VICTORIAN CONNECTIONS REFORM

STAKEHOLDER SUBMISSION RESPONSE PAPER

Published: **April 2017**

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

IMPORTANT NOTICE

Purpose

AEMO has prepared this document to provide information about proposals for the reform of the Victorian connections model.

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EXECUTIVE SUMMARY

This paper provides a summary of the submissions provided to AEMO's consultation paper on Victorian Connections Reform, published November 2016. Submissions were due 5 December 2016, and seven were received.

AEMO is proposing to streamline the process for connecting new generation to the Victorian 'declared transmission system' (DTS) by removing itself as party to the connection and augmentation contract(s) with the generator and transmission network service providers (TNSPs) as far as possible.

Submissions indicated general support for the proposed reform and streamlining the process for generator connections, particularly in light of the expected increase in connection applications to meet the Victorian Renewable Energy Target (VRET). There was support for the proposition that while the reform was desirable, it should not result in a negative impact on contestability.

A further concern seemed to centre on the linking of generator registration to the satisfaction of TNSP requirements under the Project Functional Requirements (PFR) and the Protection and Control Requirements (PCR). AEMO has suggested an alternative solution where the TNSPs are responsible for demonstrating compliance with the PFRs and PCRs prior to service commencement.

The last key concern dealt with the variations process. Stakeholders were concerned that this will cause project uncertainties. While AEMO understands that this can cause problems, the importance of this issue leaves us with little room for alternatives.

Having received in-principle support, AEMO will continue to progress this reform. We intend to submit a Rule change proposal and legislative amendment package to the AEMC and Victorian government respectively in July 2017.

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GLOSSARY

This document uses many terms that have meanings defined in the National Electricity Rules (NER). The NER meanings are adopted unless otherwise specified.

Abbreviations used in this document have the meanings in the table below

Term	Definition
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator Limited
AER	Australian Energy Regulator
AIS	Availability Incentive Scheme
COAG EC	Council of Australian Governments Energy Council
CSA	Connection Services Agreement
DSN	Declared Shared Network
DTS	Declared Transmission System
DTSO	Declared Transmission System Operator
GPS	Generator Performance Standards
MOI	Minor Outstanding Items
NEM	National Electricity Market
NER	National Electricity Rules
NSA	Network Services Agreement
PCCD	Project Construction and Coordination Deed
PCR	Protection and Control Requirements
PFR	Primary Functional Requirements
STPIS	Service Target Performance Incentive Scheme
TNSP	Transmission Network Service Provider
UoSA	Use of System Agreement
VRET	Victorian Renewable Energy Target

1. CONSULTATION SO FAR

AEMO is consulting on proposed reforms to the process for connecting new generation to the Victorian transmission system.

On 4 November 2016, AEMO held a preliminary teleconference with stakeholders to inform them of the proposals. A Consultation Paper was subsequently published on the same date.

AEMO held a stakeholder workshop in Melbourne on 16 November 2016. Attendees included TNSPs, generators and prospective generators, representative industry bodies, the AER and AEMC. The workshop provided an opportunity for initial discussion and feedback regarding the proposed reforms, allowing stakeholders to highlight any concerns or issues to be addressed in any revised process.

AEMO received seven written submissions on its consultation paper from:

- AusNet Services (AusNet Services)
- Energy Networks Australia (ENA)
- EnergyAustralia Pty Ltd (EnergyAustralia)
- RES Australia Pty Ltd (RES)
- Transmission General Holdings Australia (TGHA)
- Clean Energy Council (CEC)
- Origin Energy Limited (Origin)

This document responds to the comments provided in these submissions.

AEMO values stakeholders' participation in the workshop and responses and comments made to the consultation paper. These reforms are intended to make the generator connection contracting process in Victoria more efficient and therefore seeking the views and input of the likely participants in that process is essential to gaining the best outcome.

As a result of the consultation, AEMO has identified areas for further discussion with stakeholders in a further round of consultation and will also propose draft rules for consideration.

2. CURRENT GENERATION CONNECTION PROCESS

For ease of reference, this section summarises the current Victorian connection process and the central requirements and documents. This largely reproduces section 3.2 of the Consultation Paper.

2.1 Assessment & development of connection requirements

The current process requires the generator to submit its application to AEMO, having already undergone the pre-feasibility and enquiry connections stages with AEMO[1]. This will not change under the proposed process. AEMO will continue to assess the application, and arrange the technical requirements and incentives for the shared network augmentation and generator performance standards. That documentation is described below.

2.1.1 Primary Functional Requirements (PFR)

The PFR describe the new shared network layout, primary equipment specifications, enabling seamless operation between existing and new shared assets and the connection assets, co-ordination with other asset-owning TNSPs and their assets, details of equipment ratings and ultimate arrangement.

2.1.2 Protection and Control Requirements (PCR)

The PCR are concerned with the secondary systems requirements to manage and monitor the transmission assets in the shared network and the connection assets enabling co-ordination with the operation and protection and control systems on other assets in the DTS. There is a separate PCR for the contestable TNSP and interface TNSP for assets located on the shared network. AEMO will continue to prepare the PCRs.

2.1.3 Availability Incentive Scheme (AIS)

The AIS sets out the incentives for the contestable TNSP to maximise availability of its service. AEMO will continue to set the parameters of this measure.

2.1.4 Generator Performance Standards (GPS)

The GPS focus on the generator's generating system taking into account the requirements of shared network assets. Coordination between the TNSPs' assets and generator's assets is crucial to determine the acceptable performance standards for the generator connections.

2.2 Contracts

The current contract suite is as follows:

2.2.1 Project Coordination and Construction Deed (PCCD)

This is the overarching contract between all parties and includes the details for construction and delivery, co-ordination, energisation, commissioning and practical completion including the PFRs and PCRs. Under the proposed approach this agreement will no longer be required in its current format (AEMO will not be a party to a construction agreement. The parties will be at liberty to formulate their own way of dealing with construction. It is envisaged that there will be an agreement between the generator and the TNSP(s) documenting the connection service that is to be provided along with the shared network service defined by the PFRs and PCRs. This is analogous to a connection agreement

[1] Please refer to the AEMO website for more details on this process: http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Network-connections/Victoria-transmission-connections---process-overview

that an applicant generator would enter into with the TNSP in other NEM regions. We propose that the rules will provide some guidance on the types of agreements that will be required (particularly surrounding the shared network service obligations described in the PFRs and PCRs and how they will be incorporated and the documentation of the connection agreement between the TNSPs if there are more than one).

2.2.2 Use of System Agreement (UoSA):

The UoSA is the agreement under which AEMO provides shared network services to the generator. The UoSA also contains the technical requirements of the shared network, the Generator Performance Standards and the point of supply at the shared network boundary. Under the proposed approach, this agreement will no longer be needed.

2.2.3 Network Services Agreement (NSA):

The NSA between each TNSP and AEMO also point to the respective PFR and PCR. The TNSP(s) charges for the network services and related early termination payout amounts are also contained in these agreements. The AIS for the contestable TNSP is also captured here where applicable. These agreements may still be needed but will exclude the charges as those are paid directly between the applicant and the TNSPs.

2.2.4 CSA

The CSA is an agreement between the contestable TNSP and the connection party. AEMO is not a party to this agreement but the agreement is necessary to cover the construction of, and the service provided by, the connection assets. Under the proposed approach, we would expect that this agreement would become the governing service agreement between the generator and contestable TNSP.

2.3 Energisation, commissioning and practical completion

AEMO is kept informed of construction progress, detailed design, factory acceptance and energisation and commissioning tests. When these have been successfully completed, AEMO may grant practical completion and commence payment of the transmission charges under the agreements subject to the withholding of a percentage amount recognising the non-delivery of “minor outstanding items” (MOI). These are “defects” under the PFR and/or PCR that do not impact on delivery of the transmission service in a material way but which are nevertheless important for AEMO and in many cases, the connection applicant. These include things such as “as-built” engineering drawings and asset ratings.

3. CONNECTION REFORM PROPOSAL – RESPONSES TO THE CONSULTATION

The proposal discussed in the Consultation Paper seeks to establish a predominantly regulatory framework to ensure that a generator connection and associated DTS augmentation is consistent with AEMO's network planning, performance and service requirements.

3.1 General Issues

3.1.1 Stakeholder Comments

Submissions indicated general support for the proposed reform and streamlining the process for generator connections, particularly in light of the expected increase in connection applications to meet the Victorian Renewable Energy Target (VRET). A number of stakeholders stressed that they needed to review the details of the new process to alleviate potential concerns, and ensure the strength of the contestability framework in place in Victoria is not impacted. ENA commented that the reform should not lead to AEMO inadvertently vacating a role leading to an accountability gap in the framework.

EnergyAustralia noted there could be increased cost to participants where AEMO is not actively engaged in the process, and this should be considered in ensuring the benefits outweigh the costs of the change, particularly once the costs of implementing the reform itself are taken into account.

ENA encouraged AEMO to consider treating new load connections consistently in due course. EnergyAustralia also supported processing consistency for network augmentation, load and generation connection.

ENA recommended deferring any decisions until after the AEMC's final determination on the Transmission Connection and Planning Arrangements Rule, to better align Victorian arrangements with the arrangements in the rest of the NEM.

EnergyAustralia also queried the retrospective implications for current network agreements, and transitional arrangements for negotiations in progress. AusNet Services commented that given this reform is just for new connections, network agreements will still be in place in parallel for shared network services, so they suggested the process may provide a useful opportunity to examine the broader Victorian framework.

3.1.2 AEMO Response

In view of the in-principle support for reform, and the likelihood that connection applications for new generation are likely to increase considerably in preparation for the VRET, AEMO will continue to progress the reform to the connection process for new generator applicants. AEMO recognises that consistency is desirable, and intends that AEMO's role in relation to new load applications and the broader Victorian framework should be considered at a later time. These aspects of the framework raise additional and more complex issues, such as Transmission Use of System charges for load connections, joint planning responsibilities and the potential replacement of long standing contract arrangements between AEMO and network businesses. At this stage, generation connections are the priority given the current policy developments.

AEMO recognises that the details of how the framework will be translated into rules is an important step for stakeholders and will therefore factor in a further round of consultations as it develops proposed draft rules prior to submitting a formal Rule change proposal to the AEMC. There will also be some changes required to the National Electricity Law to implement the proposed reform. AEMO has commenced discussions with the Victorian Government on the process for legislative changes.

AEMO notes the AEMC released its Draft Determination for the open Rule change on Transmission Connection and Planning Arrangements in November 2016. The Draft Determination indicates that the proposed changes will not apply to the Victorian arrangements, with some potential exceptions to be

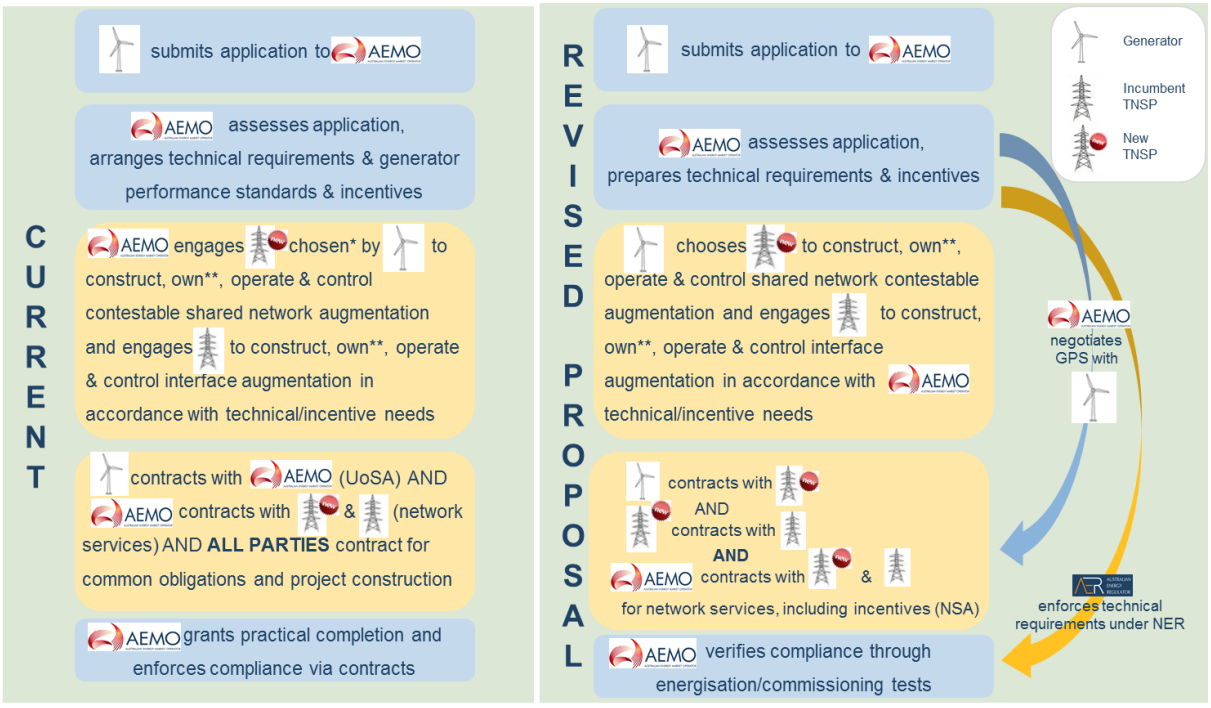
discussed with the Victorian jurisdiction. None of the proposed exceptions would impact the contestability of connections in Victoria.

Although AEMO would be removed as far as possible from the contractual and commercial negotiations, it is important to emphasise that AEMO will remain actively involved in setting the technical requirements and incentive parameters for shared network assets supporting new generation connections. AEMO considers that this is where the benefits of having an independent planner are best achieved. AEMO's role is to ensure the generator and shared network requirements are specified to a level consistent with that needed to ensure system security, maintain the quality of supply to other network users and meet other NER requirements.

Existing agreements will continue to have application after the introduction of the rules (assuming they are passed) and any connection applications and enquiries received until the passing of the legislation/rules package will continue to be negotiated under the current contractual arrangements.

3.2 Proposed new connection process

Figure 1 shows the current connection application process and compares it against the proposed application process for direct comparison. The proposed changes for each step are described in the following sections, together with stakeholder comments and AEMO's responses.



*Generator can also request AEMO to tender for a contestable TNSP.
**Operational control by a registered TNSP and DTSO is important for system security and planning reasons

Figure 1: Comparison of original and revised proposals for the proposed connection process. A similar diagram for the current process can be found in the consultation paper.

3.2.1 Application

Original Proposal

A generator wishing to connect to the DTS will submit its application to AEMO, having already undergone the pre-feasibility and enquiry connections stages with AEMO, as is currently the case.

Stakeholder Comments

Stakeholders agreed with this approach. EnergyAustralia considered the steps of the connection process must be made clear, including any foreseen changes to the current process. Guidance as to who is contacted at each stage, when and how agreements are finalised, and any other procedural matters should be incorporated in the regulatory framework. Origin raised concerns regarding the stipulation of rigid timelines where it would be possible for parts of the process to operate in parallel for efficiency. For example, connection point development can occur alongside the development of generator performance standards by AEMO.

Origin also considered there may be opportunity to revise the process for the connection enquiry and preliminary discussions with AEMO, prior to submitting a formal connection application. Origin noted that often feasibility studies or financial modelling will be used to determine the optimal project including site selection, transmission connection availability and generator preference. Undertaking a formal connection application is costly in both time and expense. Origin considers that AEMO should be open to discuss preliminary connections without having to submit a formal application.

AEMO Response

There appears to be strong support for AEMO to receive and process connection applications. Under the proposed model, AEMO will continue to negotiate the GPS (if the automatic performance standards are not adopted) and will continue to prepare the PFRs and PCRs. The applicant (along with the TNSPs) will therefore continue to liaise with AEMO to develop the PFRs/PCRs and GPS.

The stakeholder comments requesting that the rules clarify the application process in Victoria will be considered and where appropriate, we will suggest rules provisions to do so.

Stakeholder comments relating to the process of negotiating GPS and the PFRs and PCRs (and therefore the cost and time) are not strictly within scope. AEMO will continue to carry out these tasks. Therefore, the potential to save on costs and time in this part of the connection process is limited. Nevertheless, AEMO will engage with the relevant stakeholders separately to investigate whether alternative practices can be viably adopted within the current rules framework.

3.2.2 Assessment & development of connection requirements

Original Proposal

AEMO assesses the application and supporting information provided by the generator and determines the TNSP technical requirements, including AIS, and the GPS. In doing so, AEMO will produce the following technical documentation for the generator:

- PFRs for both the interface and contestable TNSPs;
- PCRs for both the interface and contestable TNSPs;
- AIS for TNSPs' new assets not covered by STPIS.[2]

With respect to the GPS, AEMO:

- Provides comments on any proposed generator GPS at the enquiry stage;
- Reviews and responds to proposed generator GPS at the connection application stage; and
- Reaches agreement with the applicant on GPS at the contract execution stage.

These documents will inform the project specification and commercial negotiations between the generator, its selected contestable TNSP and the interface TNSP.

[2] Where *negotiated transmission network services* are being or are proposed to be provided using generator funded transmission assets, the STPIS does not govern asset availability and performance. Consequently, to avoid "gaps" arising in the incentive arrangements relating to the availability performance of contiguous assets, a separate incentive scheme will be required to ensure consistency of outage incentives.

Stakeholder Comments

Submissions supported AEMO continuing to set the technical requirements for the connection. However, TGHA considered there should be opportunities for the contracting parties to seek AEMO's agreement to modify the technical requirements to allow for innovation and enable more economic solutions.

AEMO Response

AEMO supports a regulatory framework that encourages and fosters innovation and drive efficiencies. AEMO wishes to work with stakeholders to investigate how this can be incorporated into the new framework. While we are supportive of such an approach, we suggest that it should be subject to conditions such as restraints designed to protect existing network users (e.g. quality of supply protections) and have limited application where AEMO has particular expertise such as requirements arising out of AEMO specialist knowledge of the network as a whole.

3.2.3 Contracting process

Original Proposal

The generator will select a contestable TNSP to construct, own and operate the augmentation. AEMO proposes to remove the option for generators to request AEMO to tender for shared network augmentation services on their behalf.

The generator will negotiate contract arrangements with the chosen contestable TNSP and the interface TNSP. These arrangements must incorporate the PFRs and PCRs, and must ultimately be consistent with the agreed GPS and the AIS set by AEMO. If any changes are proposed, they must be approved by AEMO before being included in the contract.

Stakeholder Comments

AusNet Services and TGHA supported the removal of the option for a generator to request AEMO to tender for shared network augmentations on the applicant generator's behalf.

Origin considered generators should be able to request draft PFRs to help select the TNSP. While Origin acknowledged there may be variations required to meet the GPS in later stages, in its experience these would be expected to be minor.

AEMO Response

AEMO will propose corresponding Rule changes to remove the option for a generator to ask AEMO to tender for contestable works on its behalf.

Further consideration will be given to Origin's suggestion to furnish the applicant with provisional PFRs to assist it in choosing a contestable TNSP. As acknowledged by Origin the PFRs may need variations at a later stage when the GPS is finalised. We agree that applicants could benefit from having provisional PFRs to discuss preliminary options with TNSPs. But the question remains as to the level of detail needed to meaningfully engage with TNSPs.

AEMO is open to consider this further with the stakeholder, but the ability for AEMO to recover the costs of providing those documents and information will also need to be considered.

3.2.4 Completion and commissioning

Original Proposal

Once the assets are constructed, AEMO will perform due diligence on compliance with the PFRs and PCRs and system security. It was proposed that the generator will need to satisfy AEMO that the TNSPs have met the PFRs and PCRs before its application for registration in the NEM is granted.

AEMO considers that the regulatory framework should also provide for the timely completion of MOIs.

Stakeholder Comments

RES expressed concern that the completion of construction is proposed to be a pre-condition to registration. RES considers that once the TNSPs have proven they can meet the functional specifications, the generator should be able to participate in the NEM. RES considers that the regulatory framework should hold the TNSP accountable to complete a pre-approved list of minor outstanding items and that this would give AEMO the comfort it needs to ensure the TNSP completes the relevant work in a timely manner.

CEC had similar concerns about generator being required to satisfy AEMO that the TNSP has met the PFR and PCR prior to generator registration, foreseeing that the generator may not be in a position to either negotiate or enforce a contractual requirement for the TNSP to complete construction.

CEC also considered outstanding items expected by the TNSP's NER obligations are potentially broader than the scope of the relationship between the generator and the TNSP and as such it would not be appropriate to penalise the generator if incomplete. CEC considered that the AER could enforce MOI instead, or a financial arrangement could be struck between the TNSP and AEMO.

TGHA considered it would not be necessary to overlay regulatory timeline requirements for the contestable works as this would be incorporated in contracts. Regulatory provisions could frame incentives for undertaking interface works in a timeframe consistent with the contestable works. If regulatory provision is deemed necessary for the enforcement of MOI completion, TGHA suggested the Rules specify the period for completion of the outstanding item be defined as a "reasonable period" to allow for particular circumstances to be taken into account.

ENA also noted that the way MOIs would be dealt with under the new regime requires further consideration and clarification.

AEMO Response

The feedback received expressed concern against linking the TNSPs' obligations to meet the PFRs and PCRs with the generator's registration. AEMO has reconsidered the position and will now concentrate on having the Rules mirror the current practical completion process rather than pursue the original proposition.

AEMO will need to be satisfied that the shared network requirements meet all the service requirements under the PFR and PCR. While it is the TNSPs' responsibility to prove this to AEMO, the generator will still be impacted because the generator will not be permitted to participate in dispatch until the requirements are demonstrated to be met. This mirrors the current process which makes the physical act of connecting the generator contingent on the TNSPs' meeting the requirements of the PFR and PCR rather than affect the applicant generator's registration. It is also consistent with other jurisdictions in that it is the TNSPs' responsibility to ensure that the transmission service meets all relevant requirements. Generators can negotiate liquidated damages with TNSPs for failure to meet contract deadlines (which can arise from failure to demonstrate the technical requirements). The propensity for TNSPs to agree to face the risk of liquidated damages is much greater in a contestable environment.

MOIs are different in nature. They relate to matters of importance that still must be met by the TNSPs but which do not affect the provision of the electrical service. AEMO's concern has been that if the TNSPs are permitted to provide the transmission service and receive their full service payments under their connection agreements, there will be no incentive for them to meet outstanding MOIs. If TNSPs fail

to meet those requirements, AEMO will be far less inclined to permit connection unless all MOI matters are satisfactorily met.

There is also no incentive on the generator to ensure that the MOIs are met because they are already receiving a service. On most, if not all occasions, MOIs will not impact on the service that the generator receives.

AEMO would prefer to permit commencement of the service subject to satisfactory resolution of MOIs within a reasonable time provided that there is a mechanism that gives comfort that the MOIs will in fact be resolved. AEMO would like to canvas options with stakeholders as how to best ensure this. One proposal is to have Rules obligations on the TNSPs to complete the MOIs within a specified time. AEMO's view is that financial consequences are a more appropriate mechanism to encourage a particular behaviour rather than the threat of a Rules breach and will therefore investigate other options for further consideration.

3.3 Contracts

The Consultation Paper proposed that the generator, its selected TNSP and the interface TNSP will negotiate with each other for the construction of the network augmentation (interface and contestable assets) and connection assets, and the terms for provision of ongoing services to the generator. Those services would continue to be classified under the existing NER as negotiated transmission services. The generator will pay for them directly rather than through AEMO.

It is proposed that the final PFRs and PCRs will be captured on a new register held by AEMO, similar to the register AEMO currently maintains as market and system operator under the NER for GPS across the NEM. Generators and TNSPs would have regulatory obligations to comply with the registered PFRs and PCRs. In order to maintain accountability, the PFRs and PCRs would be drafted in a way that clearly allocates responsibility for meeting each technical requirement.

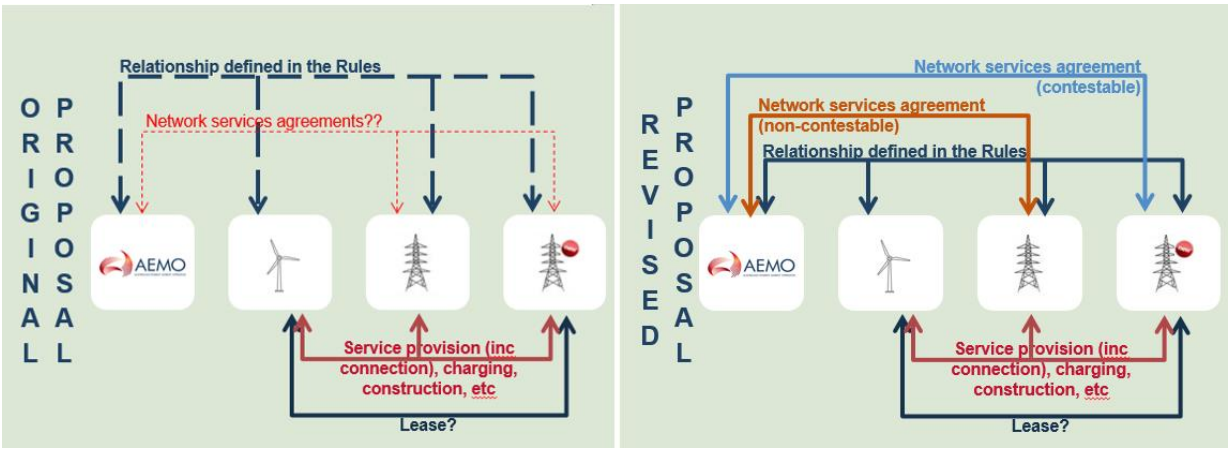


Figure 2: Proposed contractual and rules relationship between the parties involved in the connections process.

3.3.1 Generator contracts

Original Proposal

All GPS for registered generators in the NEM are maintained by AEMO in a register under rule 4.14 of the NER. To date the GPS oversight role in Victoria has been undertaken by both AEMO under its UoSAs and the AER under its generator compliance program.[3]

[3] The AER enforces compliance with registered GPS standards under the NER, in particular rule 4.15. AEMO also has a role in overseeing rectification of any GPS breach that comes to its attention.

AEMO is considering whether the responsibility for ongoing enforcement and monitoring of compliance with the GPS should remain entirely with the AER within the existing NEM-wide framework in the NER or whether additional rules-based enforcement rights should be established for AEMO, to the extent necessary for AEMO to carry out its DSN functions.

Stakeholder Comments

Stakeholders did not raise concerns or comments in their submissions regarding the contracting arrangements for the generators' GPS.

3.3.2 TNSP contracts

Original Proposal

AEMO outlined two possible models for contracting between the generator and one or both the TNSPs, under a structure where the generator no longer acquires a bundled use of system service from AEMO incorporating both the interface and contestable augmentation. These models assume that the contestable TNSP would also provide the connection services to the generator.

1. Single contract model - Under this model the applicant enters into one contract with the contestable TNSP for all the necessary shared network and connection requirements. That TNSP would in turn be responsible for procuring the interface services from the interface TNSP(s) and supplying a bundled service to the generator.
2. Multiple contract model - This model requires the generator to enter into separate agreements with both TNSPs. It is possible that there may be more than one intervening interface TNSP, depending on the configuration of the network at the proposed connection point location. In that case an agreement would be required with each of them.

Stakeholder Feedback

Origin considered there is no need to mandate between a single or multiple contract model. Connecting generators will have differing levels of expertise and should therefore be afforded the flexibility to choose which model suits them best.

TGHA preferred the single contract model to simplify the process for the generator, and enables the connection to be project managed by a single party.

RES considered that, in the absence of AEMO, a negotiating framework for the incumbent TNSP would be required to ensure the incumbent TNSP does not take any adverse advantage.

AEMO Response

AEMO has no clear preference for either model. We note that stakeholders did not possess a common view on this issue. We therefore suggest that the parties be given the choice as to how they wish to proceed.

With respect to RES's comment regarding the need for a negotiating framework, we note that the rules already require the incumbent TNSP to allow access/connection to its system. We are not sure what a negotiating framework in addition to that which already exists would add.

3.3.3 Network Service Agreements

Original Proposal

AEMO provides shared transmission services to network users in Victoria by procuring the shared transmission service from asset owning TNSPs. This is done by entering into network service agreements which specify the level of service via the PFRs and PCRs. Initially, AEMO's preference was

for the provision of shared network services to be dealt with under the rules instead of through an agreement. The alternative is for a form of NSA to continue between AEMO and the TNSPs.

Stakeholder Comments

While there is general support for the removal of all contracts to simplify the process and reduce costs for the generator, stakeholders consider removal of service contracts needs detailed assessment to give confidence in compatibility with the overall Victorian regime. AusNet Services contends that the provision of services lends itself to a service agreement approach, but the process for negotiating the agreement could be further streamlined – e.g. the contracts could be in published standard form agreements, with only the schedules to be populated and open to negotiation.

TGHA encourages the enforcement of the PFRs and PCRs by AER to be further explored, and consideration to be given to whether the AER can take on this role. If it is possible, TGHA supports this approach given continued enforcement by AEMO under NSAs reintroduces contract complexity into the reform.

Origin also considers that the NSAs may better provide for flexibility as opposed to an overly prescriptive regulatory framework.

AEMO Response

AEMO is proposing to maintain a form of NSAs in the framework, now supported by the Rules. While we recognise this leaves a layer of contractual complexity, each NSA will only be a contract between AEMO and the respective TNSP and will include among other things, the service provisions and incentive arrangements for availability.

AEMO sees this as important to ensure the level of service provided by the TNSPs remains adequate and consistent with the parties' respective ongoing obligations to ultimately provide network services to other users of the shared network. There are also additional benefits in retaining these contracts to provide for an AIS under the new framework as discussed in the next section. It was mentioned at the forum that the NSA (if retained) could be used to retain money until completion of the MOIs. It is not clear how this can be done and would like to pursue this suggestion further with stakeholders.

As suggested by AusNet, we are also considering the potential for a standard form agreement. Obviously, the description of the service to be provided and the incentive arrangements will need to be flexible.

3.3.4 Availability incentive scheme

Original Proposal

The regulatory framework needs to ensure that contestable TNSPs are appropriately incentivised to manage the market impact of outages on their assets. AEMO presented options for how incentive arrangements for TNSPs to manage their outages could be applied under the new framework.

- Given the complexity of interacting incentive arrangements, there might be benefits associated with having the AER administer an extension of the Service Target Performance Incentive Scheme (STPIS) or introduce a new scheme based on the performance of single assets or a small group of connected assets for negotiated services not in the regulated base.
- The AEMC was considering what, if any, new functions should be conferred on the AER as part of the Transmission Connections and Planning Rule change process.
- In the absence of AER-administered arrangements, AEMO could develop an availability incentive scheme to apply to the contestable TNSP as part of the package of technical requirements determined during the connection process. This approach would reflect the existing Victorian arrangements.

Stakeholder Comments

AusNet Services suggested NSAs may be required to continue to provide the mechanism to fund the AIS under a commercial arrangement with AEMO.

TGHA considered that the AIS should be able to be tailored for varying connection arrangements, and AEMO could determine these for each connection as part of determining the technical requirements.

AEMO Response

As mentioned in the previous section, AEMO considers the continuation of a form of NSAs between AEMO and each TNSP will allow for payments under an incentive scheme. The rules should permit the imposition of an incentive arrangement for these services and the details of each incentive rebate is expected to be administered via the NSAs with the TNSPs. The details can be firmed up in the next phase of the consultation.

3.3.5 Confirmation Step

Original Proposal

AEMO will no longer be actively involved in the negotiations that take place between the generator and TNSP(s). Consequently, in order to confirm that the PFRs and PCRs are correctly reflected in the connection agreement(s), AEMO should be allowed the opportunity to satisfy itself that this has occurred before the agreements are executed.

Consequently, a mandatory confirmation step before contract execution is proposed to avoid the risk that contracts are concluded and construction commences based on incorrect PFRs and PCRs or ones that were not the “for contract final” versions.

Stakeholder Comments

TGHA supported AEMO approving the contracts with reasonable timeframes applied for AEMO’s review.

Origin also suggested that a validity period should be applied to the technical requirements, rather than a mandatory confirmation step with AEMO prior to signing the contracts. Either the TNSP or generator could examine the network conditions and determine if material network changes require alteration to the connection specifications.

AEMO response

Origin’s suggestion of specifying a validity period is sensible and will be implemented in order to make clear the currency of the requirements in the PFRs and PCRs. However, that period cannot be construed as a reservation in connection queue. This would be inconsistent with the access regime underlying Chapter 5 of the NER. Connection requirements can be subject to change and subject to revised studies up until agreements are executed. AEMO has a policy document on this which stakeholders are encouraged to refer to (Policy on Active Management of Connection Applications in Victoria). The validity period can act as a period within which the applicant can conclude agreements and be assured that provided no other applications have proceeded to execution, the requirements will still be valid.

3.3.6 Variations

Original Proposal

There are occasionally cases where AEMO needs to raise a variation to the technical requirements. If an issue comes to light, whether or not as a result of changed circumstances[4], variation will be necessary if required to avoid:

- placing system security at risk;
- impacting quality or reliability of supply to other network users;
- causing a party to be in breach of the NEL or the NER; or
- impacting AEMO's ability to carry out its functions under the NEL or jurisdictional legislation.

In these circumstances, the NER should permit AEMO to raise a variation to the technical requirements and the relevant TNSP would be required to ensure that the varied requirements are met. This is consistent with the arrangements present in the current suite of agreements. Consistent with those agreements, the cost of the variation would be borne by the parties in accordance with their agreements.

Stakeholder Comments

EnergyAustralia was concerned that with AEMO less involved in the contractual process, this proposal may raise the risk of unpredictable last minute variations to connection requirements and increase cost and timeframes. RES also considered the circumstances for AEMO to be able to raise a variation need to be defined and clear so the risk can be quantified and this should not include modifications after contract execution as a result of another connection.

TGHA said that AEMO must advise any potential changes to the technical requirements due to changed circumstances in a reasonable time. TGHA considered that the risk of a variation after financial close could be removed altogether by treating it the same way as a variation after practical completion – i.e. the cost of the variation is either borne by a new connecting customer if that is the cause of the variation or otherwise by shared network users.

CEC recommended variations be disallowed beyond a project's commitment to a connection agreement and the project's financial close. CEC also suggested that if variations are allowed after financial close, there should be tight restrictions as to what is allowed, and limited to secondary plant or items not foreseeable at the time of the agreement.

ENA also noted that the way variations would be dealt with under the new regime requires further consideration and clarification.

AEMO response

AEMO understands the risk that potential variations pose for applicants and TNSPs but it remains a very important issue. The service provided to a generator is a negotiated transmission service and costs of establishing the shared network and connection services may only be recovered from the applicant generator and not from general customers. The causer pays principle requires that the applicant generator pays the costs associated with its decision to connect at the chosen connection point. This will usually take the form of installation of equipment (such as a run-back scheme) that mitigates the impact of the connecting generator and these will need to be consistent with the negotiated generator performance standards.

If those mitigating measures are not installed at the time of connection, the negative impact of the generator's connection will be felt by all network users and could require significantly greater investment or disruption subsequently. To the extent the applicant generator caused the need for the mitigating measures, it would be inconsistent with the "causer pays" principle to transfer that cost to either

[4] For example in circumstance where the information provided to AEMO by an applicant was not complete or was incorrect..

customers in general or the next applicant (which is also inconsistent with the cost recovery path for a negotiated service). Therefore, AEMO considers that a right to raise a variation after contract execution remains necessary. AEMO will consider whether appropriate conditions can be placed around AEMO's right to raise a variation to give applicants more certainty. AEMO will propose Rules in the next phase of the consultation.

3.3.7 Cost sharing terminal stations

Original Proposal

In order to get more efficient outcomes and engage in better planning outcomes, AEMO supports the sharing of terminal stations and users sharing in the costs. Provisions may need to be inserted into the NER to assist in achieving this outcome and allow AEMO to apply its cost allocation policy.

Stakeholder Comments

RES considered the cost sharing methodology should be continued, but the enforcement of this will need to be thought through as AEMO will no longer be party to the suite of contracts. The cost allocation framework may need to be agreed to and be enforced under contracts.

AEMO Response

The proposal is to allow the cost allocation policy to be enshrined as having the force of rules. Any new terminal station will have a sharing arrangement attached to it under the Rules. Any TNSP that receives an application from another generator to share the terminal station will need to apply the current cost allocation policy and share the costs among the connecting generators accordingly. We prefer not to place the policy into the rules in order to allow some flexibility to change it for future developments. We note that clause 6A.9.1(6) of the NER already require TNSPs to adjust charges according to the extent that the costs of assets are being recovered by others. We propose to leverage off that obligation with further and more specific guidance to be provided by AEMO's Cost Allocation Policy. If necessary, consideration will be given to how other AEMO policies will be dealt with.

3.3.8 Guidance and dispute resolution

Original Proposal

AEMO has in the past played a role in guiding an applicant through the connection process and mediating disagreements between it and the TNSP. We have also been involved in resolving issues arising between the incumbent TNSP and that contestable TNSP. AEMO is open to considering a limited role and seeks feedback in this regard.

Stakeholder Comments

CEC considered AEMO's current role as an independent umpire has value, and is consistent with the AEMC's proposal for an independent engineer for the other regions in the NEM. At a minimum, Victoria should have consistent arrangements, and RES suggested there may be a need to define AEMO's subject matter expert role under the contracts.

Origin preferred AEMO to be proactive earlier in the process, such as approval of changes to connection requirements, rather than just an umpire in a dispute at the later state.

AEMO Response

In developing the PFRs and PCRs, AEMO is already essentially acting as the independent engineer in respect of the shared network requirements as proposed by the AEMC for the other regions. AEMO seeks to require the most cost effective solution possible under the NER through the PFRs and PCRs. For instance, current practice is that it will consider a "soft-tee" arrangement rather than fully switched

under certain circumstances in order to reduce an applicant's connection costs. AEMO can also provide advice and assistance so that the applicant can structure its project to maximise the works that qualify as contestable. We believe that AEMO's role, particularly its involvement in the actions described above, sufficiently cover stakeholders' concerns.

In addition, AEMO considers that competition should result in the most efficient outcome and is not proposing to expand AEMO's role to include a mediation role.

4. NEXT STEPS AND TIMEFRAMES

AEMO will commence the development of rules amendments based on the proposals, comments and responses in this document. We propose to have a set of draft rules ready for consultation by mid-May with a view to submitting a rule change application to the AEMC by July 2017. The program for any legislative amendments is still to be determined and discussions are currently being held with the Victorian government. This may impact on the timeframes for consideration and passing of the rule change.

In the meantime, if you have any questions, please contact Franc Cavoli on (03) 9609 8416 or franc.cavoli@aemo.com.au.