29 September 2022

Sara Stark
Director, Network Regulation
Australian Energy Regulator

By email: AERinquiry@aer.gov.au

Dear Ms Stark

CitiPower, Powercor and United Energy response to incentivising and measuring export service performance consultation paper

CitiPower, Powercor and United Energy welcome the opportunity to respond to the Australian Energy Regulator's (AER) consultation paper on incentivising and measuring export service performance. We commend the AER for the quality and depth of discussion included in the consultation paper.

We agree with the AER that the materiality of incentive misalignment is currently low, especially noting that networks are being funded to improve customer outcomes by increasing distributed energy resources (DER) hosting capacity and reducing export constraints. Future developments such as uptake of dynamic operating envelopes (DOEs) stand to further reduce export constraints.

However, our customer values research identified that enabling export services is important to our customers as it delivers flexibility in how they use their energy resources and reduces carbon emissions. In line with these expectations, considered design of export services incentives is critical, and implementing a combination of different forms of incentives where they target different outcomes is appropriate.

With respect to the AER's options, we consider the following:

- allowing networks the option to design bespoke incentive schemes with their customers is preferable, as it can be designed to account for the different circumstances of distributors, including customer preferences, base levels of export and data availability
- bespoke incentive arrangements could be supported by a Demand Management Innovation Allowance Mechanism (DMIAM)-style scheme to enable innovative ways to deliver export services and specific customer priorities, including localised projects that may deliver significant community benefits
- reputational incentives would provide visibility for stakeholders to evaluate network export service performance and influence export service outcomes
- a one-size fits all financial incentive mechanism is not appropriate due to difficulty in effectively measuring the network's contribution to export curtailment in the absence of reliable and measurable metrics, and the likely low materiality of export service constraints. There will also be difficulty in effectively accounting for the different circumstances of networks with respect to customer preferences, data availability, current export service performance and the other mechanisms available to manage export services
- GSLs can provide inconvenience payments in recognition of customers receiving service levels below a minimum standard. We note however these are inconvenience offerings for customers and a transfer of equity rather than effective incentive arrangements, and therefore will not incentivise improved delivery of export services.

Our submission also discusses preferable reporting metrics for service performance, and the AER's proposed approach to benchmarking. Specifically:

- involuntary export curtailment and export service levels achieved are appropriate longer-term network performance reporting metrics
- broader consultation to develop benchmarking model adjustments is appropriate subsequent to determining the materiality of export services in benchmarking
- an operating environment factor adjustment should not be implemented given its limited scope for use in comparative benchmarking, as it would not ensure export services were captured in the assessment of industry productivity and operating expenditure output growth.

Additional detail to support our views is provided below.

Should you have any queries please do not hesitate to contact Chris Gilbert on [redacted] or [redacted]

Yours sincerely,

[redacted]

Megan Willcox
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CitiPower, Powercor and United Energy

1 Incentive scheme design

Distribution networks are currently being funded under regulatory allowances to improve DER hosting capacity and reduce export constraints across their networks. The Capital Expenditure Sharing Scheme incentivises networks to deliver services efficiently. Unlike consumption services, where the Service Target Performance Incentive Scheme explicitly incentivises service delivery, there is no explicit service delivery incentive scheme for export services.

We support incentives on networks to deliver export services efficiently, and the following sections discuss our specific responses to the AER's proposed incentive options. As a starting point, the overarching principles for the design of any export services scheme should recognise the following:

- Network allowances to enable exports will deliver a base level of export services to customers. Any incentive scheme should only reflect incremental improvements or detriments to service outcomes relative to this base level of export services
- incentive scheme design should ensure that networks are incentivised to deliver on the preferences of their customers
- incentive schemes should accurately capture the network's role in enabling or curtailing exports and should not be impacted by factors outside the control of networks. Careful consideration should be given to the metrics used to establish incentive schemes and relevant exemptions, as some metrics may levy unintended perverse incentives on networks
- many of these incentive scheme options can be implemented in combination because they target different outcomes. For example, a financial / bespoke incentive scheme might target broad customer outcomes, a DMIAM-style allowance mechanism might target innovative service delivery and a GSL scheme compensates worst-served customers.

We support a bespoke incentive scheme as the primary incentive mechanism to support delivery of export services for customers

We support the bespoke approach as the primary option to deliver export services incentive schemes, as it offers flexibility to co-design incentive schemes with customers. This will best ensure that export services outcomes align with customer preferences, both now and in the future.

Applying bespoke incentive schemes would enable each network to tailor incentive schemes for their unique customer preferences and circumstances that vary between networks. For example, Victorian networks could target the design of their incentive schemes to leverage full penetration of smart meter data. Other unique circumstances between networks might include different levels of export constraints, access to data, export tariffs, outcomes funded through determinations and maturity levels in their use of DOEs.

A bespoke incentive scheme should be optional for networks to implement as part of the regulatory reset. An optional approach allows networks and customers to identify whether an incentive scheme would generate customer value, and how to design it to achieve customer objectives. A similar framework to the AER's Customer Service Incentive Scheme (CSIS) guideline could be used as the basis for design of a bespoke export services incentive scheme, which would apply additionally and separately to the established CSIS.

This type of application would mean any incentive scheme applied should have regard to elements of export services that customers find most valuable. Our current CSIS, that focuses on planned outages at the direction of customers, has already demonstrably improved reliability through reducing the duration and frequency of planned outages.

An allowance and/or margin mechanism would support innovative ways to deliver export services and specific community ventures

An allowance or margin mechanism could support bespoke incentive schemes to trial innovative ways of delivering export services or to deliver service improvements that are unique to specific communities or locations.

For example, this mechanism could fund community or neighbourhood battery projects that have strong community support but are unable to be funded under the existing regulatory framework, or to improve the provision of export services in regional areas where network capacity to deliver export services may be poor.

Reporting on project outcomes would be a reasonable requirement under the mechanism to enhance transparency for customers and the AER, as well as to support shared learning across the industry.

Reputational incentives would provide visibility for stakeholders to evaluate network export service performance

Our reputation is already a focus area for our businesses because a strong reputation increases customer confidence that we will deliver on the promises we make. A positive reputation in turn allows our customers to share their preferences more openly with us to better shape network service delivery and deliver better customer outcomes.

We already face reputational incentives for the delivery of export services to our customers. For example, we committed to our customers that we would allow at least 85 per cent of all solar customers to export excess energy into our networks 85 per cent of the time, and we are currently delivering on this commitment.

As a form of reputational incentive, we support increasing the transparency of DER-related information for customers and other stakeholders to evaluate the export service performance of networks, particularly while the materiality of small customer export constraints across networks remains low.

Reputational incentives can be implemented alongside other forms of incentives, such as our preferred approach of implementing a bespoke incentive scheme. Any new reputational incentives would be complemented by performance reporting, benchmarking, information published on network websites, and Regulatory Information Notices.

Financial incentive mechanisms are not prudent given data challenges and superiority of bespoke incentive schemes

It is not yet prudent to establish a one-size-fits-all financial incentive mechanism that rewards or penalises incremental export service delivery. Levels of export curtailment among networks are currently low, and the customer detriment from export curtailment is less impactful than interruptions to consumption services.

There are also several factors limiting the effectiveness of such a scheme:

- financial incentive mechanisms which are prescribed to be the same for all networks – similar to the Service Target Performance Incentive scheme (STPIS) – require a specific measure of export service performance which directly captures a network's contribution to enabling or curtailing export services, with the measure being readily available across all networks
- we have not identified a standardised, readily available and suitable measure that accurately identifies the network's contribution to enabling or curtailing solar. Measures that could be used as reasonable proxies levy perverse incentives on networks to reduce export limits for customer connections (e.g. the duration of full export access would incentivise networks to limit export capacity to improve the percentage of time customers were allowed full export access)
- a combination of measures may improve the suitability of overall incentives, however, the challenges in designing such a scheme and ensuring it is appropriate for all networks would outweigh the benefits of implementing a financial scheme (e.g. a volumetric-based incentive to complement the duration of full export access to mitigate the perverse incentive to limit export capacity)

- a one-size fits all incentive scheme would not account for the varying circumstances between networks that could influence export service delivery, such as:
  - customer preferences on export limits and expenditure – where networks deliver different export limits in line with customer preferences on export levels and cost
  - level of intrinsic hosting capacity – where networks have different levels of available capacity to support exports (e.g. regional networks have a relatively higher proportion of SWER and single-phase distribution lines compared to urban networks)
  - data availability – where networks have different access to smart meter data coverage, and in some cases inverter data
- there would be a mismatch in timing between when a financial export incentive scheme would be designed and when export services enablement expenditure would be consulted on and funded. Defining incentive measures, a base service level and an incentive rate prior to establishing efficient expenditure allowances to enable exports during individual regulatory determinations creates regulatory process challenges. Undertaking these processes simultaneously (i.e. under a bespoke scheme) would result in a more holistic export services framework for each network.
- the existing STPIS mechanism for reliability already inherently captures some level of export service delivery because reliability interruptions for consumption services also interrupt delivery of export services, and it will be challenging to separate the consumption component from any export component.
- future uptake of DOEs would have to be considered when designing a financial scheme under some service performance metrics. For example, using the duration of full export access as a measure of service performance would not consider the differences in customer benefits delivered under different levels of DOEs. Customers would prefer an export limit of 90 per cent of full export capacity to an export limit of 50 per cent of full export capacity, but the differences in customer outcomes may not be reflected in measures of network performance.
- recent research we have undertaken on customer preferences for flexible export products (DOEs) has shown that customers on each of our networks have different preferences for fixed and variable export products.

Given these limitations and the context given by the AER that there is no evidence of wide-spread issues with export service curtailment, it is more appropriate to allow networks the option to co-design bespoke incentive arrangements with customers than a one-size fits all financial scheme.

We do however recognise that in principle, financial incentives may be appropriate in the future once an economically efficient, stable level of export services is established, and once the above factors have been addressed. Any future financial scheme should maintain optionality for networks and their customers to propose amendments to the scheme during regulatory proposals.

A paper trial may have merit in progressing thinking to establish a set of metrics that may be suitable for future incentive schemes.

Guaranteed service levels for export services are not appropriate to use as incentive schemes

We acknowledge the role of a potential GSL scheme for exports in providing an inconvenience payment to customers in recognition of service delivery below the agreed basic exports level. However, GSLs are not intended or designed to be used as an incentive scheme.

Current GSL arrangements are inconvenience payments that are not intended to reflect full economic compensation to customers for failure to provide service delivery in recognition that it would not be economic for networks to invest to offset GSL costs. Similar to existing GSL schemes, a GSL scheme for export services (if enacted) should provide for cost recovery through opex allowances, acting as an equity transfer between customers.

An export services GSL scheme based on existing Victorian arrangements would partially compensate small customers for lost export services, but would not compensate large generators for generation curtailment, potentially creating equity imbalances between small-scale exports and large generators.

2 Reporting and benchmarking

Existing network reporting should be utilised in the short term

We agree with the AER that measuring export curtailment per exporting customer due to a network constraint is, in theory, the ideal measure of service performance. However, as previously outlined in the incentives design section, there is no standardised, readily available and suitable measure that accurately identifies the network's contribution to enabling or curtailing solar.

Notwithstanding the above, short-term export service performance reporting may still be valuable to customers (despite the lack of current ideal metrics to track export service performance). Given that any reporting in the short term will be based on measures that do not fully inform stakeholders about the quality of network performance, sufficient contextual detail must be included to provide stakeholders with a more comprehensive view.

For similar reasons, existing network reporting – such as that provided for jurisdictional reporting, or to the AER already – should be utilised to avoid unnecessary and potentially duplicative reporting. This approach improves transparency of export-related information to stakeholders while minimising costs for customers.

Registered electrical contractors provide our businesses with physical DER-related data (e.g. inverter capacity, model number, settings status) when they install and configure customer DER assets. While we have measures in place to verify data quality, the source of physical DER-related data is from third parties and we cannot guarantee that all DER-related data is accurate.

If the AER continues to develop its own reporting measures, 'approved to requested export capacity ratio' and 'approved to installed capacity' are the most appropriate measures to include in network performance reporting.

- approved to requested export capacity ratio – this measure provides some indication of network export performance but may be impacted by customers who request a much higher export capacity than they would likely ever utilise
- approved to installed capacity ratio – this measure also provides some indication of network export performance but may be impacted by customers installing significant amounts of DER capacity in network locations that have low hosting capacity and are uneconomic to upgrade (such as remote rural areas).

In the short term, these measures will predominately provide stakeholders with information on the intrinsic hosting capacity of each network. However, hosting capacity will be higher for networks who have significantly invested in consumption services and who have lower capacity utilisation, not necessarily networks that efficiently provide export services for customers.

There is no need to report the percentage of export customers with different types of export limits, as it does not provide information on the size of export limits, which is what customers value. It can also provide misleading information to customers on the delivery of export services as the type of limit does not necessarily represent the value delivered to customers.

Involuntary export curtailment and export service levels achieved are appropriate long-term network performance reporting metrics

Long-term reporting on involuntary export curtailment per exporting customer due to a network constraint is an ideal long-term measure of service performance if this measure can be identified. Alternatives will need to be found if the identification challenges that we outlined in the incentives design section are unable to be addressed. For example:

- reporting on export service levels achieved per exporting customer (which was raised by SA Power Networks in its presentation at the AER forum) is the measure that should be reported in the long-term if involuntary export curtailment cannot be directly identified. This measure provides customers with a reasonably accurate view of export service performance delivery and is to a large extent within the control of networks
- another of the options presented by SA Power Networks, the duration of full export access, is very similar to export service levels achieved and could be used as well.

However, under the options noted by SA Power Networks, distributors will face a perverse incentive to limit customer export capacity below efficient levels to artificially improve measured performance. Lowering export limits for customers would allow networks to maintain export service delivery at the lower allowed export limit more often relative to a higher (and perhaps more efficient) export limit.

One option to address this perverse incentive is to include a volumetric measure of total exports enabled alongside the export service levels achieved to also incentivise networks to allow additional export capacity. A volumetric incentive would have to be carefully designed to ensure it appropriately counterbalances the service performance incentive. The 'base' for this incentive could be set during regulatory resets based on export volumes forecasts from business cases to improve exports.

Contextual information that describes the operating environment of networks should also be detailed within performance reporting to provide customers with a more comprehensive view of network performance. There are a broad range of operating factors that can influence the level of export capacity and amount of exports, such as the intrinsic hosting capacity of networks, weather and climate, type of network and customer preferences.

Customer complaints related to export services (per export customer) could also be used as a contextual descriptor in network performance reporting as it is associated with the service quality delivered to customers.

The AER's approach to developing its inaugural export performance report appears reasonable, with the preference between option one and two depending on the ability to define base level performance metrics for 2021–22.

Broader consultation to develop benchmarking model adjustments is preferable to developing an operating environment factor adjustment

We support the AER undertaking further analysis to understand the materiality of export services on benchmarking outcomes prior to implementing benchmarking adjustments. The current inclusion of energy throughput without consideration of export services is likely understating industry productivity and the growth in scale of network services delivered.

Subsequent to understanding the materiality of export services on benchmarking outcomes, we recommend the AER begin consultation to develop holistic adjustments to the benchmarking models, akin to the AER's (discontinued) review of operating environment factors (OEFs). This review would properly consider interrelationships between export services and other benchmarking variables and adjust the benchmarking models as necessary, as well as identifying appropriate ex-ante or ex-post adjustments. Holistic benchmarking improvements will improve the accuracy of efficiency assessments and lead to more efficient network expenditure allowances and customer bills.

This review may consider developing export service cost category partial productivity indicators, but should not 'remove' identified export-related inputs and outputs from the benchmarking models or analysis. Removing identified export-related inputs and outputs removes any ability for the benchmarking models to assess the efficiency of export service delivery, and would reduce the accuracy of network benchmarking overall.

Calculating and applying an ex-post OEF adjustment for export services is also inappropriate, especially prior to undertaking a holistic consultation on materiality and model impacts. OEF adjustments derived over time in a staggered manner do not effectively account for the interrelationships between inputs and outputs and result in benchmarking that is less accurate in comparison to directly factoring export service performance into benchmarking analysis.

We understand an OEF adjustment would be derived using historical exports expenditure, which not all networks can report. For networks who do have historical data, this data will only be recent, may not be reported on the same basis and may not be high quality. These issues will need to be considered as the AER progresses development of its productivity benchmarking adjustments.

Applying a standalone OEF adjustment for export services would not account for the role of export services within the AER's assessment of network allowances. Implementing an ex-post OEF adjustment will only impact the comparative benchmarking analysis, while the other roles of the benchmarking models, including assessing industry productivity and opex output growth, would not be adjusted. Less accurate measures of productivity and output growth lead to less accurate measures of efficiency, which impact network determination allowances and customer bills.

We encourage the AER to consider whether their proposed two-step process is necessary compared with moving immediately to undertaking a holistic materiality assessment and subsequently considering how to capture export services in benchmarking model specifications.