



Demand Side Participation Information Guidelines

Consultation paper

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New South Wales | Queensland | South Australia | Victoria | Australian Capital Territory | Tasmania | Western Australia

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Explanatory statement and consultation notice

This consultation paper commences the first stage of the standard rules consultation procedure conducted by AEMO to review the Demand Side Participation Information (DSPI) Guidelines (the Guidelines), where AEMO seeks guidance from stakeholders on:

- whether changes should be made to the information collected,
- whether the process, or portal used, to collect the data should change, and
- whether the quality of the information submitted can be improved,

in order to maintain the Guidelines as required under National Electricity Rules (NER) 3.7D(e)-(i). This consultation will follow the standard rules consultation procedure described in NER 8.9.2.

The detailed sections of this consultation paper include more information on the matters for consultation, including questions that may prompt feedback from stakeholders. Given the preliminary status of the consultation topics, AEMO is not including a draft update to the Guidelines with this consultation paper. A draft update to the Guidelines will be released with the draft determination.

Consultation notice

AEMO is now consulting on this proposal and invites written submissions from interested persons on the issues identified in this paper to energy.forecasting@aemo.com.au by **5:00 pm (Melbourne time) on 29 September 2023**.

Submissions may make alternative or additional proposals you consider may better meet the objectives of this consultation and the national electricity objective in section 7 of the National Electricity Law. Please include supporting reasons.

Before making a submission, please read and take note of AEMO's consultation submission guidelines, which can be found at <https://aemo.com.au/consultations>. Subject to those guidelines, submissions will be published on AEMO's website.

Please identify any parts of your submission that you wish to remain confidential, and explain why. AEMO may still publish that information if it does not consider it to be confidential, but will consult with you before doing so. Material identified as confidential may be given less weight in the decision-making process than material that is published.

Submissions received after the closing date and time will not be valid except in exceptional circumstances, and AEMO is not obliged to consider them. Any late submissions should explain the reason for lateness and the detriment to you if AEMO does not consider your submission.

Interested persons can request a meeting with AEMO to discuss any particularly complex, sensitive or confidential matters relating to the proposal. Please refer to NER 8.9.1(k). Meeting requests must be received by the end of the submission period and include reasons for the request. We will try to accommodate reasonable meeting requests but, where appropriate, we may hold joint meetings with other stakeholders or convene a meeting with a broader industry group. Subject to confidentiality restrictions, AEMO will publish a summary of matters discussed at stakeholder meetings.

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1. Stakeholder consultation process

AEMO must maintain its DSPI Guidelines in accordance with National Electricity Rules (NER) 3.7D(e)-(i). Apart from any minor or administrative changes, any revisions must be consulted on in accordance with the Rules consultation procedures set out in NER 8.9.

AEMO has also commenced the first stage of consultation to review its DSP forecast methodology¹ to satisfy the requirements in the Australian Energy Regulator's (AER's) Forecasting Best Practice Guidelines (FBPG), which require that AEMO review its Forecasting Approach at least once every four years. As information on DSP collected through the process governed by the Guidelines is a key input into the DSP forecast methodology, AEMO will consult on the Guidelines in parallel, to ensure the DSPI process supports the methodology that applies it.

In this consultation document, AEMO is highlighting a number of areas where the current DSPI Guidelines² (the Guidelines) could be adjusted or supporting documentation such as user guides improved. These are outlined in this document and are the subject of the current consultation.

Note that this document uses terms defined in the NER, which are intended to have the same meanings.

AEMO's indicative process and timeline for this consultation are outlined below. Future dates may be adjusted and additional steps may be included if necessary, as the consultation progresses. In the event that these dates change, AEMO will clearly identify the timetable on the webpage for this consultation.³

Consultation steps	Dates
Publication of consultation paper, with stakeholder consultation for this paper commencing.	1 September 2023
Discussion at Forecasting Reference Group meeting	27 September 2023
Submissions on consultation paper due	29 September 2023
Publication of draft determination and draft methodology, with stakeholder consultation for these papers commencing.	27 October 2023
Submissions on draft determination	24 November 2023
Publication of final determination and final methodology to be applied in 2024 Electricity Statement of Opportunities and other relevant reliability modelling.	15 December 2023

Prior to the submissions due date, stakeholders can request a meeting with AEMO to discuss the issues and proposed changes raised in this Consultation Paper.

As per NER 3.7D(h), any changes to the Guidelines must include a minimum period of three months between the date of publication and the date when the Guidelines commence. Based on the indicative timeline above, the earliest the Guidelines can commence (should they be updated) will be 15 March 2024.

¹ The consultation for the DSP Forecast Methodology is available at: <https://aemo.com.au/consultations/current-and-closed-consultations/demand-side-participation-forecasting-methodology-and-dsp-information-guidelines-consultation>.

² See <https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/Demand-Side-Participation-Information-Guidelines>.

³ See <https://aemo.com.au/consultations/current-and-closed-consultations/demand-side-participation-forecasting-methodology-and-dsp-information-guidelines-consultation>.

2. Background

2.1. Context for this consultation

The previous consultation on the Guidelines was undertaken in 2020. There are two main drivers for consulting on this again:

- AEMO's concurrent consultation on its DSP forecasting methodology, which will inform the DSPI required for AEMO's load forecasting process. Potential changes to the Guidelines could arise from significant developments since last consultation, including the introduction of Wholesale Demand Response (WDR) and jurisdictional schemes to curb peak demand, such as the New South Wales's Peak Demand Reduction Scheme, introduced under the Energy Security Safeguard⁴.
- Ensuring regular validation and, if required, revision of the DSP data collected and how it is collected, to ensure compliance is reasonably cost-efficient as per NER 3.7D(f)(1).

2.2. DSP categories discussed in this consultation

Any DSP program submitted to the DSPI portal must be categorised into one of the following categories.

Table 1 Categories for DSP Programs

DSP program category	Explanation
Market exposed connections	This covers connections exposed to the wholesale electricity spot price, either directly or via a pass-through contract. This includes loads responding under the WDR rules and any connections that are only spot price exposed during specific events.
Connections on fixed time-of-use tariffs	This includes connections exposed to fixed time-of-use pricing, including day/night tariffs.
Connections on dynamic event tariffs	Connections which are subject to dynamic tariffs that price consumption and/or connection costs differently for specific periods during the year. These periods are dynamically determined by the program operator and could relate to local or regional demand at the time.
Directly controlled connections (fixed schedule)	Connections directly controlled based on a set schedule for the year, irrespective of actual demand and/or spot price at the time. This includes control of hot water load.
Directly controlled connections (dynamic operation)	Connections directly controlled (or manually instructed to) based on actual or forecast system conditions and/or price. This includes aggregated battery storage systems operated as a virtual power plant (VPP) and reduction in air conditioner load or electric vehicle charging on extreme demand days.
Not elsewhere classified (other)	This category allows for special cases that don't obviously fit into the above categories. Entries in this category will be reviewed by AEMO and reclassified into the above if possible.

⁴ See <https://www.energy.nsw.gov.au/nsw-plans-and-progress/regulation-and-policy/energy-security-safeguard/peak-demand-reduction-scheme>.

2.3. Principles relevant to this consultation

The following principles guide this consultation's considerations and priorities.

The DSPI and the DSPI portal collecting the data defined in the Guidelines should:

- Efficiently support the needs of AEMO's forecasting processes, in terms of effort both to AEMO and to participants.
- Avoid where possible duplication of participant effort across multiple data collection processes.
- Comply with AEMO's confidentiality and privacy policies.
- Be simple and intuitive, or to the extent the subject matter is inherently complex, include guidance to participants on how to complete their processes within the DSPI Portal.
- Be flexibly designed to support evolution of the requirements without needing major changes.

2.4. The national electricity objective

Within the specific requirements of the NER applicable to this proposal, AEMO will in addition to the principles above seek to make a determination that is consistent with the national electricity objective (NEO) and, where considering options, to select the one best aligned with the NEO.

The NEO is currently expressed in section 7 of the National Electricity Law as:

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and*
- (b) the reliability, safety and security of the national electricity system.*

AEMO will also take into account applicable targets for reducing Australia's greenhouse gas emissions, where consistent with the NEO and the requirements of the NER. AEMO expects any such considerations are likely to be consistent with broader objectives of efficient planning for the long-term interests of consumers of electricity.

3. Possible changes to the Guidelines

This section outlines the key areas that AEMO is seeking feedback on in this consultation, covering:

- Whether changes should be made to the information collected.
- Whether the process or portal used to collect the data should change.
- Whether the quality of the information submitted can be improved.

The section presents questions on the DSPI content and process that stakeholders may elect to address in their written submissions to this consultation. The questions presented in this section are intended to prompt feedback from stakeholders, however stakeholders may provide submissions on matters not specifically referred to in this consultation paper. Submissions therefore do not need to respond to all of, or even any of, the questions raised in this consultation paper to be a valid submission.

3.1. Potential changes to the DSP information collected

AEMO must account for DSP information when developing load forecasts as per NER 4.9.1(c)(6b).

DSP is a broad term, and in the context of this consultation it covers any kind of demand flexibility. This differs from its narrower definition used in AEMO's DSP forecast, which only covers demand flexibility not covered elsewhere in AEMO's demand forecasting processes. For more information, see section 3.1 in the DSP forecast methodology⁵.

3.1.1. Duration of DSP

In its recent consultation on the ISP Methodology⁶, AEMO raised the duration of DSP response as a potential issue, noting that in some of AEMO's modelling and depending on available resources in future, DSP is forecast to be used differently than it is today, to help balance the system during longer spells of low wind and/or solar generation. This results in DSP being dispatched in the forecast models to reduce demand for much longer periods than its typical historical use. AEMO obtained mixed responses from stakeholders on setting a maximum duration for DSP and noted that further information was needed to guide the future direction. The DSPI collection is a possible way of collecting such information.

AEMO is in particular interested in how long any potential or firm DSP response in megawatts (MW)⁷ can be sustained for, regarding the following three DSP categories:

- Directly controlled connections (dynamic operation).
- Connections on dynamic event tariffs.
- Market exposed connections.

⁵ See https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2020/demand-side-participation/final/demand-side-participation-forecast-methodology.pdf.

⁶ See <https://aemo.com.au/consultations/current-and-closed-consultations/consultation-on-updates-to-the-isp-methodology>.

⁷ These are other data fields being asked for in the DSPI portal.

Questions

- 1. For which (if any) of the above DSP categories is it possible to meaningfully provide a duration of the potential or firm response?**
- 2. Would the possible DSP response duration differ between potential and firm DSP responses? If so, which of the two would it be the most meaningful to ask for?**
- 3. Would adding DSP response duration to the DSPI requirements be a suitable way for AEMO to collect this data?**

3.1.2. Declaration of future DSP

AEMO requests that participants provide information on future DSP programs in the DSPI portal. AEMO has observed that little future DSP has been declared in DSP submissions to date, and is seeking to understand why that is the case.

It is noted that information on future DSP portfolio changes may not be available well in advance of a change. Future programs may however be very relevant to declare if established to be part a qualifying contract under the Retailer Reliability Obligation (RRO), as noted in NER 4A.E.1(c).

Questions

- 4. Noting that changes to DSP portfolios may not be known well in advance, is it meaningful to provide estimates of changes to existing DSP programs or information about new DSP programs?**
- 5. Would it be possible to provide a level of confidence (in percentage or similar) in the data provided for future DSP programs? And would this ability to provide a confidence rating increase the likelihood of participants submitting data on future programs?**
- 6. Can the DSPI portal ask better questions about future DSP to elicit more responses from participants?**

3.1.3. Data to support emerging types of DSP

As consumption grows and new loads connect to the power system, DSP is expected to increase over time, due to a number of factors:

- Growth in consumer energy resources, such as battery storage and electric vehicles may provide increased demand flexibility.
- Increasing variability of available supply, as more is provided by variable renewable generation instead of continuously available dispatchable generation sources, may impact the volatility of market prices (the frequency of high and low, or negative, market prices) and thereby provide changed conditions that incentivise loads to adjust their electricity use (where possible) accordingly.
- The support and functionality provided by ongoing digitalisation and smart meter rollout.
- The connection of newly electrified loads (residential, commercial and/or industrial loads) may expand the opportunity for demand flexibility.

This increase may come from new mechanisms like the WDR, through growth in virtual power plants (VPP), and jurisdictional schemes to encourage customers to curb peak demand.

AEMO believes that the current categories and data fields in the Guidelines (see Appendix A) are sufficient to cater for the expected development of DSP in the coming years, but seeks stakeholder feedback on whether this is reasonable. This question may overlap with answers provided to the concurrent consultation on AEMO's DSP Forecast Methodology mentioned previously.

Questions

7. Are there any emerging trends in DSP that would require AEMO to ask for additional data to enable a more accurate forecast DSP in its load forecasting processes?

3.1.4. Increase/decrease of demand

The growth in electricity supplied from variable renewable sources is causing an increasing occurrence of negative wholesale electricity prices, where an increase in demand may be of value. Some connections may adjust their demand in response to low prices directly, or as part of portfolios controlled as VPPs. Other connections may be controlled by network service providers to increase demand to manage system strength issues, for example by constraining embedded generation to increase demand from the grid.

The current DSPI portal includes a mandatory field to tag any program that allows programs to be listed which either decrease or increase demand⁸. The current implementation is such that a program can only be one of the two. AEMO is seeking feedback on whether some programs (excluding 'Market exposed connections and 'Connections on fixed time-of-use tariffs', which by design will incentivise both) may be designed to deliver both decreases and increases, in which case a third option should be added to the data field indicating 'both'.

Questions

8. Is it likely that some DSP programs will be designed to both increase demand at times of low prices/system strength issues and also decrease demand when prices are high or network reliability is at risk?

3.2. DSPI collection process

AEMO uses a portal to collect information related to DSP from all registered stakeholders, as outlined in the Guidelines.

3.2.1. Timing of DSPI Portal entry

The timing of submitting information on DSP to AEMO was raised in the 2020 consultation⁹, and AEMO finds it appropriate to revisit this question again in this consultation to ensure that – as far as practicable – the DSPI timelines meet the needs of both AEMO and participants.

⁸ Mandatory for all categories other than 'Market exposed connections and 'Connections on fixed time-of-use tariffs'.

⁹ See <https://aemo.com.au/en/consultations/current-and-closed-consultations/dspi-guidelines>.

As previously noted, AEMO uses the DSPI to support its annual demand and reliability forecasting process, and it is essential that the information being submitted by participants is up to date to support a reasonable DSP forecast.

Currently, changes to declared DSP programs are considered on a case-by-case basis as to whether they are material enough to warrant changes to the Reliability Forecast. This would not change under the options below.

There are two options for the timing of DSPI submissions to AEMO's DSPI portal:

- Retain the current April-only submission window to provide timely support of the load forecast applied in the ESOO.
- Make the portal open year-round to support participant entry at any time, but require participants to confirm/finalise their current DSPI in April each year.

The pros and cons of the above options are explored in the table below.

Table 2 DSPI Portal timing

Option	Pro	Con
DSPI Portal is only open for submission in April (current)	No change required to systems and processes	Outside of April, material changes could be emailed to AEMO by participants. This is contrary to data governance best practice. The rules specify RRO qualifying contracts must be registered via the DSPI Portal as per NER 4A.E.1(c).
DSPI Portal is open all year round with April confirmation	Allow participants to inform AEMO of changes, using a consistent approach across the year. Data governance is improved (relative to submissions via email in other option).	Additional AEMO costs for IT support (keeping the portal open and provide stakeholder support to access), as well as tracking, screening and assessing the materiality of any DSPI changes submitted.

Questions

9. Is the current approach of collecting information through the DSPI portal during the month of April appropriate?

3.2.2. Statement of “no DSP to report”

All registered participants must, in accordance with NER 3.7D(b) and the Guidelines, provide a DSPI submission through the DSPI portal, although many may have no DSP to report. AEMO needs to receive confirmation that the participant has no DSP to report, to distinguish this from reporting delays or omissions.

The current approach is to require participants to access the portal to confirm they have no DSP to report, also known as a “null submission”. AEMO notes the costs to both participants and AEMO in establishing initial portal access, even in instances where participants are unlikely to have any DSP to report. Having all information collected in one portal is, however, desirable to monitor compliance and reduce complexity in considering DSP submissions. Following the last consultation on the Guidelines in 2020, AEMO sought to improve the documentation on how to report null submissions, but seeks feedback once again on the appropriateness of the current approach.

Questions

10. Is the current approach of collecting a statement of no DSP appropriate, or do stakeholders consider that alternative ways of providing this exist that do not rely on portal access? If so, what is that alternative(s)?

3.2.3. Understanding effort required to comply with DSPI guidelines

To ensure an appropriate trade-off between participant effort and value to AEMO's forecasts, AEMO is seeking to better understand what part of meeting the DSPI obligations require the most significant effort for participants. Understanding what parts take the most time to prepare will help guide any changes to the data collected (see Appendix A of the current Guidelines), the DSPI submission process (this may overlap with response to Section 3.2.2), or supporting documentation on how to use the portal and associated template files (this may overlap with response to Section 3.3.1).

Questions

11. What part of complying with the DSPI requirements takes up the most resources for participants? Is it the portal access, understanding how to use the portal, or particular upload files/data fields that makes this process resource-intensive?

3.3. Improving participants' understanding of DSPI process

3.3.1. Improving documentation to assist participant submission process

Given the necessary complexity and infrequent usage of the DSPI portal, AEMO is keen to explore whether anything can be done to assist industry participants with accessing and using the DSPI portal.

Questions

12. Can AEMO provide better documentation, such as an improved user guide, on-screen tips in the portal, or in its email reminders, on how to use the DSPI portal, in particular for typical tasks such as providing a statement of no DSP? Please provide specific suggestions.

3.3.2. Quality of submissions

AEMO is seeking to improve the consistency of reporting across participants when it comes to the defined DSP categories (see section **Error! Reference source not found.**). Lack of consistency makes it more time-consuming to determine which programs to include within AEMO's definition of DSP to avoid double-counting with demand flexibility reflected elsewhere in AEMO's forecasting process, and reduces the value of statistics provided to the wider public around the state of demand flexibility in the NEM.

AEMO acknowledges that the infrequent reporting cycle mentioned above may make it difficult to understand what each program should be reported as, and is seeking feedback on what AEMO can do to improve participants' understanding of how to use the various categories.

Questions

13. Can AEMO improve the explanation of when to use the various DSP categories in the reporting, through better documentation, webinars, or similar?

3.3.3. Validation process – post submission adjustments to categories?

AEMO may require a longer window of time to review all DSPI submissions beyond the April submission window, and may have follow-up questions for participants prior to August, when the DSP forecast and statistics are published, which is typically with the annual ESOO publication.

Related to Section 3.3.2 above, AEMO is seeking to establish an improved review process, to improve the quality and consistency of the data in order to reduce the risk of double-counting DSP and increase the value of the DSP statistics published annually. That may lead to a need for AEMO to update key data provided in the DSPI submission such as program categories or firm DSP response outside of the current submission window. Currently, AEMO only accepts changes made through the portal and thus these can only occur when the portal is open. Subject to the responses to Section 3.2.1, which asks whether the portal should remain open for a longer duration, or remain as per the current implementation, AEMO proposes to allow changes to be made based on email confirmation from the participant, instead of requiring a resubmission of DSPI through the portal. AEMO will implement this process when required, when it is outside the period that the portal is open.

Questions

14. Any review that leads to participants needing to update their submission should use the DSPI portal (if it is open), or use email communication methods (if the portal has closed). AEMO should accept emailed submissions in these circumstances. Is this a reasonable suggestion, or should this influence the considerations of the timing of DSPI portal availability, as outlined in section 3.2.1?

4. Summary of consultation questions

Submissions may be made on any matter relating to the questions provided throughout this consultation paper, or on other relevant aspects affecting DSP information provision. AEMO would welcome particular comment and feedback on the questions provided throughout this consultation paper – repeated below for convenience:

Potential changes to the DSP information collected:

1. For which (if any) categories is it possible to meaningfully provide a duration of the potential or firm response?
2. Would the possible DSP response duration differ between potential and firm DSP responses? If so, which of the two would it be the most meaningful to ask for?
3. Would adding DSP response duration to the DSPI requirements be a suitable way for AEMO to collect this data?
4. Noting that changes to DSP portfolios may not be known well in advance, is it meaningful to provide estimates of changes to existing DSP programs or information about new DSP programs?
5. Would it be possible to provide a level of confidence (in percentage or similar) in the data provided for future DSP programs? And would this ability to provide a confidence rating increase the likelihood of participants submitting data on future programs?
6. Can the DSPI portal ask better questions about future DSP to elicit more responses from participants?
7. Are there any emerging trends in DSP that would require AEMO to ask for additional data to enable a more accurate forecast DSP in its load forecasting processes?
8. Is it likely that some DSP programs will be designed to both increase demand at times of low prices/system strength issues and also decrease demand when prices are high or network reliability is at risk?

The DSPI collection process

9. Is the current approach of collecting information through the DSPI portal during the month of April appropriate?
10. Is the current approach of collecting a statement of no DSP appropriate, or do stakeholders consider that alternative ways of providing this exist that do not rely on portal access? If so, what is that alternative(s)?
11. What part of complying with the DSPI requirements takes up the most resources for participants? Is it the portal access, understanding how to use the portal, or particular upload files/data fields that makes this process resource-intensive?

Improving participants' understanding of DSPI process

12. Can AEMO provide better documentation, such as an improved user guide, on-screen tips in the portal, or in its email reminders, on how to use the DSPI portal, in particular for typical tasks such as providing a statement of no DSP? Please provide specific suggestions.
13. Can AEMO improve the explanation of when to use the various DSP categories in the reporting, through better documentation, webinars, or similar?

14. Any review that leads to participants needing to update their submission should use the DSPI portal (if it is open), or use email communication methods (if the portal has closed). AEMO should accept emailed submissions in these circumstances. Is this a reasonable suggestion, or should this influence the considerations of the timing of DSPI portal availability (as per question 9)?