



20TH JUNE 2019

To: AER
By email

Re: Submission to Draft Interim Qualifying Contracts and Firmness Guideline

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Infigen Energy (Infigen) welcomes the opportunity to make a submission to the AER Draft Interim Qualifying Contracts and Firmness Guidelines. Infigen owns portfolio of wind and firming capacity across New South Wales, South Australia, Victoria and Western Australia. Our portfolio includes 670 MW of vertically integrated wind plus Infigen has entered into PPAs to provide c90 MW of capacity in Victoria and is seeking PPAs in other regions). Infigen also owns and operates a 123 MW open cycle gas turbine in NSW and a 25 MW / 52 MWh battery in South Australia (under construction).

Infigen uses its portfolio to provide firm retail contracts to C&I customers, as well as selling futures contracts to third parties. Therefore, it is critical that the guidelines for qualifying contracts reflect the reality that portfolios of renewables are being successfully used to deliver reliable customer contracts, and provide sufficient clarity and certainty to support investment in new projects and contracts.

Infigen would like to thank the AER for consulting on and delivering a complex document in a relatively short time. In general, we consider the proposed Guidelines are fit for purpose, allow for most of the common contracting and firming methodologies, and accurately reflect the financial hedging concepts underlying the RRO. However, we have provided some suggestions below for how certainty and clarity could be enhanced.

Development of default firmness methodologies

Under the proposed AER guidelines, new wind and solar generation (either vertically integrated or sold via PPA) would be treated as non-standard qualifying contracts, and therefore require an auditor approved bespoke firmness methodology.

Infigen expects that wind and solar will comprise a growing share of retailer portfolios. Although the AER has provided (non-binding) examples of how the firmness of such arrangements should be assessed, a purely bespoke firmness (relying on uncertain future auditor methodologies) will create uncertainty when entering into long-term arrangements (i.e., either purchasing assets or long-term PPAs).

Infigen therefore proposes the development of “default” methodologies for some classes of contracts and assets. We suggest that a framework similar to automatic access standards for network connection could be applied: the AER could provide a set of (credible but potentially conservative) assumptions and methodologies that could be readily applied if a PPA/project met certain criteria. Participants could either use the default methodology or could develop a bespoke firmness methodology to be reviewed by an auditor if they considered their project to have distinct features (or if the project didn’t qualify for the default methodology).

Arrangements satisfying the requirements of a default methodology could then be assessed as standard qualifying contracts. Alternatively (but less efficiently) an auditor could still be required to approve the firmness factor, but the auditor would be required (if requested by the participant) to follow the default methodology outlined by the AER. This would increase costs to participants, but may provide greater confidence to the AER that arrangements are being fairly assessed.

This approach would have the benefit of:

- Providing clarity to industry by codifying the AER examples directly into the Guidelines and therefore reducing variability across auditors, particularly early on.
- Improving investor certainty by providing a methodology that can be readily calculated and applied by prospective buyers and sellers, for a range of potential future reliability gaps (i.e., for long-term contracts signed well ahead of a future reliability trigger). This will be important for securing finance in a post-RRO world.
- Reducing costs by avoiding the need to use auditors for routine assets or, if the AER elects to still have default methodologies reviewed by an auditor, reduce uncertainty by providing clear guidance to auditors.

Vertically integrated and run-of-plant solar or wind PPAs generally lend themselves to standardised methodologies, given the relatively limited discretionary control of the assets.

For example, building on the AER’s worked examples, it could be appropriate that for a wind or solar farm:

- If a wind or solar farm has:
 - Either
 - More than two years of historical generation data; or
 - More than three years of modelled generation by a professional engineering firm based on either measured hub-height wind speed data or on-the-ground solar irradiance data;
 - And, the liable party provides that:

- They are not aware of material factors that would cause future output to be statistically different from history (beyond normal inter-year climate variability);
- No outages are planned for the reliability gap period; and
- They intend to offer the output into the NEM;
- Then,
 - The firmness of the vertically integrated project or PPA contract for each dispatch interval in the reliability gap would be given by the average production in equivalent periods for the historical years.

Similarly, for vertically integrated thermal power stations (e.g., gas peakers), a default firmness methodology could be to assign a firmness based on the plant's rated summer capacity multiplied by an availability factor that could be determined based historical availability data.

Energy limited plant

AEMO effectively has two distinct outputs from its modelling that both have the unit of "time":

- The likely periods for USE to occur; and
- The distribution (frequency, duration, etc.) of USE events to occur in that period.

It is not necessarily the case that, for example, if AEMO identifies a four-hour gap (e.g., 3pm to 7pm) that this corresponds to a likely four hour duration of USE. Instead, it might be (again, for example) that USE will occur for two hours *somewhere* in that period – this is currently not captured in the gap period determination.

The current approach impacts the firmness factor of energy limited resources. If, for the same modelling outcomes, AEMO determined a two-hour gap instead of a four-hour gap, that resource would be (effectively) twice as a firm, despite no physical change in reliability outcomes.

Infigen suggests this could be managed by participants submitting an energy limited entry in their net contract position, whereby the energy could be distributed across an event ex post (rather than ex ante). Alternatively, energy limited resources (e.g., batteries) could be treated similar to demand response (which is again a (typically) energy limited resource) and be netted off participants' *loads* after the event based on actual usage. Participants would then need to procure sufficient qualifying contracts such that, based on their share of system load, they would have sufficient total contracts to cover the event once the energy limited resource was allocated.



Conclusion

We look forward to continuing to engage with the AER. If you would like to discuss this submission, please contact Dr Joel Gilmore (Regulator Affairs Manager) on joel.gilmore@infigenenergy.com or 0411 267 044.

Yours sincerely

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