



Coordination of Generation and Transmission Investment (COGATI) 2019 review

Technical working group meeting 1 28 May 2019

The first working group meeting was held in Melbourne on 28 May 2019.

The working group was formed by the Australian Energy Market Commission (AEMC) to provide technical advice and input into the progression of the *Coordination of generation and transmission investment – access and charging review* (EPR0073). All enquiries on this project should be addressed to Jess Boddington on (02) 8296 0626 or at jess.boddington@aemc.gov.au.

The attendees of the meeting are listed below.

Member	Organisation
Shelley Ashe	ECA
Liam Byrnes	Aurizon
Jill Caine	Energy Networks Australia (ENA)
Jevon Carding	Lighthouse Infrastructure
Miyuru Ediriweera	PIAC
Mark Feather	Australian Energy Regulator (AER)
Marcelle Gannon	Clean Energy Council (CEC)
Joel Gilmore	Infigen
Mark Grenning	Energy Users Association of Australia (EUAA)
Kirsten Hall	AEMO
David Havyatt	Energy Consumers of Australia (ECA) (via phone)
Greg Hesse	Powerlink
Angus Holcombe	Meridian Energy
Kirsten Hall	AEMO
Bill Jackson	ElectraNet
Tim Jordan	Clean Energy Finance Corporation (CEFC)
Andrew Kingsmill	TransGrid
Arista Kontos	AER
Gordon Leslie	Monash University
Ron Logan	ERM Power
Kevin Ly	Snowy Hydro
Donovan Marsh	Energy Security Board (ESB)
Dan Mascarenhas	AGL
Craig Memery	Public Interest Advocacy Centre (PIAC)
Peter Nesbitt	Hydro Tasmania
Deirdre Rose	AusNet Services
Herath Samarakoon	TasNetworks
Jon Sibley	Australian Renewable Energy Agency (ARENA)
Ben Skinner	Australian Energy Council (AEC)

Georgina Snelling	Energy Australia
David Scott	CS Energy

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

Name	Position
Suzanne Falvi	Executive General Manager – Security & Reliability
Victoria Mollard	Director – Security & Reliability
Jess Boddington	Adviser – Transmission and Distribution Networks
Orrie Johan	Graduate Adviser – Transmission and Distribution Networks
Ella Pybus	Contractor
Tom Walker	Senior Economist
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 five areas: 1) the AEMC's approach to the COGATI review; 2) current trends in the national electricity market (NEM); 3) market design principles and access reform models; 4) facilitation of renewable energy zones (REZs); 5) and prioritisation of dynamic regional pricing.

The following points were made at the meeting:

AEMC's approach to the review

- The COGATI project team discussed stakeholder feedback from the consultation paper and supplementary information paper, noting that:
 - Stakeholders generally agreed that, given the transitioning power system, there is a need for this exploration of reforms to the transmission access framework.
 - However, stakeholders differed on what the appropriate form of reform should be.
 - Stakeholders views on dynamic regional pricing were mixed – some explicitly supported the reform, while others strongly opposed the changes.
 - Many stakeholders supported a reconsideration of whether generators should be able to pay for firm access rights.
 - Stakeholders engaged much less on charging reforms than on access reforms. Around half of the stakeholder submissions did not discuss charging reforms at all.
 - Stakeholders that did comment on this generally considered that any review of the charging arrangement should occur after reforms to access are more bedded down.
 - Stakeholders generally commented that the AEMC's timeframe for the review was ambitious, particularly given the work underway at the moment to implement the move to five minute settlement.
 - In addition, a number of stakeholders commented on the potential overlap and interaction between this work and the ESB's post 2025 work that we had identified in the consultation paper and agreed it would be important for the AEMC to continue to work closely with the ESB on these issues.
- The project team emphasised that this session and future technical working group sessions will be held to draw upon stakeholder expertise across the NEM.
- The project team mentioned that there are a number of major issues occurring across the NEM that the proposed reforms seek to address, largely related to the coordination of generation and transmission investment. These issues include congestion, marginal loss factors, as well as disorderly bidding and the need to facilitate renewable energy zones.

- These issues can be resolved through holistic reform of access arrangements. The proposed reforms seek to provide certainty for generators and transmission network service providers (TNSPs), while providing efficient costs for customers.
- Consistent with the timetable on our website, it was noted that the next step for public consultation was a directions paper that will be published in late June.
- The project team also highlighted the other related projects that the COGATI 2019 review will consider and work with as the review progresses.
- Stakeholders also noted that the AEMC should keep in mind the implementation of the five minute settlement reform when thinking about implementation timeframes.

Current trends in the NEM and AEMO's discussion of the Integrated System Plan

- The COGATI project team provided a recap of the history of reviews into coordination of transmission and generation investment, noting that generation access reform has been considered many times since the creation of the NEM.
- In particular, the AEMC gave a summary of the most recent review that considered access reform, and the proposed model that that review developed: the Optional Firm Access (OFA) model. The key feature of that model is that generators would have had the option of purchasing firm access rights, and the TNSP would then have an obligation to build enough transmission network infrastructure to satisfy the purchased access rights.
- We then asked for stakeholder views on changes that have occurred in the NEM in the last few years, particularly since the last time the Commission considered access reform in 2015. A number of changes were mentioned by stakeholders, including:
 - the increasing importance of storage
 - the increased amount of distributed resources
 - the general trend of proposed investments that move the NEM to a more meshed network
 - increasing project sizes
 - different types of generation connecting (not just gas, wind and solar)
 - the profile of generation connecting
 - the transition that is occurring with the closure of thermal plants
 - changing trends on the demand side i.e. how load uses the network
 - the introduction of five minute settlement, and the potential for this to facilitate different technologies
 - increased focus and importance of system security, such as inertia, voltage and system strength issues
 - the process underway to embed and action the ISP in the regulatory framework
 - load shedding occurring in a number of states
 - increased focus on speculative investment & REZs
 - increased consumer focus on affordability
 - rate of return changes
 - increased dialogue around asset base write downs and stranded assets
 - increased inter-regional trade
 - increasing government intervention in the NEM.
- In particular, increased congestion in recent years in the NEM was discussed. Stakeholders noted that congestion is mostly increasing in the weaker parts of the transmission network. Some stakeholders were less concerned about increasing congestion, either viewing it as manageable or considering it to largely be a scheduling issue rather than a problem requiring additional transmission infrastructure. Others did view congestion as a problem, arguing that it imposes unnecessary costs on consumers.
- Stakeholders discussed the contentiousness of including grandfathering provisions for incumbent generators as part of any access reform.
- AEMO presented an overview of their inaugural Integrated System Plan (ISP). AEMO noted that their process to develop the second ISP is now underway, with consultation on the inputs, scenarios and assumptions that will be used in the modelling.
- The three main questions for COGATI reforms were noted:
 - How do we create effective price signals?

- How do we facilitate effective hedging against risk for generators?
- How do we facilitate efficient expansion of the transmission network?

Market design principles and access reform models

- This session provided the overarching and high-level design principles the AEMC has developed in response to stakeholder feedback. These principles are to help it make a decision as to what is the most appropriate reform model for transmission access, as well as to help guide individual design decisions in developing such a model. The proposed principles that were discussed are:
 - Promoting price signals that encourage efficient investment in and operation of generation assets
 - Incentivising TNSPs to operate and expand their networks in a timely yet efficient manner
 - Appropriately allocating risks to parties best placed to bear them
 - Enabling technological neutrality
 - Preferring simplicity and transparency
 - Promoting the safe, secure and reliable supply of energy.
- Beyond broad support for these principles, stakeholder feedback on these principles included:
 - suggesting that the first principle should capture load, as well as generation
 - suggesting that the first principle should be broader than just price signals – there are non-price signals that could be provided, such as improved information and transparency
 - that any market reforms should be designed to be capable of adapting to future changes in the market
 - that market reforms should promote competitive neutrality as well as technological neutrality
 - that effective policy coordination with other major reforms and the political landscape was suggested to be another principle of good market design.
- Five options for access reforms were considered by the technical working group. These options were broadly based on stakeholder feedback provided to the COGATI consultation paper:
 - **Dynamic regional pricing** – where generators and possibly some forms of load and storage are paid (or pay) the local marginal cost of supply instead of the regional reference price
 - **Locational nodal pricing** – where both generators and load would be settled at their locational marginal price
 - **Generator reliability standards** – where a form of transmission network access standard would be established that is similar to the reliability standard that already exists for load. This standard would be accompanied by locational transmission use of service charges for generators
 - **Firm access driven by transmission** – this model combines dynamic regional pricing with firm access rights. The rights that could be purchased would be based on current and planned transmission capacity.
 - **Firm access driven by generators** – this model also combines dynamic regional pricing with firm access rights, but does so in a way similar to the OFA model. Generators would purchase access rights and TNSPs would need to build enough transmission network infrastructure to facilitate these transmission rights.

Renewable energy zones

- This session discussed the idea of REZs as being related to the question of coordination between generators (as opposed to broader access reform that relates to coordination between transmission and generation). A number of submissions to the raised the concept of using REZs to facilitate the transition to a new transmission access regime.
- An overview of the transparency of new projects rule change requests, the proposal in which seek to help generators coordinate with other generators, was provided. How the proposed changes related to the issues relevant to access reform was discussed.

- The group considered the model developed by PIAC for facilitating a REZ, which largely relates to the cost recovery arrangements. A portion of the costs would be paid for by consumers and a portion paid by the generators via a charge. A TNSP can build additional network capacity on a speculative basis, and can obtain a higher rate of return from this additional capacity through negotiation with generators that would utilise it.
- The group seemed to be of the view that this model would be worth exploring further. The group raised a number of issues that would need to be considered further including how this would operate under the current connection contestability framework in the Rules (which currently allows for any third party to develop a 'REZ'), what the nature of regulatory oversight required would be, and whether TNSPs would be able to operate in a monopolistic manner under this model.

Dynamic regional pricing

- The purpose of this session was to prioritise the relevant design issues for dynamic regional pricing, noting that stakeholders raised over 100 questions on dynamic regional pricing in submissions to the COGATI consultation paper. The intent is to explore the high-priority issues in depth at the next technical working group.
- Stakeholders were asked to prioritise the following issues:
 - The allocation of settlement residues
 - The settlement of storage
 - The settlement of load
 - The formulation of dynamic regional prices
 - Interactions with interconnectors and Settlement Residues Auctions
 - Governance
 - Interaction with distribution networks.
- The majority of stakeholders indicated that the allocation of settlement residues, the settlement of load/storage, the treatment of losses, and the formulation of dynamic regional prices are the key issues which they would like to explore in depth at the next technical working group.

Next steps

- The project team thanked participants for their time and noted that the group will be convened again in approximately three weeks.
- It was noted that the next technical working group would explore dynamic regional pricing at length, focussing on the issues nominated by the technical working group members as being most important areas for discussion. The next technical working group will also consider implementation issues.

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.