



Minutes

TDOWG Meeting 3, 2019

Time: 9:30am to 12:00pm
Date: Tuesday, 22 October 2019
Venue: AEMO offices, Level 45, Central Park, 152 St Georges Terrace, Perth

Attendees	Organisation	Attendees	Organisation
Adrian Theseira	ERA	Steve Gould	Community Electricity
Alex Cruickshank	Oakley Greenwood	Tim Mcleod	Amanda Energy
Angeline Ong	ETIU	Tim Robinson	RBP
Ashwin Raj	ETIU	Troy Santen	Stellata
Brad Huppatz	Synergy	Wesley Medrana	ETIU
Chris Wallace	Cleantech Energy		
Clayton James	AEMO		
Donna Todesco	ERA		
Elizabeth Walters	ERA		
Emma Rowe	Dept of Treasury		
Geoff Gaston	Change Energy		
Geoff Glazier	Merz		
Glen Carruthers	Western Power		
Greg Ruthven	AEMO		
Greg Thorpe	Oakley Greenwood		
Jacinda Papps	Alinta		
James Townsend	Lacour Energy		
Jason Froud	Synergy		
Jayesh Halai	Perth Energy		
Jenny Laidlaw	RCP Support		
Kristian Myhre	Transalta		
Liz Aitken	Perth Energy		
Martin Maticka	AEMO		
Matthew Bowen	JacMac		
Matthew Fairclough	AEMO		
Mena Gilchrist	ETIU		
Mike Thomas	Lantau		
Neil Hay	Oakley Greenwood		
Noel Schubert	ERA		
Oscar Carlberg	ETIU		
Paul Arias	Bluewaters		
Peter Huxtable	Water Corporation		
Rebecca White	ETIU		
Rodney Littlejohn	Tersum Energy		
Sabina Roshan	Western Power		
Sam Lei	Alinta		
Sara O'connor	ERA		
Sarah Rankin	Moonies Hill		
Sarah Silbert	unknown		
Scott Davis	AEC		
Shannon Hewitt	Cleantech Energy		
Simon Middleton	AEMO		
Stephen Eliot	RCP Support		

Item No.	Issue
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1.	Allocation of Capacity Credits in a constrained network
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Project Lead, Improving Access, Ashwin Raj recapped the proposal to establish a Capacity Credit Rights regime that was presented in the 12/08/2019 TDOWG.

Ashwin Raj outlined the need for reform to the Reserve Capacity Mechanism (RCM).

- As the SWIS transitions to a constrained access network, reform is required to:
 - 1) ensure the RCM continues to meet its objective of incentivising investment in enough generation and demand-side capacity to maintain reliability; and
 - 2) continue to reward generation capacity based on its contribution to reliability.

Greg Thorpe of Oakley Greenwood gave an overview of the proposal to establish a Capacity Credit Rights regime.

- Capacity Credit Rights would act as a discount on the amount of Capacity Credits a generator can receive, preventing Capacity Credits being allocated in excess of the network's capacity, and preventing inefficient churn of existing capacity resources.
- The regime has been designed to maximise the use of existing processes.

Greg Thorpe explained the advantages and disadvantages of the proposal. Advantages included:

- certainty around capacity revenue; and
- locational signals for investment in capacity.

Disadvantages included reliance on network modelling.

Liz Aitken of Perth Energy asked whether the modelling used to allocate Capacity Credit Rights would favour certain generation technologies and noted that this would be inconsistent with the Wholesale Electricity Market (WEM) objectives.

Ashwin Raj responded that facilities will be allocated Capacity Credits and rights based on their contribution to reliability and constraints in the network.

Mike Thomas of The Lantau Group presented the key design elements of the Capacity Credit Rights proposal. The first design element presented was the tenure of the rights.

- The tenure of rights would be performance-based, considering there is no theoretical requirement to define an expiry date for any given set of CCRs, and time-based rights may:
 1. cause current and effective capacity providers to be churned out of the market and be replaced by assets that do not add significantly to the effectiveness of the RCM;
 2. attract new entrants to seek access to parts of the network that are constrained rather than seek access to unconstrained parts of the network; and
 3. Expose investors to unhedgeable risks post-investment from new investments that add no value to the RCM.

Mike Thomas presented the conditions under which rights could be removed.

- It is proposed that rights would be subject to a 'use it or lose it principle' and would be adjusted consistent with changes in Certified Reserve Capacity.

Tim Robinson of Robinson Bowmaker Paul asked whether rights would be linked to the connection point in the network and not the asset behind the connection point.

Ashwin Raj responded that rights would be linked to the facility (i.e. the asset), considering this is necessary for allowing the tenure of rights to be based on the facility's performance. For example, if rights were linked to the connection point, then it may be difficult to reduce or remove rights when the facility is not providing capacity. This could entrench incumbency and present a barrier to entry.

Jenny Laidlaw of the Rule Change Panel asked if a participant who rebuilt a facility behind a connection point, next to another facility, would be able to transfer its rights between the two facilities.

Mike Thomas responded that the proposed reforms would aim to avoid a situation where an incumbent could use transfers or brownfield developments as means of preventing its rights from being recontested when it retires facilities.

Matthew Fairclough of AEMO noted that under the current registration rules, a facility that is rebuilt in place of a retired facility may still be considered the same facility.

Liz Aitken noted that the proposal may cause the RCM to penalise customers who are able to increase their load (or decrease their embedded generation) to alleviate constraints. These customers would be exposed to higher Individual Reserve Capacity Requirement costs despite alleviating constraints and providing system benefit.

Greg Thorpe responded that this issue has been recognised by the project team and will be considered in the development of the more detailed design.

Mike Thomas noted that realising system benefit in this situation would require a high-level of co-ordination; considering generation assets would need to be ready to utilise the network capacity when it is made available by the customer increasing its load.

Mike Thomas outlined the intended purpose of designing rights to be transferrable: to allow a situation where a low-cost new entrant may purchase rights from an incumbent that has relatively higher costs. In this situation, the incumbent's cost to maintain its capacity must be greater than the amount the new entrant needs to make its investment economic.

Jenny Laidlaw questioned how the transitional price would apply to transfers. For example, would the transitional price end with a transfer or would it be transferred?

Mike Thomas said the project team recognised that this is an issue that will need to be addressed in the development of the more detailed design.

Geoff Glazier questioned whether intermittent generators would have their rights reduced where their Certified Reserve Capacity is reduced for reasons unrelated to their performance [under the Relevant Level Methodology (RLM)]; and whether they would be able to receive additional Capacity Credit Rights if they improved their availability – for example, by adding storage.

Ashwin Raj responded that the proposal is for Capacity Credits Rights to be adjusted with changes in Certified Reserve Capacity. That is, Capacity Credit Rights will not hedge against changes in Certified Reserve Capacity associated with the RLM. For example, if a facility's Certified Reserve Capacity reduced under the RLM for reasons unrelated to their performance, then the facility's rights and credits would still be reduced. Equally, if a facility upgraded its facility or its Certified Reserve Capacity increased under the RLM, then that facility would have an opportunity to gain additional Capacity Credits and rights.

Simon Middleton of AEMO asked whether rights would be transferrable between special purpose vehicles or subsidiaries.

Ashwin Raj responded that the intention of making rights transferable is to allow the efficient exit of facilities, making way for lower cost new entrants. The more detailed design would need to prevent against the scenario where transfers are used to block new entry and entrench incumbency.

James Townsend of Lacour Energy raised a concern that granting incumbents rights and allowing rights to be traded would disadvantage new entrants, presenting a barrier to entry that undermines the objectives of the constrained access reforms.

Ashwin Raj responded that rights are not intended to block new entrants and reward incumbency. The purpose of rights is to allocate Capacity Credits based on facilities' incremental contribution to reliability. In relatively congested parts of the network, a new entrant's incremental contribution to reliability will be limited and therefore the quantity of Capacity Credit Rights the facility receives will reflect this. Conversely, in less congested parts of the network, a new entrant will have opportunity to make a larger contribution to reliability and receive relatively more rights and credits.

Ashwin Raj outlined the proposed process for allocating Capacity Credit Rights and Capacity Credits. Capacity Credit Rights would be allocated in the same order that AEMO applies when allocating Capacity Credits.

Simon Middleton asked whether facilities connected under the Generator Interim Access (GIA) arrangement would be treated differently compared to other facilities in the allocation of Capacity Credit Rights.

Ashwin Raj responded that the Constrained Access Entitlement may need to be applied initially in allocating Capacity Credit Rights to GIA facilities to make sure the network can support their initial allocation of rights.

Liz Aitken asked what conditions are being modelled in allocating Capacity Credit Rights. Will these conditions be based on a single peak interval or will they be modelled based on conditions throughout the year?

Ashwin Raj responded that the tool used to allocate Capacity Credit Rights will be based on the method currently used to calculate Constrained Access Entitlement, but the detailed design of this tool will need to be developed in consultation with industry. The Constrained Access Entitlement method involves modelling the network capacity available to generators in a range of potential dispatch scenarios that may occur to meet the PoE10 demand level.

Jenny Laidlaw noted that the ERA's proposed Relevant Level Methodology would contain assumptions about the output of scheduled and intermittent facilities that may be invalidated by the constraint modelling used in the allocation of rights. Considering the RLM is an input in to the constraints model, this may require iterations to resolve.

Ashwin Raj responded that the project team has recognised this issue and will incorporate it into the more detailed design.

Liz Aitken raised a concern that the proposal would prevent new entrants from receiving Capacity Credits. For example, a peaking facility with Capacity Credit Rights up to the network's capacity would prevent new entrants getting Capacity Credits in that region despite the peaking facility rarely being dispatched.

Liz Aitken raised a concern that Capacity Credit Rights may limit opportunities for new entrants to receive Capacity Credits to locations in the network where the costs of developing a project is too high relative to the Reserve Capacity Price.

Mike Thomas responded that this would be an issue with the Reserve Capacity Price not being high enough to incentivise investment in capacity.

Greg Ruthven of AEMO noted that this situation may also arise due to a network planning issue.

Liz Aitken asked how the allocation of Capacity Credit Rights would be linked to Western Power's responsibilities to build and maintain the network. For example, would issues in the allocation of Capacity Credit Rights provide signals to Western Power to invest in the network?

Geoff Glazier noted that this signal may also come from the energy market. For example, congestion information in the energy market may indicate the need for investment in the network; and signal to generators where to connect in the network.

Ashwin Raj recognised that there is a need for a coordinated response to this issue from the energy and capacity market reform project teams.

Alex Cruickshank noted Jenny Laidlaw's earlier question about how rights would be reduced as a result of network-related factors, including network asset retirements and load changes. That is, whose rights would be reduced first? Alex Cruickshank then explained how rights will need to change due to both increases and decreases in network capacity.

- Capacity Credit Rights will not be adjusted for short-term network outages.
- For permanent reductions in network capacity that impact existing rights, the project team is developing a process to determine which facilities have their rights reduced and will present this to industry for feedback.
- Where network capacity increases and the capacity is on the regulated asset base, facilities will be allocated rights using the same tool and prioritisation process presented by Ashwin Raj.
- Generators that fund network augmentations will receive the rights associated with the augmentation.

Greg Ruthven of AEMO noted that the process for allocating rights associated with augmentations will need to account for multiple generators jointly funding augmentations, considering that it is rare that a generator individually funds a network augmentation.

Liz Aitken noted that Western Power should be liable for reductions in Capacity Credit Rights that are caused by reductions in its network capacity.

Ashwin Raj responded that the project team will take this into consideration and recognised that Western Power will also need to retain a mechanism that allows it to retire uneconomic network assets.

Glen Carruthers of Western Power noted the growth of distributed energy resources and a transition to a modular network would cause a higher level of network retirements.

Ashwin Raj acknowledged that it will be difficult to implement the proposal for the next capacity cycle, considering the necessary constraint equations and network modelling tool cannot be developed in this timeframe. Additionally, this would not allow participants enough time to interpret network information ahead of making investment decisions. There are two proposed solutions which will be discussed with industry:

- 1) undertake a provisional allocation of Capacity Credit Rights which would be subject to correction; or
- 2) defer the 2020 cycle.

Greg Thorpe presented on the potential need for temporary transfers of Capacity Credit Rights.

Jenny Laidlaw noted that the supplementary reserve capacity mechanism may obviate the need for such transfers.

2. Technical Rules change management

Project Lead, Power System and Reliability, Mena Gilchrist presented the detailed design for the Technical Rules Change Management process. This work follows the high-level design presented to the previous Power System Operation Working Group in June 2019.

The problem to be addressed was summarised:

- Western Power is currently the only party that can submit a rule change request, for the consideration of the ERA.
- Technical Rules have not responded well to changes in the sector.
- There is inconsistency in the change management processes between the Technical Rule's and the WEM Rules.
- The framework under Chapter 12 of the Access Code requires amendments to allow for a suitable open change process.

Mena Gilchrist outlined the progress and next steps of the project.

- The detailed design is nearing finalisation and will be presented to the Energy transformation Taskforce (Taskforce) in November.
- If the Taskforce endorses the proposal, an Information paper will be made available on ETIU's website.
- While the Information paper will include Access Code amendments, a formal public consultation paper will be released in Q1 2020 which will collate these changes with other ETIU Access Code changes.

Mena Gilchrist spoke to the PowerPoint presentation which outlined how the Technical Rule Change Process will work.

- The ERA will be empowered to develop the procedure that an applicant must follow in submitting a change request and will be able to reject applications that do not comply with these processes.
- The ERA will be required to seek the advice of the Technical Rules Committee for all substantial rule change requests. The Coordinator of Energy representative will remain the Chair of the Technical Rules Committee and the membership will be expanded to include AEMO. The ERA will dictate the terms of reference of the committee and may appoint additional members.
- The considerations in assessing an application will be expanded to include the impact on end-consumers as well as power system security and reliability.
- AEMO will be able to cost recover for its role in the Technical Rules Committee; submitting a rule change request, as well as make a public submission to a rule change under consideration. It will be limited to involvement relevant to its role as System Manager or Market Operator.

Stephen Elliot of the Rule Change Panel asked why the Coordinator of Energy will be the chair of the Technical Rules Committee, and not a representative of the ERA.

Mena Gilchrist responded that the Coordinator of Energy is currently the Chair of the Technical Rules Committee. The Coordinator of Energy is considered the most independent option. The Access Code currently prohibits the ERA from sitting on the Technical Rules Committee, although it may observe its activities.

Jacinda Papps of Alinta Energy asked whether the proposed changes would align with the rule change processes in the North West Interconnected System (NWIS), noting that there might be some benefit in this.

Mena Gilchrist responded that the proposed changes won't affect the NWIS considering the NWIS won't use chapter 12 of the Access Code.

Greg Ruthven asked whether the Rule Change Panel or ERA would be able to make rule change submissions.

Mena Gilchrist responded that this may raise a conflict of interest considering the ERA is also the approver of the rule change request. The ERA had advised that it did not need the ability to submit a change request.
