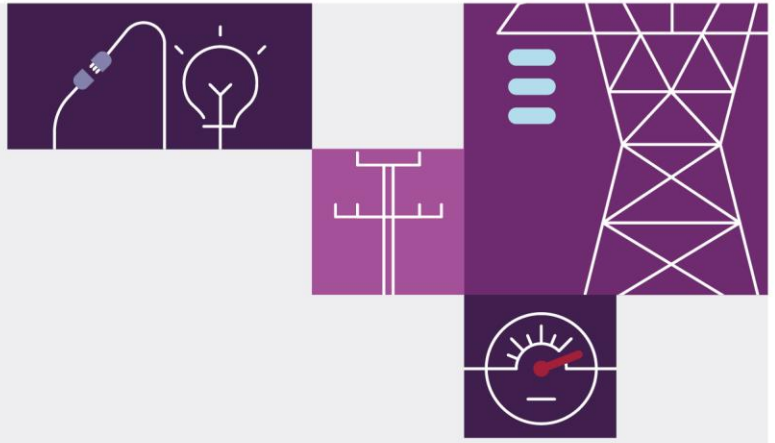


2023 Forecasting Best Practice Compliance Report

August 2023

Regarding the 2023 Inputs,
Assumptions and Scenarios Report,
and ISP Methodology





Important notice

Purpose

The purpose of this compliance report is to demonstrate how AEMO complied with the Forecasting Best Practice Guidelines (FBPG) when preparing the 2023 Inputs, Assumptions and Scenarios Report (IASR) and ISP Methodology. This report also describes how AEMO complied with the FBPG when preparing reliability forecasts for the purposes of the 2023 Electricity Statement of Opportunities (ESOO), as required by section 5.1 of the FBPG.

Disclaimer

AEMO has made reasonable efforts to ensure the quality of the information in this document but cannot guarantee its accuracy or completeness.

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Version control

Version	Release date	Changes
1	25/8/2023	Initial release

Executive summary

After reviewing its processes to develop the 2023 Inputs, Assumptions and Scenarios Report (IASR) and the update to the Integrated System Plan (ISP) Methodology, AEMO considers it has prepared those documents in accordance with the requirements and the intent of the Australian Energy Regulator's (AER) Forecasting Best Practice Guidelines (FBPG).

AEMO also considers that it has prepared the 2023 Electricity Statement of Opportunities (ESOO) and the associated reliability forecast in accordance with the FBPG.

The AER's FBPG¹ provide guidance for AEMO's forecasting practices and processes as they relate to developing the IASR, the ISP (and its methodologies) and the reliability forecasts included in the ESOO. The FBPG are also integral for the functioning of the Retailer Reliability Obligation (RRO), having regard to the following principles:

- Forecasts should be as accurate as possible, based on comprehensive information and prepared in an unbiased fashion.
- The basic inputs, assumptions and methodology that underpin forecasts should be disclosed.
- Stakeholders should have as much opportunity to engage as is practicable.

The FBPG also specify binding obligations and provide guidance for AEMO's forecasting practices and processes as they relate to the ISP, including the process (including consultation) to be used for an ISP update.

AEMO collaborates with a broad range of stakeholders – including consumer, government and industry representatives – to develop and refine its forecasting models and activities applied in the IASR, ESOO and ISP. Stakeholder input is critical to AEMO's activities and is highly valued, adding rigour and increasing confidence in the forecasts.

This compliance report describes how AEMO has prepared its 2023 IASR and ISP Methodology update and its reliability forecast and indicative reliability forecast presented in the 2023 ESOO in accordance with the FBPG.

¹ At <https://www.aer.gov.au/system/files/AER%20-%20Forecasting%20best%20practice%20guidelines%20-%2025%20August%202020.pdf>.



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1 Introduction

1.1 Background

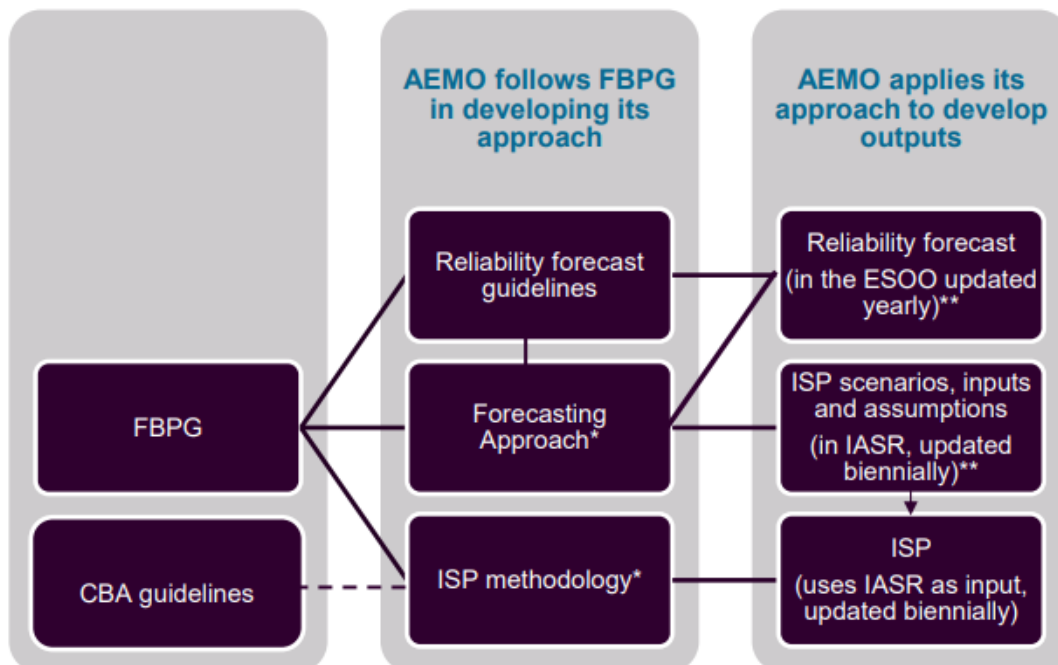
AEMO considers engagement with consumers, market participants, and other stakeholders as foundational to its forecasting activities. Incorporating stakeholder perspectives on the rapidly evolving energy market and systems, along with robust feedback on AEMO's forecasts, makes forecasts more accurate and useful and increases stakeholder confidence in them.

The AER's Forecasting Best Practice Guidelines (FBPG), introduced in August 2020, provide guidance to AEMO on minimum engagement principles and standards. The FBPG's procedural guidance covers:

- Developing inputs, assumptions and scenarios, and associated forecasting and modelling methodologies applied in the Integrated System Plan (ISP), and the preparation of an ISP update where necessary
- Developing reliability forecasts which are included in AEMO's Electricity Statement of Opportunities (ESOO) and are a critical input to statutory requirements under the Retailer Reliability Obligation (RRO)²

The FBPG describe the relationships between the guidelines, ESOO, IASR, ISP Methodology and the ISP. The illustration used in the FBPG is reproduced in Figure 1 below.

Figure 1 Use of the FBPG



* AEMO is *required* to update this at least every four years as per this FBPG.

** The ESOO and IASR include similar information. The IASR may be included in a document that also provides for the assumptions and inputs to be used in preparing other AEMO publications (such as the ESOO), and follow a joint consultation process. See NER clause 5.22.8(c).

² At <https://www.aer.gov.au/retail-markets/retailer-reliability-obligation>.

1.2 Binding elements of the FBPG

The FBPG specify:

- 'binding requirements' which must be addressed by AEMO; and
- 'binding considerations' which AEMO must have regard to or must consider when making decisions; and
- discretionary elements that do not bind AEMO, but rather provide guidance for best practice.

1.2.1 Compliance of IASR and ISP methodology

One of the binding requirements, as set out in section 5.2 of the FBPG, applies when AEMO is preparing an Inputs, Assumptions and Scenarios Report (IASR) and ISP Methodology and requires AEMO to prepare a compliance report. AEMO must demonstrate in this compliance report how AEMO has:

- complied with applicable requirements,
- had regard to applicable considerations (including providing reasons for the weight attached to each consideration), and
- resolved key issues raised by the AER through the AER's issues register.

AEMO must submit the compliance report to the AER no later than 20 business days after the publication of an IASR or ISP Methodology. The provision of this report to the AER will satisfy the binding compliance reporting requirements in section 5.2 of the FBPG. AEMO confirms that this report does not contain any confidential information and, per the binding requirement, is in a form suitable for publication.

1.2.2 Compliance and reliability forecasts

Section 5.1 of the FBPG provides that AEMO should use reasonable endeavours to prepare reliability forecasts in accordance with the FBPG. When publishing each ESOO, the FBPG states that AEMO should provide a report to the AER, describing how it has, and where it has not, prepared reliability forecasts in accordance with the FBPG. While section 5.1 of the FBPG does not impose a binding obligation, this report includes AEMO's evidence of how the 2023 ESOO and reliability forecast was prepared in accordance with the FBPG. AEMO's expectation is that if, following the publication of the 2023 ESOO, AEMO makes a request to the AER to make a reliability instrument, this report will help the AER expeditiously assess the request³.

The 2023 ESOO has been developed in accordance with a number of elements discussed in this report, including:

- AEMO's overall forecasting approach.
- The specific elements of the forecasting approach which were subject to a two-stage consultation process, resulting in updated methodologies and guidelines (refer section 2.1).
- The inputs, assumptions and scenarios outlined in the 2023 IASR (with the *Step Change* scenario being used for the ESOO Central scenario, considered by AEMO as the most likely scenario for RRO purposes).
- The stakeholder engagement activities discussed in section 3.2.
- The Forecasting Accuracy Report (FAR) and Forecasting Improvement Plan noted in section 3.2.7.

³ NER clause 4A.B.1(e) requires AEMO to use reasonable endeavours to prepare a reliability forecast and an indicative reliability forecast in accordance with the FBPG.

On the basis of the above, AEMO considers that this report demonstrates how AEMO has used reasonable endeavours to prepare the 2023 ESOO (and associated reliability forecast) in accordance with the FBPG.

1.3 Structure of this report

The remaining content of this report is structured as follows:

- Section 2 demonstrates how AEMO has complied with each specific binding requirement within the FBPG.
- Section 3 addresses how AEMO has complied with the FBPG's binding considerations as a whole, noting that there are common themes across many of the considerations, including stakeholder engagement, transparency and the adequacy of the forecasting models used. These themes are most easily explored with reference to how AEMO applies the FBPG considerations across the breadth of its forecasting activities.
- Appendix A1 contains a checklist of how each of the forecasting consultations have complied with the consultation procedures set out in Appendix A and Appendix B of the FBPG, which form part of the FBPG's binding requirements on AEMO.
- Appendix A2 contains a list of the binding requirements and binding considerations in the FBPG and where, in this report, those requirements and considerations are addressed.

2 Binding requirements

2.1 Forecasting approach consultation

“ AEMO is required to make its Forecasting Approach and associated review schedule clearly available on its website.

AEMO has a dedicated forecasting approach page on its website⁴ which provides:

- an overview of its forecasting approach,
- consultation timelines associated with each element of its forecasting approach,
- links to relevant methodologies and guidelines, and
- the AEMO Forecasting Approach Register, which summarises and responds to matters raised outside of formal consultation processes.

“ AEMO is required to follow the forecasting best practice consultation procedures in Appendix A (of the FBPG) every four years to review its Forecasting Approach (or more frequently if a material change in circumstances justifies an earlier review). If a material change in circumstances within the four yearly review cycle only affects a discrete component of AEMO's Forecasting Approach, AEMO is required to apply the shorter single stage process in Appendix B (of the FBPG) to review the component.

As noted above, the consultation timelines published on the forecasting approach page of AEMO's website track each element of AEMO's forecasting approach, when it was last reviewed, and when it is next due for review.

As at the date of this compliance report, there are no elements of AEMO's forecasting approach which are overdue for consultation.

Since the completion of the 2022 FBPG Approach report (August 2022), a number of elements of AEMO's forecasting approach have been consulted on, using the FBPG Appendix A procedures. The NEM Reliability Forecasting Guidelines and Methodology Consultation⁵ ran between October 2022 and April 2023 and resulted in the update of a number of elements of AEMO's forecasting approach, including the:

- ESOO and Reliability Forecast Methodology Document.
- Energy Adequacy Assessment Projection (EAAP) Guidelines.
- Reliability Standard Implementation Guidelines.
- Generation Information Guidelines.
- Medium Term Projected Assessment of System Adequacy (MT PASA) Process Description.

Appendix A1 of this report sets out how the above consultation process complied with each of the paragraphs in Appendix A of the FBPG. In summary, the steps taken during this consultation process were:

⁴ At <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-approach>.

⁵ At <https://www.aemo.com.au/consultations/current-and-closed-consultations/2022-reliability-forecasting-guidelines-and-methodology>.

- 26 October 2022: Discussion with the Forecasting Reference Group (FRG).
- 31 October 2022: Consultation paper published.
- 7-8 November 2022: Workshops on consultation topics.
- 28 November 2022: Stage 1 consultation submissions closed.
- 3 February 2023: Draft determination and draft reports published.
- 3 March 2023: Stage 2 consultation submissions closed.
- 24 April 2023: Final determination and final reports published.

The above process is consistent with the consultation procedures that AEMO is required to undertake, as set out in the FBPG.

The outcomes of the above consultation process were incorporated into the methodologies and guidelines used in developing AEMO's 2023 ES00.

2.2 IASR consultation

“ AEMO is required to follow the single stage process in Appendix B when developing and updating scenarios, inputs and assumptions in its IASR, which it updates as part of the ISP development process. For completeness, if AEMO combines the IASR and associated consultation process with another AEMO publication, it is still required to meet the minimum requirements in Appendix B.

Between July 2022 and July 2023, AEMO followed the consultation procedures outlined in Appendix B of the FBPG when preparing the 2023 IASR⁶. Appendix A1 sets out how this consultation complied with the FBPG. In summary, the steps taken during this consultation process were:

- July – November 2022: Pre-publication engagement.
- 16 December 2022: Publication of the Draft 2023 IASR.
- 2 February 2023: Draft 2023 IASR public webinar.
- 9 February 2023: Consumer Advocate verbal submission.
- 16 February 2023: Written consultation submissions closed.
- 15 June 2023: Draft 2023 IASR public webinar.
- 28 July 2023: Publication of 2023 IASR and associated consultation summary report.

AEMO decided to consult on a supporting publication for the IASR, the Transmission Expansion Options Report⁷, which outlines transmission expansion options to inform the development of the 2024 ISP. AEMO, transmission network service providers (TNSPs) and jurisdictional bodies undertook extensive collaboration and joint planning to inform the preparation of this report. AEMO also applied the single stage consultation procedures in the FBPG during the development of the report⁸, including:

⁶ At <https://aemo.com.au/consultations/current-and-closed-consultations/2023-inputs-assumptions-and-scenarios-consultation>.

⁷ Previously consulted on and published under the name Transmission Cost Report. Consultation materials for the 2023 consultation are at <https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-transmission-expansion-options-report.pdf?la=en>.

⁸ At <https://aemo.com.au/consultations/current-and-closed-consultations/2023-transmission-expansion-options-report-consultation>.

- 2 May 2023: Publication of Draft 2023 Transmission Expansion Options Report.
- 18 May 2023: Draft 2023 Transmission Expansion Options Report pre submissions webinar.
- 19 May 2023: Consumer Advocate information session.
- 31 May 2023: Consumer Advocate verbal submission.
- 31 May 2023: Written consultation submissions closed.
- 28 July 2023: Publication of the final 2023 Transmission Expansion Options Report.
- 10 August 2023: Publication webinar for the final Transmission Expansion Options Report.

“ AEMO is required to follow the single stage process when issuing IASR updates unless it is implementing: (1) a specific data update that it had pre-emptively set out in the IASR. This would have entailed AEMO consulting on indicative values, the methodology for updating and the timeline for updating. Where applicable, AEMO would also flag where additional consultation would occur through its forecasting reference group; or (2) an update to improve the IASR, which has been made in response to submissions on the draft ISP.

The 2023 IASR represents the most recent update of inputs, assumptions and scenarios relevant to the ISP and other forecasting and planning publications since the 2022 Forecasting Assumptions Update was published in August 2022 and an addendum to the 2021 IASR was published in December 2021 (itself in response to the AER’s Transparency Review of the final 2021 IASR for the 2022 ISP). Accordingly, AEMO has not published an IASR update as provided for in section 2.2 of the FBPG.

AEMO used the FRG to provide updates to stakeholders on selected preliminary and draft inputs and assumptions that were being included in the 2023 IASR. These inputs and assumptions included:

- Macroeconomic forecasts.
- Consumer energy resources (CER) forecasts.
- Outcomes from multi-sector modelling, which models least-cost pathways to achieve emissions targets under the scenarios within the IASR.
- Electric vehicle (EV) forecasts.
- Price forecasts; including electricity prices, coal prices and gas prices.
- Energy efficiency forecasts.
- Demand side participation (DSP) forecasts.

The inputs, assumptions and scenarios presented in the 2023 IASR are used in AEMO’s 2023 ESOO and associated reliability forecast, ensuring that AEMO’s reliability forecast has been developed with the benefit of stakeholder engagement and feedback.

2.3 ISP methodology consultation

“ AEMO is required to follow the forecasting best practice consultation procedures in Appendix A when developing its ISP methodology and when reviewing its ISP methodology every four years (or more frequently if a material change in circumstances justifies an earlier review). When reviewing its ISP methodology outside of the four yearly process, AEMO is required to run the shorter process in Appendix B.

AEMO undertook a two stage (Appendix A) consultation of its ISP Methodology in 2021. Based on a four yearly review schedule, the FBPG would require the next full review of the ISP Methodology no later than 2025.

However in 2023, upon review of the ISP Methodology AEMO determined that an earlier review and update to the ISP Methodology was warranted to provide minor improvements and improved transparency. As this 2023 update occurred outside the standard four yearly review schedule, did not respond to a material change in circumstances, and only addressed discrete sections of the ISP Methodology, as opposed to the entire document, AEMO applied a single stage consultation process in accordance with the FBPG. This consultation process sought feedback on eight proposed updates to the ISP Methodology⁹ and followed the procedures outlined in Appendix B of the FBPG. Appendix A1 of this report demonstrates how that consultation complied with the FBPG. In summary, the consultation process for the update to the ISP Methodology was:

- 31 March 2023: Notice of consultation, consultation paper and Draft 2023 ISP Methodology published
- 20 April 2023: Draft 2023 ISP Methodology pre-submissions webinar
- 1 May 2023: Written consultation submissions close
- 30 June 2023: Publication of ISP Methodology and associated consultation summary report (including a change-tracked version of the ISP Methodology for improved transparency),
- 13 July 2023: Consultation summary webinar

2.4 ISP update consultation

“ AEMO is required to follow the single stage process in Appendix B when consulting on new information and its impact on the optimal development path under NER clause 5.22.15(c).

AEMO has not issued an ISP update following delivery of the 2022 ISP.

⁹ At <https://aemo.com.au/consultations/current-and-closed-consultations/consultation-on-updates-to-the-isp-methodology>.

2.5 Compliance reporting

“ No later than 20 business days after publishing an IASR or ISP methodology, AEMO is required provide a report to the AER demonstrating that is has complied with the applicable requirements and considerations in the FBPG. AEMO is required to demonstrate in its compliance reports that it has (a) complied with applicable requirements; (b) has had regard to applicable considerations (including reasons for the weight it attached to each consideration); and (c) resolved key issues raised by the AER through the AER's issues register.

If a compliance report contains confidential information, AEMO is required to provide a non-confidential version of the report in a form suitable for publication.

The update to the ISP Methodology was published four weeks prior to the publication of the 2023 IASR and would ordinarily require AEMO to submit a compliance report separate from this report on the 2023 IASR. The AER approved an extension of time allowing a combined compliance report for both the ISP Methodology update and the 2023 IASR to be submitted within 20 business days of publication of the 2023 IASR. This report is the combined compliance report for the ISP Methodology update and the 2023 IASR.

AEMO has not been advised by the AER of any items on its issues register that require resolution. It is noted that AEMO and the AER meet at least monthly to discuss, amongst other things, progress against AEMO's regulatory obligations.

3 Binding considerations

3.1 Binding considerations in the context of AEMO's forecasting activities

In addition to the binding requirements described in section 2 of this report, the FBPG includes a list of binding considerations which AEMO must have regard to when developing a reliability forecast or an ISP. These binding considerations describe factors which AEMO must have regard to or consider when developing, engaging on, and applying its forecasts and forecasting publications.

The FBPG's binding considerations compel AEMO to have regard to the following principles:

- Forecasts should be as accurate as possible, based on comprehensive information and prepared in an unbiased fashion.
- The basic inputs, assumptions and methodology that underpin forecasts should be disclosed.
- Stakeholders should have as much opportunity to engage as is practicable.

The best practice principles described in section 4 of the FBPG provide a foundation for all the forecasting activities that AEMO undertakes. These include the preparation of the ESOO and reliability forecasts by AEMO.

When assessing a request from AEMO to make a reliability instrument, clause 4A.C.11 of the NER requires the AER to have regard to whether AEMO has used reasonable endeavours to prepare its reliability forecast in accordance with the FBPG. To assist the AER's assessment, section 5.1 of the FBPG states that AEMO should provide a report describing how it has, and where it has not, prepared a reliability forecast in accordance with the FBPG, when publishing each ESOO.

The next section describes how AEMO has applied the binding considerations in the FBPG into its forecasting process and publications. Table 5 in Appendix A2 provides a cross-reference for which sections address the binding considerations.

3.2 Applying the FBPG binding considerations

3.2.1 Forecasting Reference Group

The FBPG encourage AEMO to develop its forecasts in a way that provides stakeholders with as much opportunity to engage as is practicable, through effective consultation and access to documents and information. AEMO uses a number of methods to achieve this.

A key method of stakeholder engagement relevant to the Forecasting Approach is the use of the Forecasting Reference Group (FRG). AEMO engages with this open forum to share preliminary forecasts and key insights on such items as forecasting components, aggregated electricity consumption forecasts, and draft maximum and minimum demand forecasts for each NEM region.

While the forum is not a decision-making body, it does provide an avenue for stakeholder feedback where more formal consultation engagement is not required. FRG meetings were an instrumental component of the development of the 2023 IASR and reliability forecast, where AEMO and its consultants presented preliminary inputs and assumptions, listened to and incorporated feedback from FRG members.

Components of the IASR and reliability forecast taken to the FRG included:

- Preliminary macroeconomic forecasts at the 31 August 2022 FRG.
- Preliminary multi-sector modelling forecasts at the 21 September 2022 FRG.
- Preliminary CER and EV forecasts at the 28 September 2022 FRG.
- Preliminary coal and gas price forecasts at the 26 October 2022 FRG.
- Preliminary energy efficiency forecasts at the 29 March 2023 FRG.
- Proposed methodology change to forecasting short duration storage at the 26 April 2023 FRG and associated FRG consultation process through to August 2023.
- Preliminary DSP forecasts and preliminary ESOO forecasts (including key inputs and assumptions) at the 31 May 2023 FRG.
- Preliminary unplanned transmission and generation outage rate projections at the 14 June 2023 FRG and associated FRG consultation process through to August 2023.
- Updated preliminary gas price forecasts at the 28 June 2023 FRG.

In accordance with the FRG Terms of Reference, AEMO endeavours to prepare and distribute an agenda and materials for FRG meeting five business days prior to the meeting. These materials are also published on AEMO's website¹⁰. AEMO will typically structure FRG meetings to allow equal time for presentations and questions, which enables stakeholders to meaningfully engage in the topics presented and have their questions answered by AEMO or its consultants.

To monitor the effectiveness of the FRG, AEMO invites participants to respond to a survey at the conclusion of each meeting, asking for a rating of between 1 (not useful) and 5 (very useful) for each FRG presentation, as well as asking for written feedback on the content and engagement at the FRG. The average rating for responses received across the 2022-23 financial year is 4.0, and in the 2023 calendar year through to June is 4.4.

The FRG is therefore a key activity that AEMO undertakes to ensure it has had regard to a number of the binding considerations, particularly those that cover stakeholder consultation and engagement and making information available.

3.2.2 Webinars

In addition to the FRG, AEMO held several webinars and workshops during the development of the IASR and the ISP Methodology update to provide stakeholders with the opportunity to engage in longer, dedicated sessions on specific topics, including:

- A webinar in July 2022 on AEMO's proposed approach to developing scenarios for the 2023 IASR.
- A follow up webinar in August 2022, accompanied by a report prepared by AEMO, on the feedback received by stakeholders on the July 2022 webinar and how this feedback had shaped draft scenarios for the Draft 2023 IASR.
- Two webinars in October 2022 and November 2022 in which AEMO's process for updating its transmission cost database was presented and discussed.

¹⁰ At <https://aemo.com.au/en/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/forecasting-reference-group-frg>.

- A webinar in January 2023 on ‘What is the ISP and why does it matter to consumers?’, in which AEMO provided an overview of the purpose and outcomes of the ISP and IASR.
- A Draft 2023 IASR pre-submissions webinar in February 2023, which summarised AEMO’s Draft 2023 IASR.
- A ‘submission reflections’ webinar in March 2023, in which AEMO informed stakeholders about the submissions received on the Draft 2023 IASR and summarised the key themes from that feedback.
- A Draft ISP Methodology update webinar in April 2023, in which AEMO presented its proposed changes to the ISP Methodology.
- A webinar in May 2023 on the Draft 2023 Transmission Expansion Options Report in which AEMO summarised elements of the report and outlined consultation questions.
- A webinar in June 2023 on the feedback AEMO had received on the Draft 2023 IASR and how this feedback had shaped AEMO’s views on scenarios and sensitivities for the (final) 2023 IASR.
- An ISP Methodology webinar in July 2023 in which AEMO provided an overview of the stakeholder feedback received on the draft ISP Methodology update and how this feedback was incorporated into the final update.
- A webinar in August 2023 on the final 2023 Transmission Expansion Options Report in which AEMO provided an overview of the stakeholder feedback received on the draft report and how this feedback was incorporated into the final report.

These webinars provide stakeholders the opportunity to provide their feedback, in time allocated for questions and answers in the webinar’s agenda. These Q&A sessions provide AEMO with valuable insights that it may incorporate into its forecasting processes and publications. This addresses a number of binding considerations around information disclosure, stakeholder consultation and engagement and the different engagement models AEMO can use.

3.2.3 Panels, working groups, meetings and workshops

AEMO convenes a number of panels, working groups, meetings and workshops which provide other avenues for stakeholders to engage with AEMO on its forecasts. These include:

- The ISP Consumer Panel, which currently comprises four members and has been established in accordance with the NER to bring a consumer-focused perspective to the ISP development process. AEMO engages with the ISP Consumer Panel on a continuous and ongoing basis, seeking advice and input on matters of both substance and process. Such engagement supports the Panel’s timely consideration of issues and feedback to AEMO, allowing for AEMO’s approach to be adjusted where appropriate. The ISP Consumer Panel provides public reports to AEMO on the IASR and Draft ISP, which AEMO must have regard to when developing the ISP.
- The Executive Joint Planning Committee (EJPC), which coordinates effective collaboration and consultation between jurisdictional transmission planning bodies (for example, transmission network service providers) and AEMO on electricity transmission network planning issues.
- The Joint Planning Committee, which reports to the EJPC. In addition to undertaking work as directed by the EJPC, it provides a forum for collaboration during the preparation of an ISP and coordinates planning for energy reliability and security across the NEM.

- At the distribution network level, AEMO has established a working group with distribution network service providers to discuss issues pertaining to the ISP and how those issues may impact the operation of and investment in electricity distribution networks.
- The Advisory Council on Social Licence, which AEMO established to better understand broader community sentiment, execution challenges and possible opportunities presented by the construction of new energy infrastructure. The role of the Council includes providing input for consideration in preparing the ISP.
- Monthly meetings between AEMO and the AER in which topics such as the IASR, ISP, ESOO and FBPG have been discussed. AEMO prepares and shares minutes from these meetings and maintains a list of any actions arising, as well as a list of current AEMO consultations and engagements, to ensure the AER is aware of prevailing opportunities for stakeholder engagement.

AEMO also hosts a Technical Demand Forecasting workshop each year. This workshop gathers together technical experts from forecasting teams across many organisations, including AEMO, network service providers, government agencies and research institutions. The focus of the workshop is to present and collaborate on forecast models, methodologies, inputs and other areas of interest to those stakeholders who are involved in the technical aspects of forecasting.

These forums are another avenue for AEMO's stakeholders – particularly those with detailed technical knowledge of forecasting and its implications – to be engaged in AEMO's forecasting activities. They also provide a means for knowledge sharing for forecasting peers that will inform and improve AEMO's forecasting approach on a regular basis.

3.2.4 Consultation summary reports

AEMO prepared consultation summary reports for the three key ISP-related consultations published in 2023: the 2023 IASR, the 2023 ISP Methodology update and the 2023 Transmission Expansion Options Report. These reports summarise the feedback received from stakeholders in their submissions (where they are not confidential) and how AEMO has responded to and/or incorporated that feedback.

Consultation summary reports are an effective way to demonstrate to stakeholders that:

- their views have been considered, and
- whether those views have led to a change in AEMO's approach, inputs, assumptions and/or scenarios.

3.2.5 Forecasting approach

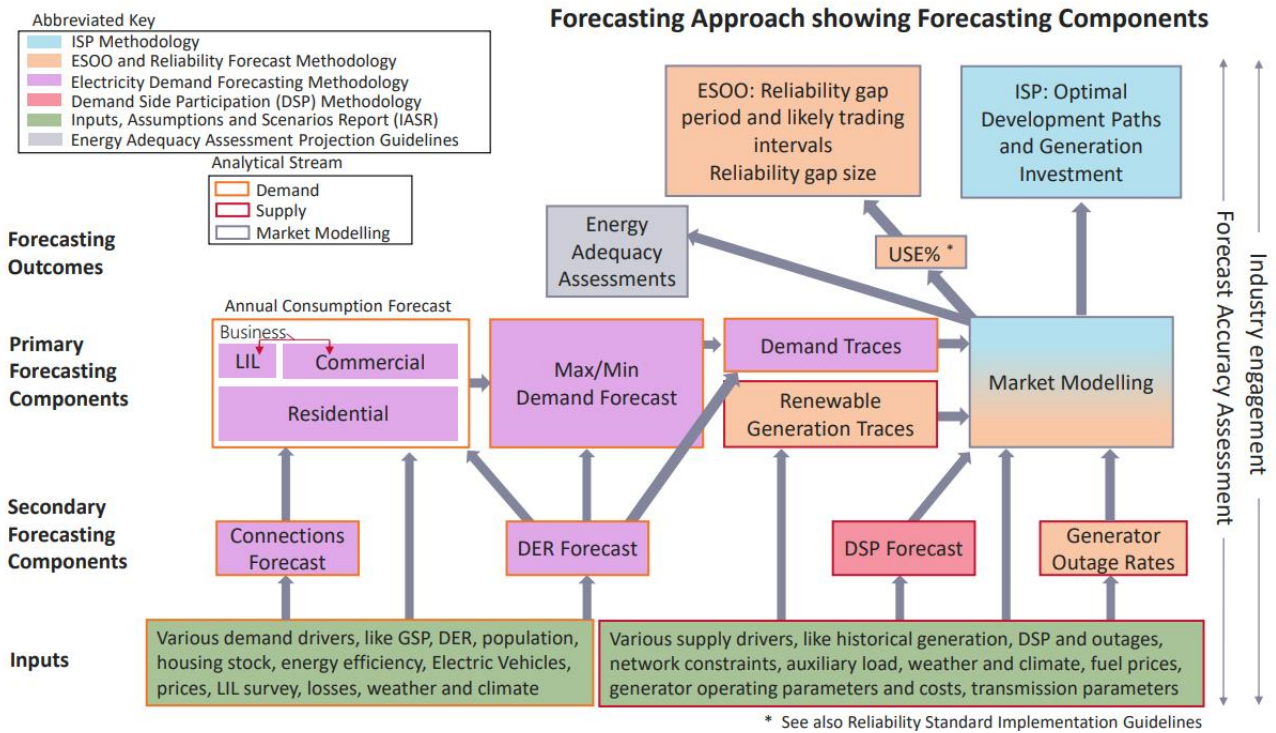
As noted in section 2.1, AEMO publishes its forecasting approach on its website, providing a high level overview of its forecasting approach (depicted in Figure 2 below).

While Figure 2 provides an easy-to-follow overview of the forecasting components developed for the forecasting approach, to provide the transparency required by the FBPG AEMO accompanies this figure with a list of the key elements within its forecasting approach. This list also provides links to the documents in question (such as methodologies, guidelines) and links to the most recent consultation regarding those forecasting elements.

These methodologies and consultation pages set out how the forecasting approach has been developed, including the inputs, outputs and limitations of the models, as well as how the forecasting approach has benefited from extensive stakeholder engagement. As noted above, this stakeholder engagement takes many forms (FRG,

webinars, working groups, etc.) and always embeds ample time for discussion and Q&A, so that stakeholders may meaningfully engage with the forecasting approach.

Figure 2 AEMO’s forecasting approach



Furthermore, the forecasting approach is subject to regular analysis and scrutiny via the FAR, discussed in section 3.2.7.

AEMO’s publication, explanation and updating of its forecasting approach ensures it is having regard to the binding considerations outlined in the FBPG.

3.2.6 Publication of methodologies, inputs, assumptions and scenarios

As noted above, the forecasting approach page contains links to all relevant methodologies, guidelines and reports which comprise AEMO’s forecasting approach. With specific reference to the AER’s expectations as set out in the binding considerations, these links provide stakeholders with access to:

- The IASR, which specifically sets out the scenarios and key sensitivities that AEMO will use for the ISP, and sets out how the scenarios, inputs and assumptions have had regard to the Cost Benefit Analysis (CBA) Guidelines. The IASR also includes the data sources used in preparing the inputs and assumptions, including the date at which the data source was current, and the IASR assumptions workbook, which provides granular detail of the inputs and assumptions for each scenario.
- The electricity demand forecasting methodology, which sets out the methodologies underpinning AEMO’s component-based forecasting approach.
- The ISP Methodology, which explains how AEMO has regard to the CBA guidelines in developing the methodology.

AEMO also maintains the forecasting data portal¹¹, which provides users with a dynamic interface in which they can view AEMO's electricity and gas consumption, maximum and minimum demand forecasts from existing and previous publications at various levels of granularity. Selected inputs are also available to download within the portal.

The publication of this data demonstrates that AEMO has had regard to a number of binding considerations with respect to disclosure of data, development of scenarios, component-based forecasting, application of CBA Guidelines and stakeholder engagement.

3.2.7 Publication of Forecasting Accuracy Report and Forecasting Improvement Plan

AEMO annually reviews the accuracy of its prior year forecasts. The 2022 FAR, published in December 2022¹², identified that most forecast components performed as expected, or were explainable by inaccuracies in the relevant inputs and assumptions.

The 2022 FAR also incorporated the Forecasting Improvement Plan that provides transparency of AEMO's proposed improvements to forecasting for the year ahead. AEMO began consulting on the Forecasting Improvement Plan in the October 2022 FRG meeting, before including the draft Forecasting Improvement Plan in the FAR. In that FAR, AEMO invited stakeholders to provide written submissions on the Forecasting Improvement Plan by 27 January 2023. AEMO considered the feedback received¹³ and set out how it had considered and addressed that feedback in its final report on the 2022 Forecasting Improvement Plan, published in June 2023¹⁴.

The Forecasting Improvement Plan set out six priority initiatives:

1. Improve renewable generation and demand traces, including the quantity used, and their shape.
2. Improve visibility of sectoral consumption.
3. Review forecast maximum and minimum distribution of the initial year of the forecast horizon.
4. Review large industrial load and other non-scheduled generation forecast components.
5. Monitor data availability of uptake and usage of emerging technologies.
6. Monitor DSP.

An update on progress against these initiatives was shared with the FRG in April 2023 and further progress will be reported in the 2023 FAR.

The FAR and Forecasting Improvement Plan, together with the internal systems and processes which are associated with them, meet the binding considerations to report on AEMO's forecast performance, as well as contributing to efforts to verify the results of the forecasting approach.

3.2.8 Publication of the Update to the 2022 ESOO

Subsequent to the publication of the 2022 ESOO, significant new relevant information became available to AEMO. In accordance with clause 3.13.3A(b) of the NER, AEMO published an update to the 2022 ESOO in

¹¹ At <http://forecasting.aemo.com.au/>.

¹² At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/2022-forecast-improvement-plan-consultation/2022-forecast-accuracy-report-final.pdf?la=en.

¹³ AEMO received submissions from two stakeholders.

¹⁴ At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/2022-forecast-improvement-plan-consultation/2022-forecasting-improvement-plan-consultation-report.pdf?la=en.

February 2023¹⁵ which addressed several material changes affecting available generation capacity in the NEM. The update to the 2022 ESOO, published in February 2023, clearly set out what the changes were and their impact on the previously published ESOO.

By publishing this update, AEMO ensured that its reliability forecast was using the most accurate and relevant data available, which is a binding consideration under the FBPG.

Section 2.3 of the FBPG notes that, when updating a reliability forecast out of cycle, AEMO should consider whether it is appropriate to run the single stage process in Appendix B of the FBPG¹⁶. When providing the reliability forecast in the update to the 2022 ESOO, AEMO had regard to section 5.2.3 of its Reliability Forecast Guidelines¹⁷, which sets out how AEMO balances industry engagement with the speed with which it can provide an update. As the new information to the 2022 ESOO related to large generator capacity, AEMO followed section 5.2.3(a) of the Reliability Forecast Guidelines and issued the updated reliability forecast without running a consultation process under Appendix B of the FBPG.

3.2.9 Summary

AEMO has:

- Undertaken extensive stakeholder engagement, throughout the year and across multiple approaches (for example, meetings, workshops, webinars, and publications).
- Provided multiple avenues for stakeholders to provide feedback (including written submissions, Q&A time, meetings, and workshops).
- Demonstrated how feedback received from stakeholders has been incorporated into AEMO's forecasting approach (for example, through consultation summary reports, 'reflections' webinars, and the Forecasting Improvement Plan).
- Published extensive documentation and data on the inputs, assumptions, scenarios and sensitivities that will be used when developing the ISP, including how the CBA Guidelines are applied.
- Clearly set out its forecasting approach, from the overview level down to the specific methodologies used when for the various components that make up AEMO's forecasts.
- Continually monitored its forecast performance, through the annual FAR and Forecasting Improvement Plan.
- Updated its reliability forecast in the 2022 ESOO when significant new information became available.

Collectively, these activities demonstrate that AEMO has had regard to the binding considerations in the FBPG, and complied with the binding requirements in section 1, when preparing the 2023 IASR, the update to the ISP Methodology and the 2023 ESOO and the associated reliability forecast.

¹⁵ At https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/nem_esoo/2023/february-2023-update-to-the-2022-esoo.pdf?la=en&hash=1AED91846C35DE3DE0BFC071A2228EAD.

¹⁶ Considering whether to consult on an out-of-cycle ESOO update is not specifically referred to in the binding requirements or binding considerations under the FBPG. However, section 2.3 of the FBPG goes on to note that it would be best practice for AEMO to set out its process for updating and consulting on an out-of-cycle ESOO in its Reliability Forecast Guidelines, which is what AEMO has done.

¹⁷ At https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/nem_esoo/2021/reliability-forecast-guidelines.pdf?la=en&hash=3CC8D4A02BF2C6243D66C111AC83C306.

A1. Consultation compliance checklists

This appendix sets out how each the consultations referred to in section 2 of this report complied with the clauses in Appendix A and/or Appendix B (whichever is applicable) of the FBPG.

A1.1 NEM reliability forecast guidelines and methodology consultation

Table 1 NEM reliability forecast guidelines and methodology consultation compliance with FBPG Appendix A

FBPG Appendix A requirement	AEMO actions
(a) AEMO must give a notice to all Consulted Persons. AEMO must give particulars of the matter under consultation, by publishing the notice on its website and notifying the members of its subscriber list.	AEMO's consultation was discussed at the 26 October 2022 meeting of the FRG and a consultation paper was published on AEMO's website on 31 October 2022.
(b) The notice must invite interested Consulted Persons to make written submissions to AEMO concerning the matter.	The consultation paper ¹⁸ invited interest persons to make written submissions by 5:00 pm (AEDT) on 28 November 2022.
(c) A written submission may state whether a Consulted Person considers that a meeting is necessary or desirable in connection with the matter under consultation and, if so, the reasons why such a meeting is necessary or desirable. To be valid, a Consulted Person must provide AEMO with a submission no later than the date specified in the notice. This date must be at least 20 business days after AEMO publishes the notice referred to in paragraph (b).	AEMO received written submissions from seven stakeholders on or before the deadline for submissions, which was 22 business days after the publication of the consultation paper.
(d) AEMO must consider all valid submissions within a period of not more than a further 20 business days. If AEMO, after having considered all valid submissions, concludes that it is desirable or necessary to hold any meetings, AEMO must use its best endeavours to hold such meetings with Consulted Persons who have requested meetings within a further 20 business days	During the consultation paper submission period, AEMO also held three workshops dedicated to exploring specific consultation topics. In addition, AEMO had several meetings with stakeholders to discuss topics that were submitted.
(e) Following the conclusion of all meetings (if any) held in accordance with paragraph (d), and AEMO's consideration of the matter under consultation, AEMO must publish a draft report in accordance with paragraph (f), to be made available to all Consulted Persons, setting out: <ul style="list-style-type: none"> its conclusions and any determinations on the matter under consultation; its reasons for those conclusions or determinations; the procedure it followed in considering the matter; summaries of each issue, that it reasonably considers to be material, contained in valid written submissions received from Consulted Persons or in meetings, and its response to each such issue; and in a notice at the front of the draft report, an invitation to Consulted Persons to make written submissions on the draft report. Subject to its confidentiality obligations, AEMO must make available to all Consulted Persons, on request, copies of any material it received in submissions. 	AEMO published a draft report ¹⁹ on 3 February 2023 which included, among other things, the elements noted in paragraph (e).
(f) AEMO must, as soon as possible, publish the draft report referred to in paragraph (e) on its website.	The draft report was available on AEMO's website on 3 February 2023.

¹⁸ At https://www.aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/reliability-forecasting-guidelines-and-methodology-consultation/nem-reliability-forecasting-guidelines-and-methodology-consultation-paper.pdf?la=en.

¹⁹ At https://www.aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/reliability-forecasting-guidelines-and-methodology-consultation/reliability-forecasting-guidelines-and-methodologies-consultation-draft-report.pdf?la=en.

FBPG Appendix A requirement	AEMO actions
(g) To be valid, a submission invited in a notice referred to in paragraph (e) must be received not later than the date specified in the notice. This date must be at least 20 business days after the publication of the draft report pursuant to paragraph (f), or such longer period as is reasonably determined by AEMO having regard to the complexity of the matters and the issues under consideration	AEMO received written submissions from seven stakeholders on or before the deadline for submissions, which was 20 business days after the publication of the draft report. AEMO also held a workshop on 13 February 2023 to ensure that all stakeholders had the opportunity to contribute to the second stage consultation.
(h) AEMO must consider all valid submissions within a period of not more than a further 30 business days.	AEMO considered the submissions in the 30 business days after the period to receive submissions had closed.
(i) Following the conclusion of AEMO's consideration of all valid submissions, AEMO must publish a final report in accordance with paragraph (j), available to all Consulted Persons, setting out: 1) its conclusions and any determinations on the matter under consultation; 2) its reasons for those conclusions or determinations; 3) the procedure it followed in considering the matter; 4) summaries pursuant to paragraph (b)4); and 5) summaries of each issue, that it reasonably considers to be material, contained in valid written submissions received from Consulted Persons on the draft report and its response to each such submission. As part of its response, AEMO should explain whether and how it has incorporated specific input from submissions. Subject to its confidentiality obligations, AEMO must also make available to all Consulted Persons, on request, copies of any material it received in submissions.	AEMO published a final report ²⁰ on 24 April 2023, which set out the requirements, among other things, of the elements noted in paragraph (i).
(j) AEMO must, as soon as possible, publish the final report referred to in paragraph (i) on its website.	The final report was available on AEMO's website on 24 April 2023.
(k) AEMO must not make the decision or determination in relation to which of the forecasting best practice consultation procedures apply until AEMO has completed all the procedures set out in this consultation process.	Subsequent to the release of the final report that concluded the requirements under the FBPG consultation procedures, AEMO updated the associated elements of its forecasting approach and has adopted them in its forecasting and planning activities and publications.
(l) Notwithstanding paragraph (k), substantial compliance by AEMO with the forecasting best practice consultation procedures is sufficient.	

A1.2 IASR consultation

Table 2 IASR consultation compliance with FBPG Appendix B

FBPG Appendix B requirement	AEMO actions
(a) AEMO must use reasonable endeavours to hold meetings with Consulted Persons on the matter under consultation with a view to informing and providing stakeholder confidence in the draft report in paragraph (c). These meetings may take the form of workshops, bilateral meetings, working groups, public forums, webinars, or any other form that AEMO finds relevant.	AEMO undertook numerous consultation activities in the lead up to the publication of the Draft 2023 IASR. These are summarised on AEMO's website ²¹ and include: <ul style="list-style-type: none"> • A webinar in July 2022 on preliminary scenarios • A follow up webinar in August 2022, along with the publication of a report, which summarised the feedback received on the July 2022 webinar • FRG meetings in August 2022 and September 2022 on economic forecasts, multi-sector modelling, CER, EVs and gas price forecasts • Webinars in October 2022 and November 2022 on AEMO's transmission cost database In addition, AEMO regularly meets with transmission and distribution network service providers in a range of forums, such as the EJPC, the Joint Planning Committee and the

²⁰ At https://www.aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/reliability-forecasting-guidelines-and-methodology-consultation/final/reliability-forecasting-guidelines-and-methodologies-final-report.pdf?la=en.

²¹ At <https://aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp/2024-integrated-system-plan-isp/opportunities-for-engagement>.

FBPG Appendix B requirement	AEMO actions
	DNSP-ISP working group, as well as bilateral meetings where necessary.
<p>(b) Following the conclusion of all meetings held in accordance with paragraph (a), and AEMO's consideration of the matter under consultation, AEMO must publish a draft report, to be made available to all Consulted Persons, setting out:</p> <ul style="list-style-type: none"> its conclusions and any determinations on the matter under consultation; its reasons for those conclusions or determinations; the procedure it followed in considering the matter; summaries of each issue, that it reasonably considers to be material, contained in meetings with Consulted Persons, and its response to each such issue; and in a notice at the front of the draft report, an invitation to Consulted Persons to make written submissions on the draft report within a specified timeframe of not less than 30 calendar days 	AEMO published the Draft 2023 IASR ²² on 16 December 2022 which included, among other things, the elements noted in paragraph (b).
<p>(c) AEMO must, as soon as possible after holding meetings referred to in paragraph (a), publish the draft report referred to in paragraph (b) on its website</p>	The draft report was available on AEMO's website on 16 December 2022.
<p>(d) To be valid, a submission invited in a notice referred to in paragraph (b) must be received not later than the date specified in the notice. This date must be at least 30 calendar days after the publication of the draft report pursuant to paragraph (c), or such longer period as is reasonably determined by AEMO having regard to the complexity of the matters and the issues under consideration.</p>	<p>AEMO received over 60 written submissions on or before the deadline for submissions of 16 February 2023, which was two calendar months after the publication of the draft report. This extended period allowed stakeholders time to respond, taking into account the Christmas and New Year period which occurred soon after the publication of the Draft 2023 IASR.</p> <p>AEMO also held a Draft 2023 IASR pre-submissions webinar on 2 February 2023 and a Consumer Advocate verbal consultation submission session on 9 February 2023 to ensure that all stakeholders had the opportunity to engage on the content of the draft report before the submission window closed.</p> <p>After the submission period had closed, but while the IASR was still being developed, AEMO continued to engage with stakeholders, including through:</p> <ul style="list-style-type: none"> A 'submissions reflections' webinar on 22 March 2023, which summarised the feedback received in submissions to the Draft 2023 IASR. FRG meetings where updates to inputs and assumptions were presented and feedback received. A consultation process for AEMO's Transmission Expansion Options Report, which included a draft report, invitation for submissions and final report. Ongoing discussions with network service providers via the groups and meetings outlined earlier in this table.
<p>(e) Following the conclusion of AEMO's consideration of all valid submissions, AEMO must publish a final report in accordance with paragraph (g), available to all Consulted Persons, setting out:</p> <ul style="list-style-type: none"> its conclusions and any determinations on the matter under consultation; its reasons for those conclusions or determinations; the procedure it followed in considering the matter; summaries pursuant to paragraph (b)4); and summaries of each issue, that it reasonably considers to be material, contained in valid written submissions received from Consulted Persons on the draft report and its response to each 	<p>AEMO published the (final) 2023 IASR²³ on 28 July 2023 which included, among other things, the elements noted in paragraph (e).</p> <p>The 2023 IASR was accompanied by a Consultation Summary Report,²⁴ which set out – in detail – the issues raised by stakeholders in their submissions and how AEMO had responded to these issues in the 2023 IASR.</p>

²² At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/2023-inputs-assumptions-and-scenarios-consultation/draft-2023-inputs-assumptions-and-scenarios-report.pdf?la=en.

²³ At <https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-inputs-assumptions-and-scenarios-report.pdf?la=en>.

²⁴ At <https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-iasr-consultation-summary-report.pdf?la=en>.

FBPG Appendix B requirement	AEMO actions
such submission. As part of its response, AEMO should explain whether and how it has incorporated specific input from submissions. Subject to its confidentiality obligations, AEMO must also make available to all Consulted Persons, on request, copies of any material it received in submissions. AEMO must consider all valid submissions within a period of not more than a further 30 business days.	
(f) AEMO must, as soon as possible, publish the final report referred to in paragraph (f) on its website.	The 2023 IASR was available on AEMO's website on 28 July 2023.

A1.3 ISP Methodology update consultation

Table 3 ISP Methodology update consultation compliance with FBPG Appendix B

FBPG Appendix B requirement	AEMO actions
(a) AEMO must use reasonable endeavours to hold meetings with Consulted Persons on the matter under consultation with a view to informing and providing stakeholder confidence in the draft report in paragraph (c). These meetings may take the form of workshops, bilateral meetings, working groups, public forums, webinars, or any other form that AEMO finds relevant.	AEMO released information in the Draft 2023 IASR and the 2024 ISP Timetable about its intent to consult on an update to the ISP Methodology.
(b) Following the conclusion of all meetings held in accordance with paragraph (a), and AEMO's consideration of the matter under consultation, AEMO must publish a draft report, to be made available to all Consulted Persons, setting out: <ul style="list-style-type: none"> its conclusions and any determinations on the matter under consultation; its reasons for those conclusions or determinations; the procedure it followed in considering the matter; summaries of each issue, that it reasonably considers to be material, contained in meetings with Consulted Persons, and its response to each such issue; and in a notice at the front of the draft report, an invitation to Consulted Persons to make written submissions on the draft report within a specified timeframe of not less than 30 calendar days 	AEMO published the Draft 2023 ISP Methodology update ²⁵ on 31 March 2023 which included, among other things, the elements noted in paragraph (b). The draft report was accompanied by a consultation paper, ²⁶ which set out the proposed changes to the methodology, the reasons why and posed specific questions for stakeholders to respond to in written submissions.
(c) AEMO must, as soon as possible after holding meetings referred to in paragraph (a), publish the draft report referred to in paragraph (b) on its website	The Draft 2023 ISP Methodology update and associated consultation paper was available on AEMO's website on 31 March 2023.
(d) To be valid, a submission invited in a notice referred to in paragraph (b) must be received not later than the date specified in the notice. This date must be at least 30 calendar days after the publication of the draft report pursuant to paragraph (c), or such longer period as is reasonably determined by AEMO having regard to the complexity of the matters and the issues under consideration.	AEMO received 25 written submissions on or before the deadline for submissions of 1 May 2023, which was 31 calendar days after the publication of the draft report. AEMO also held a Draft ISP Methodology update pre-submissions webinar on 20 April 2023 to ensure that all stakeholders had the opportunity to engage on the content of the draft report before the submission window closed.
(e) Following the conclusion of AEMO's consideration of all valid submissions, AEMO must publish a final report in accordance with paragraph (g), available to all Consulted Persons, setting out: <ul style="list-style-type: none"> its conclusions and any determinations on the matter under consultation; its reasons for those conclusions or determinations; 	AEMO published the final updates to the ISP Methodology ²⁷ on 30 June 2023 which included, among other things, the elements noted in paragraph (e).

²⁵ At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/isp-methodology-2023/draft-isp-methodology.pdf?la=en.

²⁶ At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/isp-methodology-2023/consultation-paper---update-to-the-isp-methodology.pdf?la=en.

²⁷ At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/isp-methodology-2023/isp-methodology_june-2023_tracked-changes.pdf?la=en (tracked changes version).

FBPG Appendix B requirement	AEMO actions
<ul style="list-style-type: none"> the procedure it followed in considering the matter; summaries pursuant to paragraph (b)4); and summaries of each issue, that it reasonably considers to be material, contained in valid written submissions received from Consulted Persons on the draft report and its response to each such submission. As part of its response, AEMO should explain whether and how it has incorporated specific input from submissions. Subject to its confidentiality obligations, AEMO must also make available to all Consulted Persons, on request, copies of any material it received in submissions. AEMO must consider all valid submissions within a period of not more than a further 30 business days. 	<p>The update to the ISP Methodology was accompanied by a Consultation Summary Report,²⁸ which set out – in detail – the issues raised by stakeholders in their submissions and how AEMO had responded to these issues in the update to the ISP Methodology.</p>
<p>(f) AEMO must, as soon as possible, publish the final report referred to in paragraph (f) on its website.</p>	<p>The updated ISP Methodology was available on AEMO’s website on 30 June 2023.</p>

²⁸ At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/isp-methodology-2023/consultation-summary-report---update-to-the-isp-methodology.pdf?la=en.

A2. List of binding requirements and binding considerations

Table 4 List of binding requirements in the FBPG

Section-Area	Requirement	Section(s) in which AEMO's compliance is discussed
2.1 – Forecasting Approach consultation	<p>AEMO is required to:</p> <ul style="list-style-type: none"> • Make its Forecasting Approach and associated review schedule clearly available on its website. • Follow the forecasting best practice consultation procedures in Appendix A every four years to review its Forecasting Approach (or more frequently if a material change in circumstances justifies an earlier review). If a material change in circumstances within the four yearly review cycle only affects a discrete component of AEMO's Forecasting Approach, AEMO is required to apply the shorter single stage process in Appendix B to review the component. 	Section 2.1 Appendix A1.1
2.2 – IASR consultation	<p>AEMO is required to follow the single stage process in Appendix B when developing and updating scenarios, inputs and assumptions in its IASR, which it updates as part of the ISP development process. For completeness, if AEMO combines the IASR and associated consultation process with another AEMO publication, it is still required to meet the minimum requirements in Appendix B. AEMO is required to follow the single stage process when issuing IASR updates unless it is implementing:</p> <ul style="list-style-type: none"> • a specific data update that it had pre-emptively set out in the IASR. This would have entailed AEMO consulting on indicative values, the methodology for updating and the timeline for updating. Where applicable, AEMO would also flag where additional consultation would occur through its forecasting reference group; or • an update to improve the IASR, which has been made in response to submissions on the draft ISP. 	Section 2.2 Appendix A1.2
2.4 – ISP methodology consultation	<p>AEMO is required to follow the forecasting best practice consultation procedures in Appendix A when developing its ISP methodology and when reviewing its ISP methodology every four years (or more frequently if a material change in circumstances justifies an earlier review). When reviewing its ISP methodology outside of the four yearly process, AEMO is required to run the shorter process in Appendix B.</p>	Section 2.3 Appendix A1.3
2.5 – ISP update consultation	<p>AEMO is required to follow the single stage process in Appendix B when consulting on new information and its impact on the optimal development path under NER clause 5.22.15(c).</p>	Section 2.4
5.2 – Compliance reporting for IASR and ISP methodology	<p>No later than 20 business days after publishing an IASR or ISP methodology, AEMO is required provide a report to the AER demonstrating that it has complied with the applicable requirements and considerations in the FBPG. AEMO is required to demonstrate in its compliance reports that it has (a) complied with applicable requirements; (b) has had regard to applicable considerations (including reasons for the weight it attached to each consideration); and (c) resolved key issues raised by the AER through the AER's issues register.</p> <p>If a compliance report contains confidential information, AEMO is required to provide a non-confidential version of the report in a form suitable for publication.</p>	Section 2.5

Table 5 List of binding considerations in the FBPG

Section-Area	Consideration	Section(s) in which AEMO's compliance is discussed
3 – ISP consultation principles and practices	<p>AEMO must have regard to the principles in the most recent version the AER's 'consumer engagement guideline for network service providers' when developing the ISP. When applying these principles, AEMO must consider how it can run its consultation processes to most effectively:</p> <ul style="list-style-type: none"> • facilitate effective discussion by providing stakeholders with sufficient time to digest any materials before workshops or public forums 	Section 2.2 Section 2.3 Section 3.2.1 Section 3.2.2 Section 3.2.3

Section-Area	Consideration	Section(s) in which AEMO's compliance is discussed
	<ul style="list-style-type: none"> • account for constraints that stakeholders face when developing a consultation strategy or program, including by proactively building stakeholders' skills and understanding of the material; • be aware of when more stakeholder involvement or collaboration is warranted, including clarifying which engagement approach is being adopted and why; • employ a wide range of engagement strategies to receive appropriate feedback, taking a flexible approach with a view to meaningfully bring stakeholders into the process; • seek regular considered feedback from stakeholders on the efficacy of the engagement process; and • make relevant and timely information available to stakeholders with a view to achieving stakeholder-centric objectives. 	Section 3.2.4
3 – ISP consultation principles and practices	<p>AEMO must have regard to how it can employ the following consultation practices when developing the ISP:</p> <ul style="list-style-type: none"> • Engage effectively and meaningfully with stakeholders at all key stages of the ISP development process. • Consult on key modelling outputs in a way that allows stakeholders to see the key outputs of the ISP, as well as the key drivers of those outputs • Transparently disclose all key inputs, noting that specific network investment options are modelling inputs. 	Section 2.2 Section 2.3 Section 3.2.1 Section 3.2.2 Section 3.2.3 Section 3.2.4 Section 3.2.5 Section 3.2.6
4 – Best practice forecasts	<p>AEMO must have regard to the three principles NER clause 4A.B.5(b) when developing its forecasting practices and processes, which are relevant to the ISP, reliability forecasts, and AEMO's forecasts in general. To achieve this, AEMO must consider incorporating the following factors as part of its forecasting practices and principles:</p> <ul style="list-style-type: none"> • Publish all key elements of its Forecasting Approach (as set out in section 4.1). • Facilitate stakeholder engagement. • Apply the CBA guidelines when selecting reasonable inputs and assumptions. • Use a component-based methodology and identify critical inputs/assumptions driving forecasts • Consider a range of forecast outcomes to take into account different future scenarios and identify the key parameters for sensitivity analysis. • Apply the CBA guidelines when developing scenarios. Publish information on the construction of the scenarios to clarify how these feed into the ISP outcomes. • Specify how it will use and disclose data, including how it will use the most accurate and relevant data available, and how it will handle confidential data. • How it will examine and report on its historical forecast performance. 	Section 2.1 Section 3.2.1 Section 3.2.2 Section 3.2.3 Section 3.2.4 Section 3.2.5 Section 3.2.6 Section 3.2.7 Section 3.2.8
4.1 – Details for the Forecasting Approach	<p>When developing its Forecasting Approach, AEMO must consider how it can best explain and present its:</p> <ul style="list-style-type: none"> • Suite of models for to use. • Approaches to: determining modelling inputs, incorporating/publishing data, reporting uncertainties around forecasts, incorporating exogenous factors, and representing resource/network constraints affecting energy delivery. • Method for allowing stakeholders to engage with the results of the analytical stream. • Internal process for verifying its approach and results. 	Section 2.1 Section 2.2 Section 3.2.1 Section 3.2.3 Section 3.2.5 Section 3.2.6 Section 3.2.8