Australian Energy Markets Commission

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Submission to Enhancing the ISP to support the energy transition: Consultation Paper

The Australian Energy Council welcomes the opportunity to make a submission to the Enhancing the ISP to support the energy transition: Consultation Paper (Consultation Paper).

The Australian Energy Council (AEC) is the peak industry body for electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. AEC members generate and sell energy to over 10 million homes and businesses and are major investors in renewable energy generation. The AEC supports reaching net-zero by 2050 as well as a 55 per cent emissions reduction target by 2035 and is committed to delivering the energy transition for the benefit of consumers.

Chapter 2 - Better integrating gas market analysis into the ISP

Background

It is currently unclear whether it is possible to have a reliable and secure electricity system that solely relies on weather-dependent generation. The weather correlation risk of such a system would be unmanageable. The only way to manage this risk is to introduce an electricity source that is completely independent of the weather. This has been noted by the International Energy Agency:

> *"Flexibility, fuel availability and resilient infrastructure will become even more vital as Australia's energy system incorporates very high shares of variable renewables and faces more frequent and more extreme weather events."*

Until there is a clean technology that has the characteristics of gas-powered generation (GPG), Australia will need GPG to firm variable renewable energy (VRE) and ensure we have an efficient, robust and reliable electricity supply. It is expected that in general, GPG requirements will be minimal. However, as recently witnessed (May 20-27, 2024) severe VRE droughts do occur and absent other electricity sources, GPG will be required to run hard to maintain reliable electricity supply and avoid or minimise load shedding in a high VRE electricity system. In these situations, adequate upstream assets that can deliver both the required maximum hourly quantities (MHQ) and maximum daily quantities (MDQ) will be essential.

Accordingly, the AEC is supportive of changes that can add more rigor to the GPG modelling for the optimal development path (ODP) for electricity to reduce its emissions in line with Australia's targets.

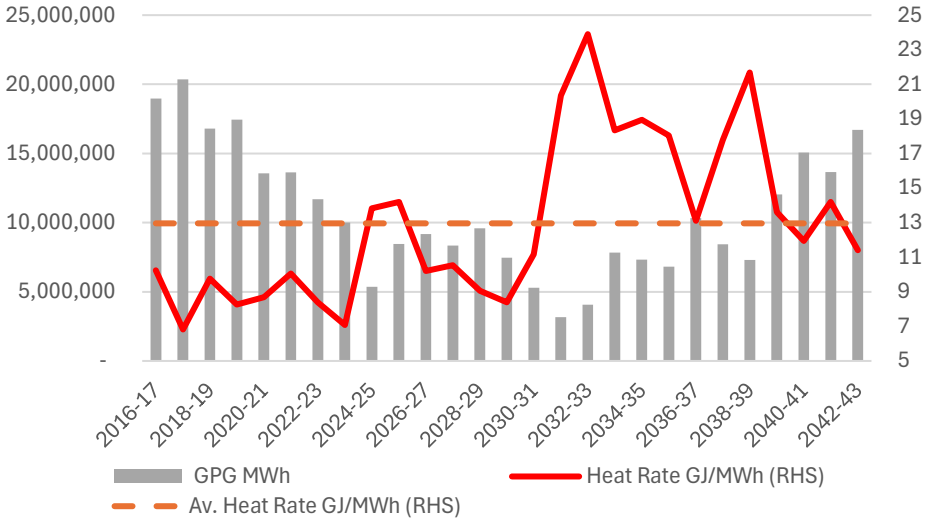
The Consultation paper notes that the rules currently require AEMO to have regard to the most recent GSOO in developing the ISP. However, when comparing the 2024 ISP and 2024 GSOO, there are some disparities between the two documents. As an example, Figure 1 illustrates GPG generation from the ISP and the implicit heat rate based on GPG gas consumption from the GSOO. For the actuals, heat rates are reasonably consistent at around 7-10 GJ/MWh but in the forecast period heat rates jump markedly and in some years are over 20 GJ/MWh while in others below 12 GJ/MWh.

Level 14, 50 Market Street
Melbourne 3000
GPO Box 1823 Melbourne Victoria 3001

P +61 3 9205 3100
E info@energycouncil.com.au
W energycouncil.com.au

ABN 98 052 416 083

Figure 1: 2024 ISP Step Change GPG actual and forecasts and implied heat rates based on 2024 GSOO GPG consumption



Sources: 2024 ISP, 2024 GSOO and AEC analysis.

***Question 1**: Should greater gas market analysis be required under the ISP?*

(a) Would requiring AEMO to include greater analysis of gas in the ISP provide benefits to electricity consumers? This includes information to inform the following:

- *further analysis of future gas demand and pricing*
- *developing projections about the future utilisation of gas infrastructure*
- *collating pipeline closures or conversion dates*
- *reflecting updated gas generator fuel costs*

Should the rules be amended to explicitly require this?

(b) Should the rules be amended to enable AEMO to utilise gas information provided to it under other functions?

We believe AEMO's ISP gas analysis needs to be improved and align with the GSOO. Additional detail and explanation in the ISP would also be helpful - for example, MHQ and MDQ requirements during VRE droughts. Outcomes from such analysis must include the capability of the gas transmission network to deliver the required level of gas and what, if any, gas transmission network development is needed to achieve the required outcome.

At this stage, the AEC is not entirely convinced that the rules need to be amended to establish more prescription on AEMO with respect to how it conducts its analysis. We present an alternative for consideration in our response to Question 5.

The AEC does see the need to change the rules to allow AEMO to utilise gas information that it already collects for other purposes, subject to confidentiality requirements which are set out in our response to Question 4.

If the rules are to be changed as proposed in the Consultation paper, we would urge that they explicitly state that AEMO is not to develop an ODP for the gas market. While this is stated in the Consultation paper, we

Level 14, 50 Market Street
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believe it also needs to be stated in any new rules.[1] The proponent's recommended rule changes do not include this.[2]

***Question 4**: What implementation considerations need to be considered?*

> *(a) Do you have any concerns about sharing gas information received under the NGR for the purposes of developing the ISP? Is there sufficient clarity on what information should and should not be publicly disclosed?*
>
> *(b) Are there any other implementation issues that should be considered?*

Careful consideration must be given to the publication of any information provided by or to AEMO under the NGR or as required for this proposed change. We recommend that the rules include a requirement that AEMO de-identify and aggregate data to a level that makes attribution impossible where simple de-identification would be ineffective at masking the commercial interests of participants reporting information for other purposes. The AEC considers that there is currently insufficient detail in the proposed rule change about what gas information, received by AEMO, can be published as part of the ISP or GSOO. We support clear guidance being provided in the rules on this issue.

***Question 5**: Are there alternative ways in which further analysis can be included within the ISP instead of the proposed rule change?*

> *(a) Would the development of a procedure or policy enable the same outcome?*
>
> *(b) What level of prescription vs principle is appropriate when setting out the requirements for the ISP?*

In our view setting out high level obligations in the rules from which AEMO can improve its gas market analysis and how this links into the ISP as well as presenting more detail in both the GSOO and the ISP, may be what is required. As part of this process, it would be helpful if AEMO developed methodologies, processes and guidelines subject to the rules consultation procedure to which stakeholders can provide feedback. This could minimise any rule change requirements and prevent the introduction of any technology bias into the rules for the suite of technologies that are required for the transition.

Chapter 3: Improving demand forecasting and demand-side data in the ISP

The rule change request proposes to amend the NER to require AEMO to expand its analysis of the uptake and availability of orchestrated CER and distributed resources and provide greater detail about both the technical and non-technical assumptions that underpin the expanded analysis.

The NER does not currently specifically require AEMO to identify and describe the assumed development of critical demand-side actions that are required to support the uptake and availability of orchestrated CER and distributed resources included in the ISP. The proponent considers that this would mean that investment decisions are less informed.

The DER Register is a database of information about DER devices installed in the NEM that is foundational to AEMO's Distributed Energy Resources (DER) Program. The visibility of installed DER across residential and business devices allows AEMO to better manage the electricity grid. The AEC's assumption is that the proponent is not suggesting that AEMO develop a parallel or additional function or system to identify or describe installed DER (or CER).

[1] Consultation paper, p.6.
[2] Consultation paper, p.8.

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Give greater consideration to network and non-network factors needed to enable the levels of orchestrated CER and distributed resources. This would make AEMO's forecasts and analysis more robust

Following on from the above, the AEC's assumption is that AEMO is already interrogating its DER Register. So, the material gap here could be that AEMO would in addition to its current activities be required to publish its analysis, and to use this to better inform its decision making. If this is the case, and AEMO has not been making use of this information already, then amending the NER may be prudent.

Require AEMO to develop guidelines setting out a process for gathering relevant data from distribution network service providers (DNSPs) to inform its analysis of demand-side factors in the ISP, supplemented by a mandatory requirement on DNSPs to disclose the information set out in AEMO's guideline.

The AEC would prefer that the Australian Energy Regulator (AER) be the party required by the NER to require AEMO to identify and describe the assumed development of critical demand-side actions that are required to support the uptake and availability of orchestrated CER and distributed resources included in the ISP. This could be in the form of a Guideline that the AEMC direct the AER may develop and issue. The decision to develop and issue the Guideline should be at the AER's discretion.

The advantage with the AEC's preferred approach is that there is an oversight of the costs and benefits of the proponent's rule change, both embedded in the AEMC's initial consultation and any rule, and subject to the AER's ongoing oversight. Whilst the key outcome that the proponent describes is that investment decisions would be better informed, the better approach might be that investment decisions are adequately informed, and that the data sets and information systems that are required to be paid for by the market have been subjected to sufficient scrutiny.

In being informed, it is worth reflecting that data will not remove all uncertainty. Technical organisations have a propensity to overreach on data collection and misuse it in their decision-making process. This overreach arises from their "We have tons of data, there has to be some good insights in here" approach; and they misuse it in decision making by looking for the problems where data exists, as opposed to looking for data where the problems exist. This is part of a data-centric culture driven by a technology fascination, and AEMO is a largely technical organisation. Therefore, AER oversight of the Guideline will help mitigate against this by requiring consultation with parties that have both the commercial acumen as merchant operators, and consultation with those with skin in the game as the parties that ultimately pay for it, in the development of the Guideline. This will serve to limit data collection from overreach.

Any questions about our submission to Chapter 2 should be addressed to Peter Brook, by email to peter.brook@energycouncil.com.au or by telephone on (03) 9205 3103. Any questions about our submission to Chapter 3, please contact David.markham@energycouncil.com.au.

Yours sincerely,

Peter Brook

Wholesale Policy Manager

Australian Energy Council

David Markham

DER and Networks Policy Manager

Australian Energy Council