have a high degree of firm, how does this impact the participant's risk position versus the current market arrangements?
- How does this impact participant's willingness or ability to offer hedges in the contract market?
- Given FTRs are firmer than SRAs, is this likely to improve liquidity in lower liquidity regions of the NEM?
- How does the cost of purchasing FTRs impact liquidity? If they are low cost, what does this mean? If they are high, what does this mean?
- What changes to the current design specification would further preserve or enhance contract market liquidity?

- Stakeholder questions and comments on contract market liquidity (and responses from the project team) included:
  - Stakeholders asked whether primary FTRs can be sold in the secondary market? The project team outlined that there would be no prohibition on FTRs being sold in a secondary market. There a number of considerations that would need to continue to occur, including whether any resale into a secondary market could be tracked, or participants could be required to report any resale.
  - Participants raised the fact that the price of FTRs will have to be factored into contracts being offered into the wholesale market. It was suggested this is a question that will need to be considered and observed over the long term i.e. how the cost of FTRs is reflected in the contract market. The project team noted that it should be expected that the outcome should be the same as any other cost a generator might face in offering capacity in the contract market. Participants agreed with this, but because this is 'new' it would be worthwhile observing outcomes.
  - Stakeholders queried whether participants will need an Australian financial services licence to trade FTRs. The project team noted that each participant should seek their own legal advice on this question, although our initial view is that an AFS licence would likely be necessary.
  - Participants queried whether the FTRs would be financial or physical?
    - The project team responded that FTRs are financial. Physical rights create a number of inefficiencies and complexities given the physics of the electricity system.
    - It was also noted that the current specification of the FTRs has these being 'fixed volume' i.e. being purchased for a particular MW quantity, with the quantity purchased not varying. Time of use rights will be available for purchase.
    - If more bespoke products were desired, then these could potentially develop as part of the secondary market.
  - Some participants disagreed that FTRs will lead to increased liquidity. This was for a variety of reasons,:
    - the quantity of FTRs sold may be less than the actual network capacity on the day. The project team noted that it would consider this point further.
    - the increased basis risks for participants, may result in the market being more complex and so impacting liquidity.
    - while the firmness of the FTRs has increased, because they are not fully firm, this may not increase the amount of contracts sold into the market.
  - In relation to the discussion point about FTRs, some participants noted that there is already an ability in the market to firm SRAs through participant analysis and ability, and that most incumbents are comfortable firming their own rights. However, this

might not apply to newer or smaller entrants into the market who might benefit from a firmer inter-regional hedge.

- A participant asked why we do not make rights available based on generator availability. The project team answered that this was considered, and is discussed in more detail in earlier reports. In summary, while it would be theoretically possible to sell FTRs that vary based on generator availability, this would be very complex and may create issues with the firmness of the FTRs. The time of use FTRs are designed to try and approximate some of the benefits of variable FTRs i.e. if a generator is a solar farm, then it may decide to only purchase FTRs that pay out during the day.

Liquidity in the FTR Market

- The project team outlined design decisions in the current specification that have a bearing on liquidity in the sale of FTR instruments. This includes whether non physical participants should be permitted to take part in the auction for FTRs, the length of FTRs available, transitional allocations of FTRs and the types of right available, including continuous rights and time of use rights.

- The project team outlined the potential for the emergence of a secondary market and the way in which the proposed design allows for this by placing no restrictions on secondary trading. As a result there will be multiple avenues by which FTRs can be acquired, including: being purchased in the auction run by AEMO (either from FTRs being released by AEMO, or from those FTRs sold back to AEMO by participants) or from a secondary trade. This should promote liquidity in these products making sure that they are available to those parties who value them most.

- Stakeholder questions and comments on liquidity in the FTR market (and responses from the project team) included:
  - Participants asked for clarification on secondary trading. The project team responded that the primary market product is the same product that would be sold into the secondary market. In addition, synthetic products, not directly backed by congestion rent, could also be sold in the secondary market.
  - Participants asked whether the introduction of LMP without FTRs is possible. The project team responded that this is possible – indeed, this occurred in New Zealand. However, introducing LMPs without FTRs would increase the basis risk faced by generators; and so, we consider it desirable for FTRs to be introduced at the same time to minimise this risk. In addition, FTRs were requested by stakeholders to aid in risk management.
  - Participants asked for clarification on the current restrictions to trading. The project team clarified that the only restriction we have been contemplating is in restricting non-physical participants in the primary auction that AEMO would run for “intra-regional” FTRs. However, we are interested in stakeholder views on this question. In response:
    - Some participants were supportive of having financial players participate in the FTR auction, stating that competition laws would act as an effective deterrent to uncompetitive behaviour in the market. Some participants also considered that it would be difficult to stop speculators participating in a primary market. Stakeholders suggested there may be learnings on this point that can be observed from overseas markets.
  - Participants questioned how will FTRs work with plant outages e.g. if a participant expected to have some units out on maintenance for a particular quarter and so only purchased FTRs to the operational unit capability, but then the plant comes

back online early – the generator may not have as much FTRs as it would like. Conversely, a participant may hold FTRs but then has a major outage, and so it would have paid for FTRs that are not then utilised due to the outage. The project team noted that this argument supports secondary trading, the ability for generators to sell FTRs back into the AEMO auction and more frequent FTR auctions.

- There was some discussion about batteries during the session. It was noted that there will be changing incentives for batteries, with the introduction of locational pricing giving batteries much more granular price signals regarding their location in order to price arbitrage.

Next steps

- The project team outlined upcoming technical working group meetings in July and August on key design topics, public forums in August and the opportunity for written submissions in consultation with the formal COGATI technical specification consultation paper to be published in August following the publication of the ESB's post 2025 market design consultation paper.
- The project team invited – as always – stakeholders to reach out for bilateral meetings or to share thoughts and reflections on the technical working group.