RULE CHANGE REQUESTS TO BETTER INTEGRATE DER

VIRTUAL PUBLIC FORUM

13 AUGUST 2020



- Three rule changes proposing reforms to better integrate distributed energy resources into the electricity system
- Providing a public forum for rule proponents to discuss their requests with stakeholders
- AEMC staff will explain the rule change process and how stakeholders can provide input to our decision making process





St Vincent de Paul Society



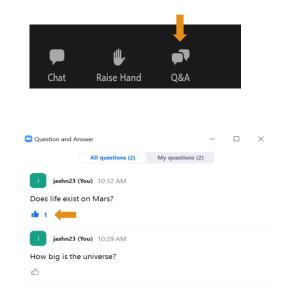
Agenda

1.	Opening Remarks
2.	Proponent presentationsTotal Environment Centre and Australian Council of Social Service rule change requestSt Vincent de Paul Society Victoria Rule change request
3.	5 min break
4.	Proponent presentationSA Power Networks Rule change request
5.	Panel Q&A All Proponents
6.	AEMC Consultation Paper and process
7.	Closing Remarks

- All participants are current in 'listen-only' mode
 - Please stay on mute during presentations
- Presentations from today will be posted on our website after the webinar
- Please engage respectfully

Zoom Q&A function

- Q&A function is open throughout the webinar
 - Use the Q&A button on the bottom of your screen
- 'Upvoting' function
 - We will try to answer all questions, but will prioritise questions with most 'upvotes' first
- 'Dismissed' queue
 - This is a Zoom term
 - We will move questions here if they are duplicates





Asking questions

- Questions will be answered at dedicated Q&A sessions
- Please keep questions on topic and avoid making comments we have a large audience and limited time
- When asking questions, please indicate which presenter you are directing the question to
- If requested by moderator please switch your mic or mic/video on during the Q&A session to further explain your question. Moderators won't switch your mic/video on unless you specifically request it.
- If we don't get to your question during the forum, the proponents and AEMC will endeavour to get back to you.

OPENING REMARKS

MERRYN YORK AEMC CHAIR (ACTING)

RULE CHANGE REQUESTS PRESENTATIONS FROM THE PROPONENTS

KELLIE CAUGHT (ACOSS) & MARK BYRNE (TEC) GAVIN DUFTY (ST VINNIES) MARK VINCENT (SAPN)



More Sun for Everyone Distributed Energy Resources Rule Change

AEMC Consultation Webinar





August 13 2020

Why DER access and pricing reforms are needed

- <u>DER provides benefits</u>, key part of the future energy system, help accelerate the decarbonisation of the grid, improve grid reliability and help make energy more affordable for everyone.
- The rapid uptake of DER (8GW now, 60GW in 2050) means we are <u>moving towards a two-way electricity grid</u> in which people consume, generate, export and trade energy.
- But the grid and the rules are stuck in the outdated one-way system, with several consequences:
 - <u>Technical issues</u>, voltage, thermal, visibility, which are leading to constraints, system shut off, costs and loss of value to consumers.
 - <u>Constraints on pricing reform</u>, impacting on cost recovery and valuing benefits of DER, reducing value to consumers and creating inequity between consumers.
 - <u>Constraints on network access and connections</u>, no firm access, consumers being export constrained reducing value to consumers and creating inequity between consumers.
 - <u>Limited DER enablement</u>, networks not incentivized to increase DER capacity. Reducing value to consumers, reducing decarbonisation potential.





What could happen without these reforms

- More DER owners will be export limited or subject to zero exports.
- DER owners will have their systems shut off more often, preventing even selfconsumption.
- The inequities between early and late adopters of rooftop solar will become exacerbated.
- Other consumers will bear the increasing costs of managing DER integration if costs exceed the benefits to all.
- Speed of decarbonisation could be reduced.



Process taken to inform TEC/ACOSS Rule Change





Energy Agency

Australian Government public interest Australian Renewable

> **AUSTRALIAN** ENERGY REGULATOR



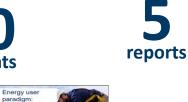


120 participants

Three workshops identified a broad range of distribution reform options to better integrate DER into the energy system.

Approximately 120 participants from governments, industry, associations, market bodies and regulators, in addition to a cross-section of energyuser customer representative groups were involved.

The working group has also held 6 reference group meetings which consist of 22 interested parties in the outcomes.



the day

PTEMBER 27, 2011



TEC/ACOSS Rule Change 2020 – in a nutshell

More Sun for Everyone rule change is the first step to creating a fit for purpose regulatory framework for the emerging high DER energy system in the NEM.

The changes to the regulatory framework will support greater investment in and better operation of DER to facilitate faster decarbonisation of the energy system and deliver more equitable and efficient outcomes for all energy users.

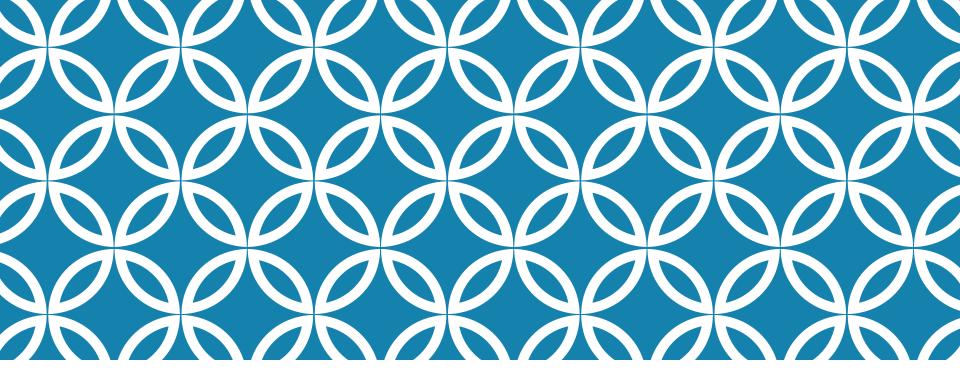
It does this by creating obligations and incentives for networks to optimise existing, or invest in additional, DER hosting capacity, improving access to export for the grid for DER owners, and allocates costs more fairly when costs to export more, outweigh the benefits for all consumers.



TEC/ACOSS Rule Change 2020 - Detail

- 1. Introduce a requirement for networks to prepare a comprehensive 5 yearly *DER integration strategy* (DERIS). It would outline current and projected DER uptake, network challenges and opportunities and proposed investments and other actions over the coming five years and beyond.
- 2. Encourage networks to make the best use of existing infrastructure to maximise DER exports. Introduce a new obligation to require networks to optimise existing hosting capacity as a network operation solution.
- 3. Encourage networks to invest in additional DER hosting capacity where this benefits all consumers. Introduce a net market benefit criterion explicitly relating to the role of DER as a guiding principle of network planning and investment.
- 4. Allow prosumers subject to export constraints to put more of their surplus energy back into the grid. Amend the existing prohibition on network charges for DER exports to give prosumers the option of purchasing additional access or capacity.
- 5. Require networks to offer prosumers a basic level of DER exports i.e. they can no longer impose zero exports.
- 6. Allocate hosting capacity fairly. Introduce a new pricing principle to guide the allocation of existing and planned export capacity between prosumers to provide a better balance for fairness and equity





<u>RULE CHANGE REQUEST FROM: ST VINCENT DE</u> <u>PAUL SOCIETY, VICTORIA - REMOVAL CLAUSE</u> <u>6.1.4 IN NATIONAL ENERGY RULES</u>

Gavin Dufty











Currently NER 6.1.4 (a) (b) prohibits distribution networks from charging for exports or injections into the grid.

6.1.4 Prohibition of DUOS charges for the export of energy



(a) A Distribution Network Service Provider must not charge a Distribution Network User distribution use of system charges for the export of electricity generated by the user into the distribution network.

(b) This does not, however, preclude charges for the provision of connection services.

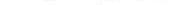




















We submit that NER 6.1.4 is in conflict with the network pricing objective in NER 6.18.5(a)

Vinnies good works

6.18.5 Pricing Principles

Network pricing objective





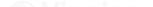


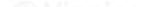
(a) The network pricing objective is that the tariffs that a Distribution Network Service Provider charges in respect of its provision of direct control services to a retail customer should reflect the Distribution Network Service Provider's efficient costs of providing those services to the retail customer.

THE CHALLENGE / ISSUES

It is clear that the current arrangements are sub-optimal for both DER participants and society more broadly as renewable energy can fail to be harvested despite the investments that have been made. Other issues such as increased in complaints and other frustrations for consumers, networks, retailers, government etc

Moving forward we seek to open up more options for consumers ... to do this we propose





PROPOSAL - INCREASING OPTIONS FOR DER AND OTHER CONSUMERS

We propose a a rule change to remove impediments in the National Electricity Rules (NER) to Distribution Network Service Providers (DNSPs) recovering costs incurred by the DNSP in supporting the export of electricity from the Distribution Network Users who export energy, which therefore propose

the removal of Rule 6.1.4. within the National Electricity Rules.





INCREASING OPTIONS FOR DER AND OTHER CONSUMERS

Importantly, we are not advocating for an approach where DER participants have to pay for using the networks. <u>Rather we are proposing to explore a solution that allows DER generators / exporters to choose between paying or being constrained.</u>

This is an important distinction as some DER participants may prefer being constrained rather than paying a DUOS type charge for export that is consumers have both a passive option the status quo applies and an active option if they choose to take it up.

This would also create a price point for other non network solutions to base other products and services around

Enabling customer choice as we continue the transition to a new energy future

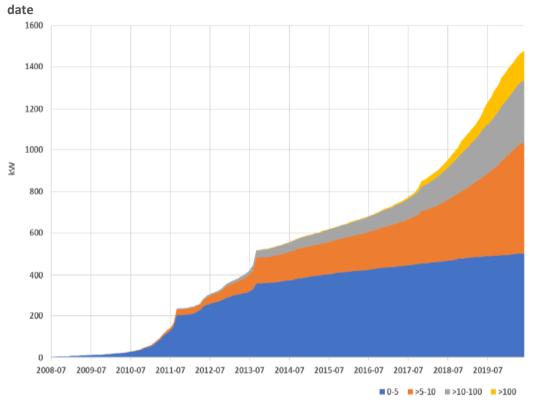
SA Power Networks rule change proposal for access and pricing of Distributed Energy Resources (DER)

AEMC public forum 13 August 2020





A combination of factors make reform a necessity



Distributed generation in SA - PV approvals commissioned by size (kw) & approval

- As customers continue to install DER, networks are approaching their intrinsic hosting capacity
- Either customer service levels will decline or networks will need to invest. The rules lack clear guidance as to:
 - Access rights for customers
 - The **framework for networks to invest** to enable DER
 - How the cost of additional investments should be allocated between customers
- We want to enable continued network access for customers

Our key reform objectives

zero export limits

Objectives

Recognise in the Rules that networks now provide an 'export service'	Encourage efficient network investment and prevent over-investment	Enable informed customer choices
 Right to receive a	 Support service levels	 Cost-reflective price
service offer – no static	that customers desire	signals

Guiding considerations

- Borrow existing regulatory mechanisms applied to 'consumption services'
- Minimise regulatory change and cost, use what works, consistency of approach

Export services are a distinct service that customers value

- Distribution networks now provide customers with two material and distinct services:
 - o 'consumption services'
 - 'export services'
- Current regulatory framework doesn't recognise the export service. Nor does it provide guidance as to how customers' desires to export should be supported.
- We consider that for the '**export service'**:
 - o Customers desires for export capacity should directly guide investment
 - Where customers have a willingness to pay, regulation should enable service provision

Existing regulation can be readily adapted to export services

- Expanding the definition of distribution services to export services would allow existing regulatory arrangements to apply:
 - Distributors would be required to 'meet or manage demand' and 'maintain service performance'
 - Can't simply say no export
 - Distributors would **propose expenditure** to meet these goals as part of their regulatory proposals
 - AER would maintain **all existing regulatory controls** on network spends proposal assessment against the capex and opex objectives, RIT-D, incentives, ex-post reviews, benchmarking, reporting etc.
 - An adapted **Service Target Performance Incentive Scheme** would encourage continuous improvement

Price signals will enable efficient cost allocation and choice

 Enabling customers (or their agents) to make informed choices on energy services, including 'export services', will promote the NEO and keeps with earlier Power of Choice reforms

This depends on signalling network cost drivers – cost-reflective pricing

- Network tariffs for consumption reflect the long-run marginal cost of providing enough capacity to support customers' use. Without similar cost-reflective tariffs for 'export services':
 - DER customers have no signals to encourage efficient use of the network
 - Networks have limited insight into customers' willingness to pay for additional export capacity
 - Non-DER customers must pay for capacity they cannot use

Design of export tariffs needs to be carefully considered

- We recommend:
 - Export tariffs should principally recover **marginal costs of investments to add export capacity** since the dominant purpose of the network remains to support consumption
 - The Tariff Structure Statement process would apply, requiring deep engagement and AER approval
 - Carefully managed and significant transition periods would be needed to minimise impacts on existing solar customers
 - Export tariffs should not apply to stand-alone generators
 - The rules should allow **rewarding of customers** for exports that reduce network costs
- Distribution tariffs are revenue-neutral so any costs recovered from export tariffs would be offset by savings to consumption tariffs

In summary ...

- We propose very little change to regulation:
 - Refine existing terminology and remove the barrier to cost-reflective pricing
 - o Main task will be adapting the AER's STPIS
- However, much can be achieved with these few changes, including:
 - **Resolving the question of access** by defining the export service
 - A **clear framework for distributors** to continue investing to enable services to customers, consistent with customer willingness to pay
 - Efficient allocation of future costs and enablement of informed customer choice

END

PANEL Q&A HOST: DAVID FEENEY

Panellists:

Kellie Caught (ACOSS) Mark Byrne (TEC) Gavin Dufty (St Vinnies) Mark Vincent (SAPN) Bruno Coelho (SAPN) Bryn Williams (SAPN)

AEMC RULE CHANGE PROCESS JASHAN SINGH

Consultation underway on all three requests



Requests are being considered concurrently

Issues grouped under three key themes

	Updating framework	Aligning incentives	Pricing of export services
	•	•	•
Power Networks	•	•	•
St Vincent de Paul Society grade rootsi			•



Different opportunities to engage: public forum, submissions, technical working group

Our assessment timeframe

Expected timeline

н

Early July	Rule change requests submitted
Late July	Rule changes initiated
10 Sept	• Submissions on consult paper due
Mid Nov	Expected publication of draft determination
ТВС	Public forum on draft determination
Early Jan 2021	Submissions on Draft due
Late Feb 2021	Expected publication of final determination

- Extended consultation periods:
 - Six weeks initial consultation
 - Eight weeks after release of draft determination
- Timeline allow potential changes to be incorporated into the next revenue resets for NSW, ACT, TAS, NT distribution businesses

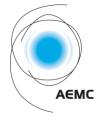
CLOSING REMARKS

CHARLES POPPLE AEMC COMMISSIONER

Before we close ...

- Technical working group nomination closes: 21 August
- Submission to the consultation paper closes: 10 September
- Project contact:
 - Ed Chan ed.chan@aemc.gov.au
 - Jashan Singh jashan.singh@aemc.gov.au





Office address

Level 15, 60 Castlereagh Street Sydney NSW 2000

ABN: 49 236 270 144

Postal address

PO Box A2449 Sydney South NSW 1235

T (02) 8296 7800 F (02) 8296 7899