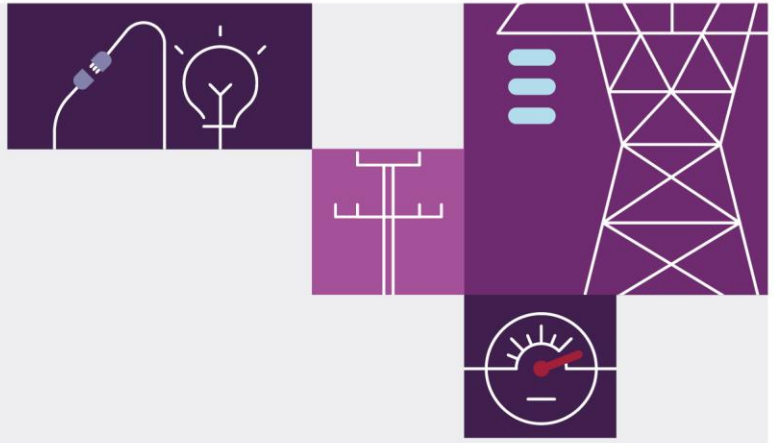


2024 Forecasting Best Practice Compliance Report

August 2024

Regarding the 2024 Electricity
Statement of Opportunities





Important notice

Purpose

The purpose of this compliance report is to demonstrate how AEMO complied with the Forecasting Best Practice Guidelines (FBPG) when preparing reliability forecasts for the purposes of the 2024 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.

Accordingly, to the maximum extent permitted by law, AEMO and its officers, employees and consultants involved in the preparation of this document:

- make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of the information in this document; and
- are not liable (whether by reason of negligence or otherwise) for any statements or representations in this document, or any omissions from it, or for any use or reliance on the information in it.

Copyright

© 2024 Australian Energy Market Operator Limited. The material in this publication may be used in accordance with the [copyright permissions on AEMO's website](#).

Version control

Version	Release date	Changes
1	29/8/2024	Initial release

Executive summary

After reviewing its processes to develop the 2024 Electricity Statement of Opportunities (ESOO) and the associated reliability forecast, AEMO considers it has met the requirements and the intent of the Australian Energy Regulator's (AER) Forecasting Best Practice Guidelines (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.

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.

This 2024 Forecasting Best Practice Compliance Report ("compliance report") describes how AEMO has prepared its reliability forecast, presented in the 2024 ESOO, in accordance with the FBPG.

¹ At <https://www.aer.gov.au/system/files/AER%20-%20Forecasting%20best%20practice%20guidelines%20-%202025%20August%202020.pdf>.



Contents

Executive summary	3
1 Introduction	5
1.1 Background	5
1.2 Binding elements of the FBPG	6
1.3 Structure of this compliance report	7
2 Binding requirements	8
2.1 Forecasting Approach consultation	8
2.2 IASR consultation	9
2.3 Compliance reporting	10
3 Binding considerations	11
3.1 Binding considerations in the context of AEMO's forecasting activities	11
3.2 Applying the FBPG binding considerations	11
A1. Consultation compliance checklist	18
A1.1 DSP Forecasting Methodology	18
A2. List of binding requirements and binding considerations	20

Tables

Table 1	DSP Forecasting Methodology consultation compliance with FBPG Appendix A	18
Table 2	List of binding requirements in the FBPG as they relate to the 2024 ESOO	20
Table 3	List of binding considerations in the FBPG as they relate to the 2024 ESOO	20

Figures

Figure 1	Use of the FBPG	5
Figure 2	AEMO's Forecasting Approach	15



1 Introduction

1.1 Background

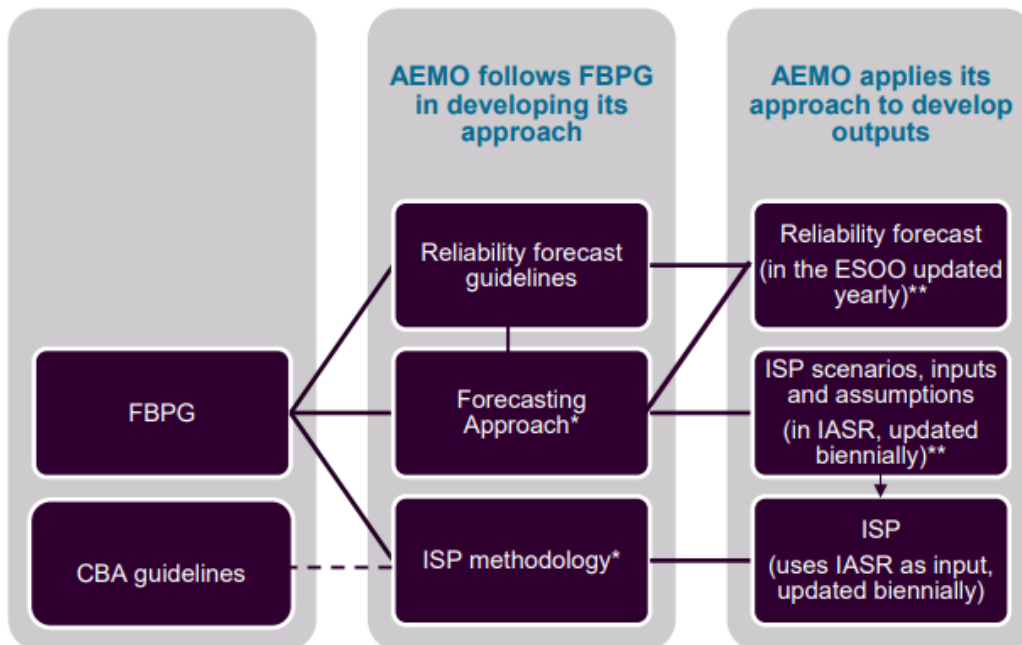
AEMO considers engagement with consumers, market participants, and other stakeholders as foundational to its forecasting activities. Incorporating stakeholder perspectives on the rapidly evolving energy market and systems, along with robust feedback on AEMO's forecasts, makes forecasts more accurate 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, Inputs, Assumptions and Scenarios Report (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 IASR or an ISP Methodology. AEMO has not prepared either of these publications since the 2023 FBPG Compliance report (August 2023) and hence these binding elements are not considered in this compliance report.³

AEMO published a Forecasting Assumptions Update⁴ (used in the 2024 ESOO) which updated several of the inputs and assumptions which were published in the 2023 IASR and used in the 2024 ISP. This compliance report demonstrates how the consultation process for the 2024 Forecasting Assumptions Update had regard to the FBPG as it relates to AEMO's reliability forecast, as explained further in the next section.

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 compliance report includes AEMO's evidence of how the 2024 ESOO and reliability forecast was prepared in accordance with the FBPG. AEMO's expectation is that if, following the publication of the 2024 ESOO, AEMO makes a request to the AER to make a reliability instrument, this compliance report will help the AER expeditiously assess the request⁵.

The 2024 ESOO has been developed in accordance with a number of elements discussed in this compliance report, including:

- AEMO's overall forecasting approach.
- The specific elements of the forecasting approach which were subject to a consultation process, resulting in updated methodologies and guidelines (refer section 2.1).
- The inputs and assumptions outlined in the 2024 Forecasting Assumptions Update (with the *Step Change* scenario from the 2023 IASR being used for the ESOO Central scenario, considered by AEMO as the most likely scenario for reliability forecasting purposes).
- The stakeholder engagement activities discussed in section 3.2.

³ AEMO published the 2024 ISP on 26 June 2024. AEMO's *Cost Benefit Analysis Guidelines Compliance Report*, provided to the AER on 24 July 2024, sets out how AEMO complied with the relevant regulatory obligations when preparing the 2024 ISP.

⁴ At <https://aemo.com.au/en/consultations/current-and-closed-consultations/2024-forecasting-assumptions-update-consultation>

⁵ 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.

- The Forecasting Accuracy Report (FAR) and Forecasting Improvement Plan noted in section 3.2.7.

On the basis of the above, AEMO considers that this compliance report demonstrates how AEMO has used reasonable endeavours to prepare the 2024 ESOO (and associated reliability forecast) in accordance with the FBPG.

1.3 Structure of this compliance report

The remaining content of this compliance report is structured as follows:

- Section 2 demonstrates how AEMO has complied with the FBPG binding requirements as they relate to AEMO's 2024 ESOO and reliability forecast.
- 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 AEMO's Forecasting Approach consultations have complied with the consultation procedures set out in Appendix A 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 as they relate to the 2024 ESOO and reliability forecast and where, in this compliance 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 website⁶ 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 2023 FBPG Compliance report, AEMO applied the FBPG Appendix A consultation procedures to review its Demand Side Participation (DSP) Forecasting Methodology⁷. Appendix A1 of this compliance report sets out how this consultation process complied with each of the paragraphs in Appendix A of the FBPG. In summary, the steps taken during the consultation processes were:

- The publication by AEMO of a consultation paper on key issues regarding the DSP Forecasting Methodology
- A period of not less than 20 business days in which stakeholders could provide written submissions on the consultation paper
- The publication by AEMO of a draft report and draft changes to the DSP Forecasting Methodology
- A period of not less than 20 business days in which stakeholders could provide written submissions on the draft changes
- The publication by AEMO of a final report and final changes to the DSP Forecasting Methodology.

⁶ At <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-approach>.

⁷ At <https://aemo.com.au/consultations/current-and-closed-consultations/demand-side-participation-forecasting-methodology-and-dsp-information-guidelines-consultation>

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 relevant methodologies used in developing AEMO's 2024 ESOO and reliability forecast.

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.
-
- “ 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.
-

AEMO has not prepared or issued an IASR since the 2023 FBPG Compliance Report was submitted to the AER, therefore these binding requirements are not relevant for this compliance report.

However, when preparing the 2024 ESOO and reliability forecast, AEMO updated numerous 2023 IASR inputs and assumptions, as outlined in the 2024 Forecasting Assumptions Update (published in conjunction with the 2024 ESOO). The 2024 Forecasting Assumptions Update was developed with reference to the FBPG's binding considerations, as described in section 3 of this compliance report. The key consultation activities associated with the 2024 Forecasting Assumptions Update were:

- A presentation to the FRG on preliminary consumer energy resources (CER) forecasts, including electric vehicles, to the October Forecasting Reference Group (FRG)⁸
- The publication of the Draft 2024 Forecasting Assumptions Update, which provided more detail on the CER/EV forecasts, on 20 December 2023. This was followed by a seven week period in which stakeholders had the opportunity to provide written submissions⁹
- FRG presentations, followed by FRG Consultations¹⁰, on other inputs and assumptions that had been updated for inclusion in the 2024 ESOO, after the publication of the Draft 2024 Forecasting Assumptions Update
- The preparation of a 2024 Forecasting Assumptions Update Consultation Summary Report, which set out how AEMO had addressed and/or incorporated feedback received from stakeholders in the above consultations.

⁸ Refer to section 3.2.1 for more information on the FRG and how AEMO engaged with FRG participants during the preparation of the 2024 ESOO.

⁹ AEMO also held a verbal submission session with consumer advocate groups.

¹⁰ As described in the Reliability Forecast Guidelines, at https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2024/2024-reliability-forecast-guidelines-consultation/final/reliability-forecasting-guidelines.pdf.

2.3 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.

Given that neither an IASR or an ISP Methodology has been published since the 2023 FBPG Compliance Report, section 2.5 of the FBPG is not relevant for this compliance report. Nevertheless, the FBPG also contain several binding considerations which AEMO must have regard to when developing a reliability forecast. AEMO's compliance with these binding considerations is addressed in the following section.

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 compliance 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.

The next section describes how AEMO has applied the binding considerations in the FBPG into its forecasting process and publications. Table 3 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 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 2024 ESOO and reliability forecast, where AEMO and its consultants presented preliminary inputs and assumptions, listened to and incorporated feedback from FRG members.

Components of the 2024 ESOO and reliability forecast taken to the FRG included:

- Preliminary CER forecasts, including EV projections, at the 25 October 2023 FRG – subsequently consulted upon within the Forecasting Assumptions Update
- Preliminary economic forecasts at the 28 February 2024 FRG and associated FRG Consultation process
- Preliminary ESOO component forecasts and draft demand side participation forecasts at the 29 May 2024 FRG and associated FRG Consultation process, together with the preliminary ESOO consumption forecasts derived from these components
- Preliminary unplanned transmission and generation outage rate projections at the 12 June 2024 FRG and associated FRG Consultation process
- Preliminary minimum and maximum demand forecasts at the 12 June 2024 FRG.

FRG meeting materials are published on AEMO's website¹¹ and provided to registered FRG stakeholders prior to each FRG meeting. 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 10 (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 in financial year 2023/24 was 8.8 out of 10, indicating that stakeholders who provided responses found the sessions very useful.

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

AEMO's webinars provide stakeholders the opportunity to provide their feedback on forecasting components or publications, always with 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 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 regarding

¹¹ At <https://aemo.com.au/en/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/forecasting-reference-group-frg>.

the ISP. 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. A sub-committee for more technical collaboration is provided by the Joint Planning Committee, which reports to the EJPC.
- At the distribution network level, AEMO continued engaging with a working group with distribution network service providers to discuss issues pertaining to the ISP and how those issues may impact 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.
- Meetings with various other stakeholders¹² as relevant, and allowed for, under consultation processes that AEMO undertakes.

AEMO also hosts a Technical Demand Forecasting workshop each year. This workshop gathers together technical experts from forecasting teams across many energy industry 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 Reflecting stakeholder feedback

AEMO demonstrated how it had incorporated feedback received on the various consultations which were applied in the 2024 ESOO by publishing:

- a consultation summary report¹³ for its 2024 Forecasting Assumptions Update, which addressed feedback received on the Draft 2024 Forecasting Assumptions Update¹⁴ and the FRG Consultations referred to in section 3.2.1 of this compliance report

¹² E.g. Government departments and agencies, large customers, industry bodies, research agencies, etc.

¹³ At https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/nem_esoo/2024/2024-Forecasting-Assumptions-update-Consultation-Summary-Report

¹⁴ At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/2024-forecasting-assumptions-update-consultation-page/draft-2024-forecasting-assumptions-update.pdf

- a draft and final report for the DSP Forecasting Methodology consultation it undertook using FBPG Appendix A consultation procedures (refer section 2.1).
- a final report on the 2023 Forecast Improvement Plan¹⁵, which addressed feedback received on the draft 2023 Forecast Accuracy Report and draft Forecast Improvement Plan (refer section 3.2.7)

These reports summarised the feedback received from stakeholders in their submissions (where they were not confidential) and how AEMO responded to and/or incorporated that feedback.

By publishing reports that specifically address how AEMO has responded to stakeholder feedback, AEMO demonstrates 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

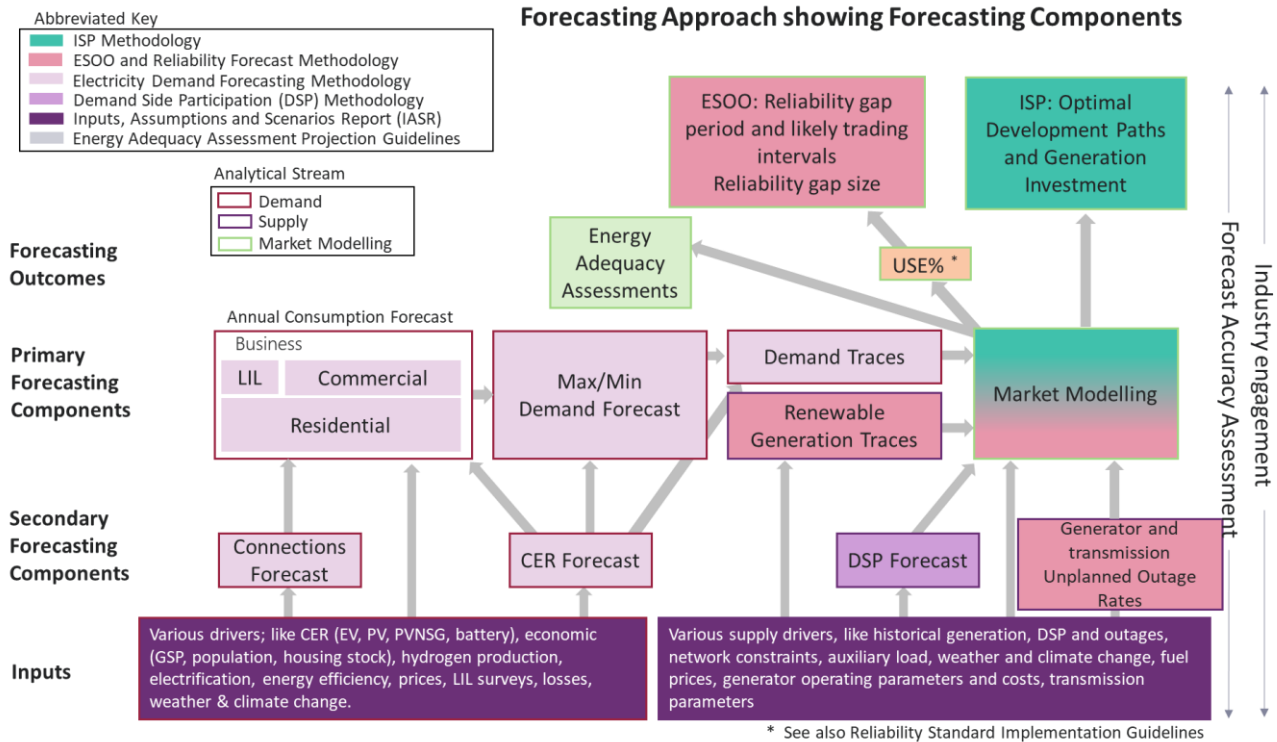
As noted in section 2.1, AEMO publishes its Forecasting Approach on its website, providing a high level overview of its Forecasting Approach (depicted in Figure 2 below).

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.

¹⁵ At https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/accuracy-report/2023-forecasting-improvement-plan-final-report.pdf

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 its planning activities, and sets out how the scenarios, inputs and assumptions have had regard to the Cost Benefit Analysis (CBA) Guidelines for the ISP. 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 portal¹⁶, 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.

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 Forecast Improvement Plan

AEMO annually reviews the accuracy of its prior year forecasts. The 2023 FAR, published in January 2024¹⁷, identified that most forecast components performed as expected, or were explainable by inaccuracies in the relevant inputs and assumptions.

The 2023 FAR also incorporated the Forecast Improvement Plan that provides transparency of AEMO's proposed improvements to forecasting for the year ahead. AEMO began consulting on the Forecast Improvement Plan in the November 2023 FRG meeting, before including the draft Forecast Improvement Plan in the FAR. In that FAR, AEMO invited stakeholders to provide written submissions on the Forecast Improvement Plan by 5 February 2024. AEMO considered the feedback received¹⁸ and set out how it had considered and addressed that feedback in its final report on the 2023 Forecast Improvement Plan, published in May 2024. As an example, AEMO expanded one of its forecast improvement areas (CER and EVs) to explicitly incorporate the feedback received on this topic.

The FAR and Forecast 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 Update¹⁹ to the 2023 ESOO

Subsequent to the publication of the 2023 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 2023 ESOO in May 2024²⁰ which incorporated new commissioning dates for Project EnergyConnect, mothballed gas generators in South Australia, and approximately 4.6 gigawatts (GW) of new generation and storage projects. The May 2024 Update to the 2023 ESOO 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 required under the NER, and 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 FBPG²¹. When providing the

¹⁶ At <http://forecasting.aemo.com.au/>.

¹⁷ At https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/accuracy-report/2023-forecast-accuracy-report.pdf

¹⁸ AEMO only received one submission.

¹⁹ The Update referred to in this section is the May 2024 Update to the 2023 ESOO.

²⁰ At https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/nem_esoo/2023/may-2024-update-to-the-2023-electricity-statement-of-opportunities.pdf

²¹ 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.

reliability forecast in the May 2024 Update to the 2023 ESOO, AEMO had regard to section 5.2.3 of its Reliability Forecast Guidelines, which sets out how AEMO balances industry engagement with the speed with which it can provide an update. The new information to the 2023 ESOO related to well understood drivers, which could not be informed or potentially improved by the types of alternative views or opinions that may be provided by stakeholders on changes to other inputs or assumptions (e.g. demand forecasts). AEMO therefore 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 and the Forecasting Improvement Plan).
- Published extensive documentation and data on the inputs, assumptions, scenarios and sensitivities that will be used when developing the reliability forecast.
- 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 2023 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 relevant binding requirements, when preparing the 2024 ESOO and the associated reliability forecast.

A1. Consultation compliance checklist

This appendix sets out how each the consultations referred to in section 2 of this compliance report complied with the clauses in Appendix A of the FBPG.

A1.1 DSP Forecasting Methodology

Table 1 DSP Forecasting 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 published a notice of consultation and consultation paper on its website on 1 September 2023. ²²
(b) The notice must invite interested Consulted Persons to make written submissions to AEMO concerning the matter.	The consultation paper ²³ invited interested persons to make written submissions by 29 September 2023.
(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 two formal written submissions, one informal written submission via the FRG and one consumer advocate verbal submission on or before the deadline for submissions, which was 20 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 provided a presentation on the key elements of the consultation paper at the FRG.
(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 ²⁴ on 31 October 2023 which included, among other things, the elements noted in paragraph (e).

²² At <https://aemo.com.au/consultations/current-and-closed-consultations/demand-side-participation-forecasting-methodology-and-dsp-information-guidelines-consultation>

²³ At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/dsp-forecasting-methodology-and-dsp-information-guidelines-consultation/dsp-forecast-methodology-consultation-paper-final.pdf

²⁴ At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/dsp-forecasting-methodology-and-dsp-information-guidelines-consultation/second-stage/dsp-forecast-methodology-draft-report.pdf

FBPG Appendix A requirement	AEMO actions
(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 31 October 2023.
(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 three stakeholders on or before the deadline for submissions, which was 20 business days after the publication of the draft report.
(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 ²⁵ on 20 December 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 20 December 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.	

²⁵ At https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2023/dsp-forecasting-methodology-and-dsp-information-guidelines-consultation/final-stage/2023-dsp-forecast-methodology-final-report.pdf

A2. List of binding requirements and binding considerations

Table 2 List of binding requirements in the FBPG as they relate to the 2024 ESOO

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. 	<p>Section 2.1 Appendix A1.1</p>

Table 3 List of binding considerations in the FBPG as they relate to the 2024 ESOO

Section-Area	Consideration	Section(s) in which AEMO's compliance is discussed
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. 	<p>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</p>
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. 	<p>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</p>