COGATI 2019 review – technical working group #4

15 November 2019

The fourth working group meeting was held in Melbourne on 15 November 2019.

The working group was formed by the Australian Energy Market Commission (AEMC) to provide advice and input into the progression of the Coordination of Generation and Transmission Investment (COGATI) 2019 review (EPR0073).

All enquiries on this project should be addressed to Jess Boddington on (02) 8296 0626.

The attendees of the meeting are listed below.

Member	Organisation
Andrew Kingsmill	TransGrid
Arista Kontos	Australian Energy Regulator
Ben Skinner	Australian Energy Council
Bill Jackson	ElectraNet
Craig Memery	Public Interest Advisory Centre
Dan Mascarenhas	AGL
David Havyatt	Energy Consumers Australia
David Scott	CS Energy
Dean Gannaway	Aurizon
Donovan Marsh	Energy Security Board
Emma White	ERM Power
Georgina Snelling	EnergyAustralia
Gordon Leslie	Monash University
Greg Hesse	Powerlink
Jill Cainey	Energy Networks Australia
Joel Gilmore	Infigen
Lillian Patterson	Clean Energy Council
Katie Yates	AusNet Services
Kirsten Hall	Australian Energy Market Operator
Nishana Perera	Australian Energy Regulator
Oliver Story	Australian Renewable Energy Agency
Peter Nesbitt	Hydro Tasmania
Robert Pane	Intergen
Sally McMahon	Spark Infrastructure
Tom Geiser	Neoen
Verity Watson	Energy Networks Australia

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

Name	Position
Victoria Mollard	Acting Executive General Manager – Security & Reliability
Tom Walker	Senior Economist
Jess Boddington	Adviser – Transmission and Distribution Networks
Orrie Johan	Adviser – Transmission and Distribution Networks
Russell Pendlebury	Senior Adviser – Retail and Wholesale Markets
Ella Pybus	Consultant – Cambridge Economic Policy Associates
Jessica Scranton	Lawyer

At the start of the meeting, the 'competition health warning' was read out, and copies of the protocol (attached) were given to each member of the working group.

The meeting focussed on three areas:

1) preliminary stakeholder feedback to the October 2019 COGATI discussion papers on access reform and renewable energy zones (REZs)
2) key COGATI access model themes for further input based on stakeholder feedback to the October 2019 Directions Paper, including:
    a. whether there are new market power concerns that could arise by introducing the access model
    b. the ability of market participants to manage risk and impacts on contract market liquidity by introducing the access model
    c. implementation timeframes
    d. the tenure of financial transmission rights
    e. grandfathering arrangements
    f. transmission losses, including how to design financial transmission rights to hedge the risk of transmission losses
3) REZs.

Stakeholder submissions and feedback on the COGATI discussion papers

The COGATI team gave a recap of the main themes from submissions received to the access model discussion paper published in October 2019, as well as meetings that it had attended over the past few weeks:

- The AEMC received 60 submissions in response to the discussion papers, and is expecting several more.
- The majority of respondents suggested that there need to be changes to the transmission access framework.
- Many stakeholders – including most transmission network service providers (TNSPs), the AER, consumer groups and a minority of generators and investors are generally supportive of the access model proposed in the discussion paper.

- However, most generators and investors, and a minority of other stakeholders, are not supportive of the access model currently proposed, largely due to concerns around the impact it may have on contract market liquidity and the fact that that the firmness of the products is not yet known in detail.
- Some stakeholders suggest that building more transmission should be a priority. The AEMC agreed and noted that streamlining the regulatory process for key projects identified in the ISP whilst retaining a rigorous cost-benefit assessment would occur through the ESB's *Actioning the ISP (Integrated System Plan) Process*.
- The ESB provided an update on this process, including the upcoming consultation paper and draft rules. These have now been published on the COAG Energy Council website: http://www.coagenergycouncil.gov.au/publications/consultation-draft-isp-rules
- The COGATI team then explained that the transmission planning and investment decision making process will determine the aggregate amount of transmission capacity in the system. The proposed access model will then assist in coordinating generation investment with that transmission investment, by providing signals to generators about where to locate.
- Many stakeholders consider that more time is needed to sufficiently develop and assess the reform proposal, as well as to allow for sufficient consultation.
    - The AEMC agrees with this. Under our terms of reference we need to publish a final report for this review in December. However, the proposed access model, as well as accompanying quantitative impact analysis needs to continue to be progressed. In particular, the modelling is critical in order to understand the impacts on how the proposed access model will facilitate the national electricity objective, as well as specific policy design choices. For example, we are keen to undertake modelling into how "firm" the FTRs may be under our current design specifications.
- Most stakeholders are suggesting that the implementation date of 1 July 2022 is too soon. We noted that we heard this feedback and that we wanted to discuss this in more detail with the technical working group on the day.
- Generators and investors generally consider that there needs to be greater visibility about how this reform will be integrated with the ESB's post-2025 market design review. The COGATI team noted that it is working closely with the ESB on these matters, including with AEMC representatives on the ESB post-2025 working group. The ESB has also noted that the COGATI work is foundational to its post 2025 project.
- Many stakeholders are supportive of our proposed approach to modelling, particularly on market power analysis.

A summary of stakeholder submissions can also be found on our website: https://www.aemc.gov.au/news-centre/media-releases/summary-submissions-transmission-access-reform-model

Discussion of key COGATI access model themes

Market power

- The AEMC noted that market power issues are frequently cited as a key concern.
- The main market power concerns raised by stakeholders are that:
    - Incumbent generators could 'hoard'/buy large quantities of FTRs in a particular part of the transmission network to create a barrier to entry for retailers and generators, or to reduce the ability for others to manage their risk.
    - The introduction of dynamic regional prices could increase the opportunity for generators to manipulate wholesale electricity prices for their benefit.

    - If there is limited competition in the auction process, then FTRs could be sold for less than their expected value, meaning that less consumer charges for transmission infrastructure (TUOS) would be offset by the FTRs.

- Stakeholders at the meeting noted that all three concerns are interrelated, but the most material concern appears to be the first one. In particular the fact that larger organisations could outbid smaller organisations for FTRs.
- In relation to the potential issue of hoarding it was noted:
    - The transmission network is highly meshed, meaning most constraints involve more than one generator. The way the simultaneous feasibility auction is run in order to allocate the FTRs takes this into account, which means there would likely be enough competition for FTRs and so hoarding would not be a huge concern. Some stakeholders had the view that there were already existing competition market provisions that would protect against this concern (e.g. provisions in the Competition and Consumer Act). In this way, the introduction of the proposed access model wouldn't necessarily create a new type of market power.
    - Others queried whether or not this was a material concern, since if hoarding means generators or other parties paying a high price for FTRs, that isn't a bad thing, because it means that the FTRs are more highly valued as a risk management tool.
    - Other stakeholders noted that a party hoarding FTRs by purchasing them for more than their perceived value specifically to prevent other parties from entering the market or to obtain an advantage in a non-FTR market is a difficult strategy to successfully utilise.
    - Some stakeholders suggested solutions to this issue, such as restricting the number of parties who can buy FTRs (to physical participants) which would reduce the competition for the FTRs. If third parties were to be included then that would increase competition for the FTRs. It was also noted that it is important to make sure that new entrants (e.g. intending participants) can purchase FTRs.
    - Stakeholders also noted that there is an interaction between hoarding concerns and the length of the FTRs – shorter ones covering around four years may be more difficult to hoard than ten-year FTRs.
    - Stakeholders also noted that it is likely that hoarding could potentially be a more significant problem during the initial implementation period at the first auction due to grandfathering (rather than ongoing auctions).
- Other issues to do with market power concerns were also discussed:
    - Stakeholders commented that based on experience with other overseas markets, rather than there being separate primary and secondary auctions, there is just one auction, where you sell the FTR back into the pool (the primary market) and then someone else can buy FTRs in the same (or a different) form. This occurs because of the nature of the transmission network.
    - It was noted that over-regulation to address market power concerns could have unintended consequences and end up harming competition in the market.

FTR tenure

- The AEMC noted that feedback from generators/investors was consistently that FTRs of 3-4 years are not long enough. This does not provide generators / investors with sufficient certainty over their investments.
- The COGATI team noted that the rationale for having 3-4 year FTRs was due to the fact that a) the ISP will be conducted at least every two years, and so four years would line up well with that; and b) the tenure is commensurate with other financial products traded in the wholesale market.

- Given this feedback, the team explored with the technical working group how longer-term FTRs can be offered.
- Stakeholders agreed that longer-term products would be preferred over shorter-term products. Longer-term FTRs would increase certainty and reduce the costs of capital. All stakeholders agreed with that – the long-term benefits of this reform for consumers come from increased certainty for generators. Any offsetting of TUOS is an ancillary benefit.
- We then discussed some of the challenges associated with offering longer-term FTRs, and ways in which these could be addressed:
    - It may be more difficult to accurately forecast the amount of capacity in the transmission network to determine how many FTRs to release. Stakeholders noted that this may be less of a concern with the actioned ISP. Consumer representatives wanted more clarity on what happens if the expectations of transmission network capacity are wrong, and who would bear the risks of that.
    - As noted above, it may increase the concerns about 'hoarding'. It was noted that the design could address these concerns e.g. FTRs could be sold in tranches over the next 10 years; there could be a cap on how many FTRs a particular party could purchase.
    - We discussed 'how long' should longer term hedges be sold for. It was suggested that to maximise consumer interests, four years FTRs are too short and 10 year FTRs are too long.
    - It was noted that there was a possibility that FTRs are sold for a relatively low amount of money, reducing the amount that offsets customer TUOS. It was noted – including by consumer groups – that this was a small concern, since the long-term benefits of the reform come from increasing the certainty for generators.
    - It was also noted that even in offering longer FTRs, having FTRs split by time could be useful. This means that solar generators for example could pay for an FTR that would only cover congestion during the day.

Liquidity

- The AEMC noted that many stakeholders query how the proposed access model would affect the wholesale contract market.
- Some stakeholders noted concerns that in relation to congestion, dynamic regional pricing would replace the volume risk that generators currently face with price risk. This could require additional ongoing resources and skills as well as result in disaggregation of risks to be managed.
    - It was noted that the status quo is inefficient from a dispatch perspective. However, it does (typically) have concentrated forward markets around a single price, which creates more depth and liquidity. It was noted that careful thoughts require that these arrangements are not undermined.
    - Other stakeholders noted that contract markets will need to evolve and that the proposed access model could help evolve the contract markets. It was noted that the proposed access model should be thought in light of what contract markets could look like, not what they currently do.
- Stakeholders also noted concerns that in relation to losses, the introduction of dynamic losses into local prices may make it more difficult for generators to forecast and manage the price risk of losses on an ongoing basis. This may have the effect of generators taking a conservative approach and offering less volume in the contract market.
    - The converse was also noted that dynamic loss factors are likely to be less volatile in a future with more capacity, more efficient investment and better investment signals.

- The group also discussed the distinction between transitional risks arising through the implementation of the reforms, and ongoing risks once the reform is implemented. It was noted that any risks to liquidity comes from the change in technology underpinning the market (shift from small number of large participants to a large number of small participants). The best time to reform the framework is when this change is in its early stages, not in the late stages. It was suggested it was therefore better to deal with the transitional issues now.
- Some stakeholders noted concerns about the socialising risk under the proposed access model. This occurs through the use of the settlement residue from across the network and across time to increase the firmness of the FTRs, rather than limiting it to the constraints that are affected by the congestion.
- It was also noted that liquidity would be increased if FTRs could be purchased from parties other than TNSPs who can back supply – such as storage providers.

Implementation

- It was noted that nearly all stakeholders consider that June 2022 is far too soon to implement the reforms. Stakeholders have commented that there are other significant reforms that require resourcing (e.g. 5 minute settlement) and have an implementation date near 2022. It was also noted that a closer implementation date increases regulatory uncertainty i.e. it has the potential to slow investment in the immediate term.
- The project team noted that 2022 may be too soon.
- Nevertheless, the AEMC considers it crucial that we continue to progress the *design* of the COGATI reforms urgently, to provide clarity on the reforms to the market. This was noted by several stakeholders in submissions to the discussion paper.
- Also, instead of proposing a fixed date, the AEMC is interested in exploring a timeframe for when the reforms should come into effect after the rules have been finalised, and what factors should be taken into account when setting this timeframe.
- Stakeholders noted that there are four major variables to consider:
    - Contract markets – the proposed access model would have an impact on the contract markets – a contract market cycle runs for three years, while PPAs can be up to 10 years. This is the biggest determinant to take into account.
    - NEMDE – consideration would need to be given as to how long it would take to redesign NEMDE, if this is required.
    - Auction design – the proposed access model involves a large combinatorial auction design model, which would be non-trivial to establish.
    - Grandfathering – grandfathering arrangements would need to be developed and set, which may take some time. Time is also needed for the market to understand and prepare for the changes.
- Stakeholders also noted the interactions between COGATI and the ESB's post-2025 are important to consider. The AEMC agreed.
- Some stakeholders noted that a staged implementation of reforms could be useful. Others noted that delayed implementation would also lead to delayed efficiency benefits.

Grandfathering

- The AEMC's position as set out in the discussion paper was that existing generators would receive an amount of FTRs for free that would taper off over time. Therefore, transitional

FTRs would approximate the implicit access that generators currently have. Recognising the risk that implicit access can be degraded (or increased) over time, transitional FTRs would be sculpted back over a defined period.

- Stakeholders asked a number of questions in submissions about who grandfathered FTRs are allocated to and for how long, as well as whether grandfathering timeframes should be based on when a plant became operational, whether they should be based on an estimated closure date and whether they should be surrendered if a generator/load closes.
- The attendees noted that in relation to grandfathering access, congestion already exists, so there will not be enough grandfathered FTRs for the full capacity of all existing generators. The amount of grandfathered rights allocated could not be greater than the existing capacity of the network.
- Some stakeholders suggested that a way to allocate grandfathered rights would be to auction them rather than allocating them. Others suggested that they should be allocated based on the existing way in which access is implicitly allocated – via disorderly bidding by the dispatch engine. Others noted that grandfathering should occur based on consumer impact principles.
- In terms of the length of grandfathered FTRs, these could be provided based on how long a generator has already been in operation. Another option discussed was fixed grandfathering for 3-5 years, with the grandfathered rights tapering off afterwards.
- It was noted that another important question is what would be the cut-off date used to decide who receives grandfathered FTRs and who does not? And, what status would prospective generators need to have to be eligible for receiving grandfathered FTRs at the cut-off date? Having financial commitment was proposed as an option by a participant.
- It was noted that if the access model is designed correctly, then grandfathering may matter less. In contrast, investors noted that they needed more certainty over the grandfathering length, amount and glidepath.
- There was also a query about how historical loss factors would be incorporated into the grandfathered FTRs.

Transmission losses

- The COGATI team prepared a paper to facilitate a discussion on losses, and how an FTR loss product could be designed. We discussed the following issues:
    - If dynamic loss factors are introduced, how important would it be to introduce FTRs to help manage risks around losses? It was noted that a loss hedge product is not necessarily required along with a move to dynamic losses. The financial market could be used to manage loss-based risks instead.
    - The discussion paper mentioned challenges around designing a loss FTR product, such as the fact that if you are to maintain marginal loss signals then there will be insufficient revenue recovered.
    - Those challenges mean trade-offs are needed for loss FTR design – should losses be fully hedged even if there is not enough settlement residue to cover the FTRs, or should losses be partially hedged instead? Some stakeholders suggested that hedging at least a portion of transmission losses would be preferable. For example, hedging between the marginal and the average loss factors could be good enough, rather than the FTRs completely covering marginal loss factors. Other suggestions raised by stakeholders to address this concern are to: scale the money that is available for paying for FTRs; or use TUOS to fund the payments. In response to this it was noted that the risks of losses should not be transferred to consumers.

- Another difficulty is separating out the 'loss' component from the 'congestion' component. Participants noted there would be benefits in doing this if it was possible.
- It was also noted that the magnitudes of constraints and losses are very different – congestion doesn't occur as often, but the financial impacts are larger when it does occur. Losses are a constant factor with smaller financial impacts in a given time period.
- The implications for different market participants of loss FTRs. For example, a wind or solar farm may have more interest in a losses FTR than in a congestion FTR.
- Stakeholders noted that pre-dispatch information is important to help market participants to determine what the losses would likely be in any given interval, which would help them manage that risk.

Renewable energy zones

- The COGATI team presented feedback from submissions on REZs, and then worked through a number of different ways in which REZs can be facilitated.
- Some stakeholders noted that the definition of REZ was still not precise enough – a REZ is not actually a cluster of generators. Instead, it is a *cluster of a cluster* of generators. This would mean that a REZ could include more than one of the REZ types identified by the Commission. In addition, a REZ provides benefits to the overall system, and so has more benefits than just those provided to individual generators.
- Stakeholders also discussed the interactions with the broader access regime.
- Following on from Energy Network Australia's submission, the following definitions of REZs were proposed and discussed:
  - A type A REZ is a cluster of generators connected to a shared transmission asset via a dedicated connection asset (DCA). The connection assets are paid for by the connecting party. Stakeholders agreed there would be some ways in which the existing connection framework could be adapted in order to improve the potential for generator coordination.
  - A type B REZ is a cluster of generators connected to the shared network, involving prescribed services paid for by consumers via TUOS charges where a regulatory investment for transmission (RIT-T) has been satisfied, i.e. the investment is in the long-term interests of consumers. It was made clear that under this option the investment should only occur if it was deemed to be in the long-term interest of consumers, since consumers would be paying for this. It was noted that bonds could be used to overcome the 'chicken and egg' problem with type B REZs and help focus investments that may be made. A bond could represent a commitment by generators and shows that there is enough interest to justify building transmission assets. Stakeholders discussed whether or not generators would be interested in paying a bond or not, and what they would get in return.
  - A type C REZ involves a cluster of generators within the shared network, where the investment may not satisfy the RIT-T and would therefore be paid for by generator as a negotiated service. An upgrade using this model could happen anywhere from the generator to the load. It was noted that a model like this may work better in some areas of the network than others.
  - Stakeholders noted there might be a hybrid of types B and C, utilising the model developed by PIAC that addressed cost allocating and sharing.
  - Stakeholders also noted the interaction between consideration of REZs here and the ESB's actioning the ISP work.

Next steps

- The project team thanked participants for their time and for providing submissions and input into the COGATI process.
- The AEMC will publish a final COGATI report at the end of December.
- The AEMC noted that there will be future technical working groups in early 2020 in order to continue to progress and develop the access model and the impact analysis.

Australian Energy Market Commission
Working group protocol

Context and purpose

The AEMC has convened this working group with energy industry members to discuss proposed access reforms being considered by the Commission in its COGATI review.

The Working Group is committed to complying with all applicable laws, including the *Competition and Consumer Act 2010* (**CCA**), during these discussions. Breach of the CCA can lead to serious penalties for members and for individuals involved in any breach (including large financial penalties and potentially also imprisonment for key individuals involved).

This Protocol governs the way in which Working Group discussions will proceed, and the Working Group agrees to adhere to this protocol in order to ensure compliance with the CCA.

Key principles

The purpose of this Working Group is solely to discuss the proposed reforms being considered by the review and for stakeholders to raise potential issues for the Commission's further consideration.

Each member **must make an independent and unilateral decision** about their commercial positions and approach in relation to the matters under discussion in the Working Group.

This Working Group **must not discuss**, or **reach or give effect to any agreement or understanding*** which relates to:

- **pricing** for the products and/or services that any member supplies or will supply, or the terms on which those products and/or services will be supplied (including discounts, rebates, price methodologies etc).
- **targeting (or not targeting) customers** of a particular kind, or in particular areas.
- **tender processes** and whether (or how) they will participate
- any decision by members:
  - about the purchase or supply of any products or services that other members also buy or sell
  - to not engage with persons or the terms upon which they will engage with such persons (i.e. boycotting); or
  - to deny any persons access to any products, services or inputs they require.
- **sharing competitively sensitive information** such as non-publicly available pricing or strategic information including details of customers, suppliers (or the terms on which they do business), volumes, future capacity etc
- **breaching confidentiality obligations** that each member owes to third parties.

* An "understanding" does not have to be formal; a "nod and a wink" is enough if one party commits to act in a particular way.

Communication & meeting guidelines

Members must ensure that **all communications** (including emails and verbal discussions) adhere to the Key Principles.
All meeting between Working Group members should be conducted in accordance with the following rules:

- Agree and circulate an agenda in advance of each meeting. The content of each agenda should not include anything that could contravene the Key Principles set out in this Protocol, and try to avoid "any other business" agenda items.
- Ensure all members understand ahead of the meeting that any competitively sensitive matters must be subject to legal review before any commitment/agreement can be given.
- The below 'competition health warning' is read and minuted at any meetings or conference calls:
  - *Attendees at this meeting must not enter into any discussion, activity or conduct that may infringe, on their part or on the part of other members, any applicable competition laws. For example, members must not discuss, communicate or exchange any commercially sensitive information, including information relating to prices, marketing and advertising strategy, costs and revenues, terms and conditions with third parties, terms of supply or access.*
  - *For any new attendees – please note that participating in these discussions is subject to you having read and understood the Protocol including the Key Principles. If you have not yet done so, please do so now.*
- Accurate minutes are kept of all meetings, including details of attendees.
- If something comes up during a meeting that could risk contravening any Competition Laws, attendees should:
  - Object immediately, and ask for the discussion to be stopped.
  - Ensure the minutes record that the discussion was objected to and stopped.
  - Raise concerns about anything that occurred in the meeting with their respective legal counsel immediately afterwards.
- Any decision about whether, and on what terms, to engage with customers and suppliers is an independent and unilateral decision of each member.