

Customer export curtailment value methodology

Issues Paper

17 December 2021

Public Interest Advocacy Centre
ABN 77 002 773 524
www.piac.asn.au

Gadigal Country
Level 5, 175 Liverpool St
Sydney NSW 2000
Phone +61 2 8898 6500
Fax +61 2 8898 6555

About the Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is leading social justice law and policy centre. Established in 1982, we are an independent, non-profit organisation that works with people and communities who are marginalised and facing disadvantage.

PIAC builds a fairer, stronger society by helping to change laws, policies and practices that cause injustice and inequality. Our work combines:

- legal advice and representation, specialising in test cases and strategic casework;
- research, analysis and policy development; and
- advocacy for systems change and public interest outcomes.

Energy and Water Consumers' Advocacy Program

The Energy and Water Consumers' Advocacy Program works for better regulatory and policy outcomes so people's needs are met by clean, resilient and efficient energy and water systems. We ensure consumer protections and assistance limit disadvantage, and people can make meaningful choices in effective markets without experiencing detriment if they cannot participate. PIAC receives input from a community-based reference group whose members include:

- Affiliated Residential Park Residents Association NSW;
- Anglicare;
- Combined Pensioners and Superannuants Association of NSW;
- Energy and Water Ombudsman NSW;
- Ethnic Communities Council NSW;
- Financial Counsellors Association of NSW;
- NSW Council of Social Service;
- Physical Disability Council of NSW;
- St Vincent de Paul Society of NSW;
- Salvation Army;
- Tenants Union NSW; and
- The Sydney Alliance.

Contact

Craig Memery
Public Interest Advocacy Centre
Level 5, 175 Liverpool St
Sydney NSW 2000

E: [REDACTED]

Website: www.piac.asn.au



Public Interest Advocacy Centre



@PIACnews

The Public Interest Advocacy Centre office is located on the land of the Gadigal of the Eora Nation.

Contents

Contents	3
1. Introduction	2
2. Consultation questions	2
<u>1. Do you agree with our interpretation of export curtailment in the context of calculating CECVs?</u>	2
<u>2. Which value streams should be captured in the CECV?</u>	2
<u>3. Should CECVs reflect the detriment to all customers from the curtailment of DER exports, or particular types of customers?</u>	3
<u>4. How should CECVs be expressed?</u>	3
<u>5. Do you agree with our overall interpretation of CECV?</u>	3
<u>6. Should there be a more explicit link between CECVs and export tariffs?</u>	3
<u>7. How could we estimate CECVs across different customer groups?</u>	3
<u>8. Should CECVs be estimated by NEM region?</u>	3
<u>9. Should CECVs for a particular NEM region reflect the impact of DER export curtailment that occurs in other NEM regions?</u>	3
<u>10. What is the appropriate temporal aggregation for estimating CECVs?</u>	3
<u>11. Should we also estimate CECVs into the future, or allow DNSPs to forecast changes in CECVs over time?</u>	3
<u>12. Do shorthand approaches provide sufficient forecasting ability or is electricity market modelling necessary for calculating CECVs?</u>	3
<u>13. How should generator bidding behaviour be modelled?</u>	4
<u>14. How should interconnector behaviour be modelled to determine regional CECVs?</u>	4

1. Introduction

PIAC welcomes the opportunity to respond to the Australian Energy Regulator's (AER) consultation on a methodology for calculating Customer Export Curtailment Values (CECV). We respond to select consultation questions below.

2. Consultation questions

1. Do you agree with our interpretation of export curtailment in the context of calculating CECVs?

PIAC is concerned with the AER's initial view they do not need to identify instances of curtailment and estimate the impacts on specific customers to calculate CECVs. While PIAC understands the rationale for this approach, it is likely to be inaccurate. The AER should work towards gathering evidence of actual curtailment from distributors to develop more accuracy.

2. Which value streams should be captured in the CECV?

PIAC supports the AER's proposed categories of benefits and costs except for 'change in DER investment'. We consider this category will be hard to accurately measure and is not sufficiently linked to changes in network hosting capacity.

While PIAC appreciates the argument for extending consideration of benefits and costs to investment behind-the-meter as it is designed to put DER and non-DER generation on equal footing, we do not consider the two similar enough to be treated equally. Individual consumers and commercial generators do not have the same motivations or face the same trade-offs when making investment decisions. It is generally understood that return on investment (ROI) is not the major driver of the rate of distributed PV uptake. Household PV purchasing behaviour is heavily driven by up-front cost and marketing rather than the payback period for investment in solar. This will likely be true for other DER such as batteries, as they become more popular. Non-financial drivers of uptake, such as emissions reduction, resilience, independence, and reliability also feature heavily in household DER investment decisions.

As noted in the 'Value of Distributed Energy Resources: Methodology Study', DER forecasts used today by AEMO in the ISP do not consider any impacts from network constraints, and networks might struggle to credibly identify such forecasts.

Given the questionable link between network investment and DER investment we do not consider it appropriate to include change in DER investment as a quantified cost or benefit.

We support the exclusion of environmental benefits from the calculation under the conditions proposed by the AER. While environmental benefits are key aspects of DER integration, they largely accrue to the broader community and their associated costs should not be recovered from consumers.

3. Should CECVs reflect the detriment to all customers from the curtailment of DER exports, or particular types of customers?

CECVs should reflect the detriment, and benefit, to all customers from curtailment.

4. How should CECVs be expressed?

PIAC is comfortable with CECVs being expressed as \$ per MWh of curtailed solar PV generation.

5. Do you agree with our overall interpretation of CECV?

Is the AER able to provide more explanation of why 'export curtailment is difficult to objectively measure'? Is it difficult to measure because DNSPs currently do not have the capability to measure it? Could DNSPs develop the capability to measure export curtailment?

6. Should there be a more explicit link between CECVs and export tariffs?

No.

7. How could we estimate CECVs across different customer groups?

No response.

8. Should CECVs be estimated by NEM region?

PIAC supports CECVs being estimated by NEM region or some other region which captures material differences in values.

9. Should CECVs for a particular NEM region reflect the impact of DER export curtailment that occurs in other NEM regions?

No response.

10. What is the appropriate temporal aggregation for estimating CECVs?

No response.

11. Should we also estimate CECVs into the future, or allow DNSPs to forecast changes in CECVs over time?

PIAC considers a consistent approach across all DNSPs should be used to forecast CECVs. DNSPs may be best-placed to forecast CECVs, however, their methodology for doing so should be consistent and transparent.

12. Do shorthand approaches provide sufficient forecasting ability or is electricity market modelling necessary for calculating CECVs?

No response.

13. How should generator bidding behaviour be modelled?

PIAC does not have a preference for how generator bidding behaviour should be modelled, but we highlight some issues the AER should consider when determining a modelling approach.

The current scale and rate of change in the NEM makes it increasingly challenging to make useful assumptions regarding potential generator bidding strategies over longer modelling periods. Bidding outcomes post the recent change to 5-minute settlement are in flux with the impact of this change still to be fully understood by participants. In the medium term, a capacity mechanism of some description, as recommended by the Energy Security Board in its Post-2025 market design work, may materially change the economics of generation and generators' bidding strategies, rendering simplified models obsolete.

Assumptions around which participants are strategic bidders, and to what extent, are contentious and hard to estimate accurately. There can be strategic players in each market at different times and strategic bidding is not certain to occur at any time.

Any assumptions around strategic bidders should have defined selection or analysis criteria. If the AER does model bidding behaviour using a choice of strategic bidders, it should undertake additional consultation and analysis regarding input assumptions prior to commencement of any modelling. The choice of strategic participants and the level of strategic choice allowed must be subject to rigorous and transparent consultation.

14. How should interconnector behaviour be modelled to determine regional CECVs?

Interconnector behaviour should not be considered because it is too hard to draw a meaningful link.