

9 December 2022

Mr Mark Feather
General Manager, Strategic Energy Policy and Energy Systems Innovation
Australian Energy Regulatory (AER)
GPO Box 3131
Canberra, ACT, 2601

Dear Mr Feather,

AER Issues Paper: Flexible Export Limits

Endeavour Energy appreciates the opportunity to provide feedback to the AER's Issues Paper (the **paper**) which focusses on ensuring the regulatory framework allows the effective introduction and operation of flexible export limits (**FELs**) by Distribution Network Service Providers (**DNSPs**).

FELs will become – and for some DNSPs already are – a key tool to efficiently coordinate the use of the network for exports. For instance, FELs can reduce the level of customer export curtailment that would otherwise occur where static export limits are used to manage network congestion. Furthermore, they promote a more equitable access to the system for new and future consumer energy resources (**CER**). Operating in conjunction with export tariffs, they can also increase utilisation of the existing network and defer capital investment to increase network hosting capacity.

FELs are integral to the efficient long-term integration of CER and a fit-for-purpose framework is required to deliver the outcomes envisaged by the Energy Security Board's (**ESB**) CER Implementation Plan. A key part of the plan is to transition DNSPs to a Distribution System Operator (**DSO**) model to better equip networks to manage two-way flows and accommodate the continued increase of CER. FELs are central to unlocking the benefits of this transition and will require networks to have a granular understanding of the hosting capacity of the network. For most DNSPs, this necessitates an uplift in network capability and near real-time visibility of energy flows in the low voltage network.

The successful implementation of FELs is also dependent on CER devices being compatible with network systems and customer participation. The former is currently the subject of a related ESB process to establish common communications protocols and technical standards for CER interoperability. The latter requires customers to consent to the output of their devices to be varied in accordance to prevailing local network conditions. The industry will need to work collaboratively to adequately inform and educate customers of the benefits of FELs to achieve customer buy-in of the FEL concept.

We appreciate that during the initial implementation period CER customers should be provided the option of a dynamic or static export limit. However, the framework should aspire to establish FELs as the default for the connection and subsequent operation of CER. This would enable both CER and non-CER customers to accrue the full spectrum of benefits from FELs more quickly.

The paper discusses several actions that may be required to facilitate the implementation of FELs. Although we are still developing our dynamic management capabilities, we expect to introduce FELs during the 2024-29 regulatory control period. Our initial thoughts on what may be required of the framework to apply FELs successfully are outlined in the sections below.

Capacity allocation

Apportioning network hosting capacity and signalling this allocation through dynamic operating envelopes (**DOE**) requires DNSPs to constantly measure, forecast and monitor changes in the utilisation of local networks. Although DNSPs have made concerted efforts to improve their low-voltage network visibility in preparation for FELs, these capabilities still vary across the NEM.

Given these differences, we consider it is important that DNSPs have discretion over when and where to introduce FELs and how network capacity is allocated to CER customers. Through a principles-based approach, DNSPs would be provided the flexibility needed to trial different allocation methodologies tailored to specific circumstances and characteristics which will be used to inform a consistent, long-term approach.

The paper suggests the capacity allocation principles could align with those developed by the Distributed Energy Integration Program (**DEIP**) Working Group. Overall, we consider these principles provide a sound basis to guide a capacity allocation approach that delivers positive customer and network outcomes. Furthermore, we consider it appropriate DNSPs provide transparency of possible allocation methodologies through their respective CER integration strategy.

In developing our strategy as part of our 2024-29 regulatory proposal, we have outlined the pros and cons (i.e. trade-offs) of different allocation approaches. Our intention is to initially trial these approaches during 2023-24 and, drawing from our learnings of that of other DNSPs, academic research and further customer consultation, apply those which can best minimise export curtailment.

However, we do not believe these principles should necessarily be binding during the early stage of FEL implementation as this could limit the degree to which DNSPs examine innovative approaches and test their technical capabilities to identify knowledge gaps. Relatedly, we do not believe allocation methodologies should require AER approval and be audited until:

- the DNSP has settled on a BAU allocation approach(es);
- FELs apply to a larger portion of the DNSPs customer base (e.g. 10-15%); and
- new CER devices default to a FEL upon connection.

Consumer participation

Under an 'opt-in' approach, new and existing customers can provide active and informed consent to participate where FELs are available, and their CER devices are suitably equipped to participate. Alternatively, FELs could be applied as the default arrangement for new CER connections with customers able to 'opt-out' to a static limit. CER systems connected under a static export limit contract would have their conditions preserved but the 'opt-out' arrangement would apply to any extension or upgrade of their existing system.

Customer awareness and appreciation of the benefits of FELs is currently limited. The paper suggests that until this matures, it may be appropriate for opt-in arrangements to apply. Nevertheless, if FELs are to be relied as a tool for DNSPs to manage system level congestion efficiently and effectively, widespread participation is needed. That is, export tariffs cannot be solely relied upon to fully achieve the optimal customer behaviours, meaning FELs could be applied as a 'back-stop' mechanism which enables ramping down of CER exports en masse to levels required to keep the system within safe and secure technical limits. This would most effectively be achieved through an opt-out default arrangement.

In assessing the most appropriate approach, it may be useful for the AER to consider the parallels with the Power of Choice metering reforms which sought to encourage the deployment of smart metering despite the benefits of transitioning to the new metering technology being poorly understood by customers. Under the AEMC's rule, existing customers could request a smart meter (i.e. opt-in) and opt-out where a retailer initiated a new-for-old replacement. However, the right to opt-out was not provided to new customers or for the replacement of faulty meters.

Despite the restrictions on opt-out arrangements, the take up of smart metering has been much slower than expected. Consequently, the AEMC has recently made recommendations to accelerate the penetration of smart metering despite research revealing only a small proportion of customers being fully aware of the multiple features and benefits of a smart meter.

Although we do not consider it appropriate apply similar restrictions to opt-out of FELs, we believe an opt-in approach would not deliver the critical mass of participants required for FELs to be a reliable system management tool. As has observed with metering, given an option, customers are likely to have an intrinsic

bias to stay with the status quo, due to a combination of informational limitations, loss aversion and inertia, that would delay or deny the benefits of FELs being realised.

Irrespective of which approach applies, we support a significant uplift in communication and education to ensure customers are better informed ahead of making their choice. An information campaign could be led by DNSPs (particularly if customers are required to communicate their opt-in or opt-out preference with the DNSPs directly) and involve governments, retailers and other customer facing participants as part of an industry-wide collective effort. Where multiple parties are involved, it will be important to ensure the messaging to consumers is consistent to ensure customer buy-in.

Connection agreements

The paper suggests the terms and conditions for FELs should be set out in the connection agreement or Model Standing Offers (**MSO**). However, as an additional consumer protection measure the AER proposes to require DNSPs provide the following information:

- Operating parameters, such as the length of the interval, notification period and how often the limit will be changed, expectations of performance (e.g., 10kW export limit 95 per cent of the time)
- Conditions for the revision of the flexible export limit, including the options for the consumer to change to a static export limit (i.e., there is more than one connection agreement option available)
- Communication processes for changes to the flexible export limits
- Consumers' compliance obligations, including DNSPs' approaches to identifying non-compliant devices
- Related commercial implications, including direct compensation or rebates on network charges, if service levels are not achieved

We agree that MSOs will need to be updated ahead of implementing FELs for certain types of connections and, with the exception of expected operating performance, that they should include the proposed information.

During the early implementation of FELs and with limited practical experience to draw from, it may be difficult for DNSPs to confidently provide accurate guidance on the expected level of export performance to individual customers. Also, if a DNSP's performance is to be assessed against the expectations set out in MSOs, there would be an incentive by DNSPs to establish conservative expectations. Low estimates could in turn not provide the level of export service that prospective customers would require to entice them into a FEL agreement.

Governance arrangements

The paper identifies two broad models of operation for FELs whereby:

- a DNSP communicates the export limit to compatible consumer devices that subsequently manage their output to export within the communicated limit, and
- a third-party trader sees the DNSP limit and passes it through to consumer devices.

We consider the former model to be more established and better understood and are developing our FEL trials around this approach. Although we are not aware of any arrangements in place where a third-party is responding to FEL signals on behalf of the customer, we accept that governance arrangements should be flexible to accommodate the delegation of responsibility for compliance of export limits to a trader.

In our view, it would be preferable for this transfer of responsibility be reflected in a contract between the customer and trader which would sit outside the connection agreement with the DNSP. This would be akin to the contractual relationship between a customer and retailer and would provide the portability required to facilitate customers choosing to transfer between FEL traders.

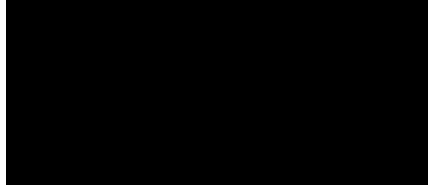
A new contract between the DNSP and trader may not be required as the connection applicant's obligations and responsibilities in regard to FELs would transfer from the customer to authorised party they delegate to act on their behalf. However, as a trader model is adopted, it will become important for the DNSP to have visibility over the arrangements at each connection point to better understand which responsible party FELs will be signalled to and responded.

Furthermore, a distinct feature of communicating directly to CER devices is that the DNSP in return receives measurement data from the device. This data is used to validate the device's response to the FEL signal.

This would also be the means relied on by DNSPs to identify an issue with the customer's device and bring it to their attention. This obligation would remain where a trader is engaged by the customer and as such the real-time two-way flow of information between the DNSP and the CER device should not be interrupted. Given the important dual purpose of this data flow, we consider preserving the data exchange under all possible models should be mandated in the Rules.

To discuss our submission further please contact Joe Romiti, Regulatory Analyst at Endeavour Energy on [REDACTED] or [REDACTED]

Yours sincerely,



Colin Crisafulli
Head of Network Regulation