

DEMAND SIDE PARTICIPATION INFORMATION (DSPI)

FINAL REPORT AND DETERMINATION

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EXECUTIVE SUMMARY

The publication of this Final Report and Determination (Final Determination) concludes the Rules consultation process conducted by AEMO on proposed amendments to the Demand Side Participation Information (DSPI) Guidelines (the Guidelines) under the National Electricity Rules (NER) consultation process.

The Guidelines have been updated to align with:

- Wholesale Demand Response (WDR) and Distributed Energy Resource Register (DER Register) rules.
- Registration of Retail Reliability Obligation (RRO) qualifying contracts.

The Guidelines have also improved the DSPI submission process for stakeholders by reducing the complexity and number of mandatory fields.

The DSPI Issues Paper published by AEMO outlined its proposed changes to the DSPI Guidelines and the DSPI portal. AEMO received one written submission to the first stage of consultation. The Draft Determination outlined AEMO's responses to issues raised in the submission including:

- Minimising burden on participants by not making unnecessary fields mandatory, by avoiding duplication of information requested and by providing templates that ease entering data.
- Ensuring sufficient time is available for participants to prepare and submit DSPI.
- Clarifying text in the Issues Paper.

AEMO received no submissions to its Draft Determination.

The Issues Paper, Draft Determination and the received submission are published on AEMO's website¹.

¹ At <https://aemo.com.au/en/consultations/current-and-closed-consultations/dspi-guidelines>



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1. STAKEHOLDER CONSULTATION PROCESS

As required by clause 3.7D(e)-(i) of the NER, AEMO has consulted on its DSPI Guidelines in accordance with the Rules consultation process in rule 8.9.

AEMO's timeline for this consultation is outlined below.

Deliverable	Date
Notice of first stage consultation [and Issues Paper] published	26 August 2020
First stage submissions closed	20 September 2020
Draft Determination & Notice of second stage consultation published	11 November 2020
Submissions due on Draft Determination	25 November 2020
Final Determination published	8 December 2020

The publication of this Final Determination marks the conclusion of this consultation.

Note that there is a glossary of terms used in this Final Determination at **Appendix A**.

2. BACKGROUND

2.1. NER requirements

NER clause 3.7D(e) requires AEMO to develop, maintain and publish Guidelines that specify:

1. the information Registered Participants must provide to AEMO in relation to:
 - (i) contracted demand side participation; and
 - (ii) to the extent not covered by subparagraph (1)(i), the curtailment of non-scheduled load or the provision of unscheduled generation in response to the demand for, or price of, electricity, which may include, but is not limited to:
 - (iii) the circumstances under which non-scheduled load may be curtailed or unscheduled generation may be provided;
 - (iv) the location at which non-scheduled load may be curtailed or unscheduled generation may be provided;
 - (v) the quantity of non-scheduled load that may be curtailed or unscheduled generation that may be provided; and
 - (vi) historic or current information
2. when Registered Participants must provide and update demand side participation information
3. how demand side participation information is to be provided, including, for example:
 - (i) the format in which the information must be provided; and
 - (ii) any information AEMO requires to assess the accuracy of the information;
4. AEMO's methodology for assessing the accuracy of demand side participation information provided to it under rule 3.7D; and
5. the manner and form in which AEMO will publish details, in accordance with paragraph 3.7D(d), on the extent to which demand side participation information has informed its load forecasts.

2.2. Context for this consultation

There were various drivers for this consultation on the DSPI Guidelines. Specifically, the National Electricity Amendment (Wholesale demand response mechanism) Rule 2020 No. 92, requires AEMO to review, and if



required, amend and publish these Guidelines no later than 31 December 2020, to take effect on and from 31 March 2021.

AEMO's review, prior to starting the consultation, found a number of changes to the Guidelines were required because:

- The Wholesale Demand Response (WDR) rules change broadens the term DSP from load curtailment to load adjustment, i.e. DSP now includes load increase – NER 3.7D(a). The data model does not reflect this, and must be updated along with the Guidelines. The load increase will be an important tool to manage system security at time of low demand.
- The intention to minimise duplication of participant effort across portals given the newly established Distributed Energy Resource Register (DER Register). AEMO's review found, in the absence of changes to the DSPI Guidelines, certain data would be obtained twice. Thus, AEMO has proposed amendments to the DSPI data reporting requirements to avoid duplication where possible.
- The need to support participant registration of Retail Reliability Obligation (RRO) qualifying contracts in compliance with NER 4A.E.1 (c). This is not currently possible.
- AEMO's learnings on the use of the DSPI data source, both internally and from participant users.

2.3. Principles relevant to this consultation

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

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

- Efficiently support the needs of AEMO's forecasting processes.
- Minimise effort for participants entering data and avoid where possible duplication of effort across multiple data collection processes.
- Comply with AEMO's confidentiality and privacy policies.
- Be intuitive, or to the extent it is necessarily complex, include guidance on how to complete the processes.
- Utilise flexible technologies and data structures to allow it to efficiently evolve.

2.4. First stage consultation

AEMO issued a Notice of First Stage Consultation² on 26 August 2020. The accompanying Issues Paper³ outlined proposed changes to the DSPI Guidelines and portal.

AEMO received one written submission to the first stage of consultation. It has been published on AEMO's website⁴.

2.5. Second stage consultation

AEMO published a Notice of Second Stage Consultation and accompanying Draft Determination⁵ on 11 November 2020, responding to clarifications and issues raised in the submission received in the First Stage Consultation.

² Available at https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2020/dspi/notice-of-first-stage-consultation-on-dspi--guidelines.pdf

³ Available at https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2020/dspi/dspi-guidelines-issues-paper.pdf

⁴ At <https://aemo.com.au/en/consultations/current-and-closed-consultations/dspi-guidelines>

⁵ Available at https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2020/dspi/demand-side-participation-information-guidelines-draft-determination.pdf?a=en



AEMO also published a draft DSPI Guidelines document reflecting changes discussed in the Issues Paper³ and Draft Determination⁵

AEMO received no written submission to the second stage consultation. Therefore, the Final Guidelines are unchanged from the Draft Guidelines.

3. SUMMARY OF MATERIAL ISSUES

The key material issues raised by Consulted Persons in the First stage consultation are summarised in Table 1:

Table 1 Material Issues Raised

No.	Issue	Raised by
1.	Improving the completeness of the Potential Response field	Enel X
2.	Enhancing detail of future DSP programs	Enel X
3.	Timing of DSPI Portal entry	Enel X
4.	Geographic information for validation and statistics	Enel X
5.	Adding participant contact details	Enel X
6.	Improved resources for portal users	Enel X
7.	Distinguishing connections with Energy Storage	Enel X

A detailed summary of issues raised, together with AEMO's responses, is contained in **Appendix B**.

4. DISCUSSION OF MATERIAL ISSUES

4.1. Improving the completeness of the Potential Response field

4.1.1. Issue summary and submissions

In response to section 3.1 of the Issues Paper, asking participants for their views on making DSP response estimates mandatory, Enel X submitted:

We agree that this portal, and DSP in general, is still not well understood across the industry, and therefore response fields should be optional wherever possible. DSP will constantly be evolving, and we will continually be developing new DSP resources in future. We will not always have all the relevant information for the DSPIP (Demand Side Participation Information Portal) at any given time. AEMO should err on the side of caution in making too many categories and response fields "mandatory" as this will dilute the response rate and quality of responses. Fields should be optional unless AEMO can demonstrate that it needs to know the information for the purposes of system security and reliability. The questions need to be simple to respond to and not too onerous on Market Participants to avoid administrative burden.

Enel X is comfortable with AEMO differentiating between maximum potential response and firm (or contracted) response.

4.1.2. AEMO's assessment

AEMO agrees that it is important to reduce the burden on participants and that mandatory fields should be limited to those needed for system security or reliability. AEMO agrees that splitting 'potential response' into 'Maximum' and 'Firm' is easier for participants than adding further mandatory responses. Since a subsequent field asks for firm response, the potential future response need not be mandatory.



4.1.3. AEMO's conclusion

AEMO has amended the Guidelines to split 'potential response' into 'Maximum' and 'Firm' and limit mandatory fields.

4.2. Enhancing detail of future DSP programs

4.2.1. Issue summary and submissions

AEMO recognises the importance of future DSP programs in managing reliability and system security. To facilitate better forecasts, AEMO proposed a number of mandatory fields for future DSP:

Table 2 Mandatory fields in Add Future DSP Programs as proposed in the Issues Paper

Field	Mandatory/Optional
Name of Future Program	Mandatory
Increase or Decrease in Demand	Mandatory
NEM Region	Mandatory
Expected Start Date	Mandatory
Maximum Response (MW) (Year 1)	Mandatory
Firm Response (MW) (Year 1)	Mandatory
WDR or RRO Qualifying Contract	Mandatory

Table 3 Mandatory fields in Add a Change in an Existing DSP Program as proposed in the Issues Paper

Field	Mandatory/Optional
Name of Existing Program	Mandatory
Increase or Decrease in Demand	Mandatory
NEM Region	Mandatory
Expected Start Date	Mandatory
Change in Maximum Response (MW) (Year 1)	Mandatory
Change in Firm Response (MW) (Year 1)	Mandatory
WDR or RRO Qualifying Contract	Mandatory

The full list of mandatory and optional fields for both Add and Change Existing DSP Programs is shown in the Guidelines.

In response to the above proposed mandatory fields, Enel X submitted:

Enel X agrees with this approach in principle, but in our view only the following should be mandatory fields:

- Name of program



- NEM region
- Maximum response / firm MW

4.2.2. AEMO's assessment

AEMO agrees that it is important to reduce the reporting burden on participants and that mandatory fields should be limited to those needed for system security, reliability or regulatory requirements. Further, mandatory field responses should be as simple and easy as possible. The table below explains why AEMO will require additional mandatory fields for future DSP programs and changes to existing DSP programs beyond what Enel X proposes.

Table 4 Update to mandatory fields as proposed in Issues Paper for both changes to existing programs and future DSP programs

Field	Updated Mandatory/ Optional	Explanation
Name of Program	Mandatory	Unchanged from Issues Paper. Supported by Enel X.
Increase or Decrease in Demand	Mandatory	<p>This field is a simple radio button program level response, which should not increase the reporting burden.</p> <p>Capturing this information is to ensure programs are being reflected in the direction intended, so (net) load decreases are used to address reliability during high demand events and (net) load increases used to address system security events during low demand periods.</p> <p>The proposed data model to capture this new information assumes a program can either increase or decrease load but not both. Any program which does both would require two separate submissions.</p>
NEM Region	Mandatory	Unchanged from Issues Paper. Supported by Enel X.
Expected Start Date	Optional for DSP programs <10 MW, otherwise mandatory	<p>AEMO recognise that many DSP programs are under 10 MW. While such programs are important collectively, the exact start date of each one is unlikely to critically affect reliability. For such programs, it is sufficient that AEMO capture the Firm response (year 1) as a mandatory field for the coming summer.</p> <p>In contrast, the starting dates of larger DSP programs can affect AEMO's assessment of system reliability and the start date (or best estimate of this) must be provided.</p>
Maximum Response (MW) (Year 1)	Optional	Following review, AEMO agrees this does not need to be mandatory.
Firm Response (MW) (Year 1)	Mandatory	Unchanged from Issues Paper. Supported by Enel X.
WDR or RRO Qualifying Contract	Mandatory	<p>The response for this field is a radio button with the following options: WDR/RRO/NA.</p> <p>The field is required to meet the Rules obligation to allow participants to register RRO qualifying contracts.</p> <p>In AEMO's view, responding N/A where applicable to this field will not increase the reporting burden on participants.</p>



4.2.3. AEMO's conclusion

AEMO has made the following fields mandatory for future DSP programs to ensure it has the necessary data to address system reliability and security issues:

- Name of future program
- Increase or Decrease in Demand
- NEM Region
- Firm Response (Year 1)
- WDR or RRO Qualifying Contract

AEMO recognises that exact timing of DSP Programs only matters at larger scales, and thus the portal has only made the start date field mandatory where the Firm Response field is over 10 MW.

4.3. Timing of DSPI Portal entry

4.3.1. Issue summary and submissions

In response to section 3.6 of the Issues Paper, where AEMO asked for recommendations on the timing of the portal opening, Enel X submitted:

Enel X supports having the portal open year-round to support participant entry if it provides value to AEMO operations for upcoming summers. Our preference would be to have a submission window that does not coincide with a holiday period, when internal resources may be limited.

4.3.2. AEMO's assessment

AEMO requires DSP information to be submitted as at 31 March each year by 30 April. These dates ensure that past summer DSP information is captured, while allowing AEMO sufficient time to utilise the DSP information in the Electricity Statement Of Opportunities (ESOO).

To manage holiday seasons and resourcing, AEMO suggests that participants prepare their DSP data ahead of time, using the templates available from the DSPI webpage, which is open year round.

4.3.3. AEMO's conclusion

The current March-April portal submission window is the best trade-off between capturing timely data from the previous summer and allowing sufficient time to incorporate the DSPI within the ESoo reliability forecast.

4.4. Geographic information for validation and statistics

4.4.1. Issue summary and submissions

In section 3.8 of the Issues Paper, AEMO proposed uploading bulk data as a solution for DSP programs that span multiple regions. Enel X requested this upload process be simple and have a simple CSV template.

4.4.2. AEMO's assessment

AEMO's proposed bulk upload functionality will allow participants to simply upload each DSP program (split by region) in a single csv template.



4.4.3. AEMO's conclusion

AEMO has published a sample csv template alongside the consultation material,⁶ demonstrating the simple process for this solution.

4.5. Adding participant contact details

4.5.1. Issue summary and submissions

In response to section 3.10 of the Issues Paper, regarding adding mandatory contact details, Enel X suggested only requiring contact details once per participant and not for every DSP site for which a survey must be submitted.

4.5.2. AEMO's assessment

AEMO agrees that it is important to limit participant requirements and therefore only requires contact details once per annual submission, not separately for each DSP program.

4.5.3. AEMO's conclusion

AEMO has updated the Guidelines accordingly.

4.6. Improved resources for portal users

4.6.1. Issue summary and submissions

AEMO proposed to provide documentation that supports DSPI Portal users in their use of the portal (see Section 4.2 of the Issues Paper). Enel X referred to such documentation as 'the Guide' and submitted:

Enel X supports this approach, provided that the DSPI Portal itself is intuitive, straightforward to use and provides a positive user experience. The Guide should only be used as a reference document (secondary tool).

We seek clarification from AEMO on what is meant by the third point that "asset only" components do not need to be entered into the portal.

4.6.2. AEMO's assessment

AEMO agrees that the DSPI Portal should be as intuitive and user-friendly as possible, so that the Guide is rarely required by most DSPI Portal users.

The phrase 'asset only components need not be entered into the portal' appeared in the Issues Paper (Section 4.2) as an example of portal usage detail requiring further instructions in the Guide, but was not intended to be a stand-alone explanation.

4.6.3. AEMO's conclusion

AEMO is actively considering and designing for a positive user experience, with the intended outcome that for most DSPI Portal users, the Guide should only be required for new or complex matters. One such matter is the distinction between battery types. The text in Section 4.7 forms the basis of the Guide's description of battery types.

⁶ Available at: https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2020/dspi/dsp-bulk-upload-example-files.xlsx?la=en <https://aemo.com.au/en/consultations/current-and-closed-consultations/dspi-guidelines>



4.7. Distinguishing connections with Energy Storage

4.7.1. Issue summary and submissions

AEMO outlined a new distinction between connections with Energy Storage in Section 3.3 of the Issues Paper as follows:

- Connections with energy storage.
 - This category was relevant prior to the DER Register but is no longer required. AEMO proposes removing this unnecessary category from the DSPI Portal, to support AEMO’s intention of minimising participant effort.
 - Note that where energy storage is part of a package that fits a category above, it would still be required in its respective category. For example, where a battery is managed as a VPP by a network operator, the NEMs with that program would be listed under the ‘Connections on network controlled load’ as shown in Error! Reference source not found. below.

In Section 4.2 of the Issues Paper, AEMO stated

‘Asset only’ components need not be entered into the portal. For example, a retailer with knowledge of its customer’s battery installation is not, of itself, an instance of DSP that is required for the portal. However, if the battery is at least partially controlled by the retailer, it is DSP and requires entry into the portal.

Enel X sought clarification regarding “asset only components do not need to be entered into the portal.”

4.7.2. AEMO’s assessment

AEMO has adopted the following text as the basis of the (User) Guide:

The DSP program category of “Connections with energy storage” has been removed from the DSPI Portal. This category captured any installation with battery storage regardless of whether controlled by a third party or not.

Battery storage information is now available to AEMO through the DER Register, albeit with no visibility of whether the batteries are controlled dynamically by a third party. DSPI Portal users may be able to reduce their data entry as follows:

- Participants should report batteries controlled by them under any program categories in Table 5 below. This will ensure their inclusion in AEMO’s DSP forecast.

Table 5 DSP Program Categories

DSP Program Category	Explanation
Market exposed connections	This covers connections exposed to spot price, either directly or via 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 include 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, irrespectively of actual demand and/or spot price at the time. This includes control of hot water load.



DSP Program Category	Explanation
Directly controlled connections (dynamic operation)	Connections directly controlled (or manually instructed to respond) based on actual or forecast system conditions and/or price. This includes aggregated response of same battery storage systems as a virtual power plant (VPP) and reduction in air conditioner load or electric vehicle charging on extreme demand days.
Not elsewhere classified	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.

- If no such external control is present, the batteries are assumed to operate on an algorithm which optimises battery charge and discharge patterns according to owner and operator requirements. Typically, such requirements would be to minimise retail energy purchases. AEMO models batteries without external control directly as part of its DER forecast.

4.7.3. AEMO's conclusion

The reference to "asset only" referred to battery installations not exclusively controlled by a third party.

5. FINAL DETERMINATION

Having considered the matters raised in the submission to this consultation, AEMO's Final Determination is to amend the demand side participation information guidelines so that they are in the form of the Attachment⁷, in accordance with clause 3.7D(e)-(i) of the NER. The amended Demand Side Participation Information Guidelines take effect on and from 31 March 2021.

⁷ Available at: <https://aemo.com.au/en/consultations/current-and-closed-consultations/dspi-guidelines>



APPENDIX A. GLOSSARY

Term or acronym	Meaning
AEMO	Australian Energy Market Operator Limited
CSV	Comma-separated values; a file format for exchanging data.
DER	Distributed Energy Resources
DSPI	Demand Side Participation Information
DSP	Demand Side Participation
DSPIP	Demand Side Participation Information Portal
ESOO	Electricity Statement Of Opportunities
IP	Issues Paper
NEM	National Electricity Market
NER	National Electricity Rules
RRO	Retailer Reliability Obligation
WDR	Wholesale Demand Response



APPENDIX B. SUMMARY OF SUBMISSIONS AND AEMO RESPONSES

No.	Consulted person	Issue	AEMO response
1.	Enel X	<p>In response to Issues Paper (IP) section 3.1:</p> <p>We agree that this portal, and DSP in general, is still not well understood across the industry, and therefore response fields should be optional wherever possible. DSP will constantly be evolving, and we will continually be developing new DSP resources in future. We will not always have all the relevant information for the DSPIP at any given time. AEMO should err on the side of caution in making too many categories and response fields “mandatory” as this will dilute the response rate and quality of responses. Fields should be optional unless AEMO can demonstrate that it needs to know the information for the purposes of system security and reliability. The questions need to be simple to respond to and not too onerous on Market Participants to avoid administrative burden.</p>	See Section 4.1
2.	Enel X	<p>In response to IP section 3.1:</p> <p>Enel X is comfortable with AEMO differentiating between maximum potential response and firm(or contracted) response.</p>	Noted
3.	Enel X	<p>In response to IP section 3.3:</p> <p>Enel X supports AEMO’s proposed approach to updating DSP program categories:</p> <ul style="list-style-type: none"> • Removing ‘Connections with energy storage.’ • Changing ‘Larger connections and programs” to ‘Not elsewhere classified.’ • Making the DSP Program categories more generic to reflect the type of control or signalling for response independent of the organisation type. 	Noted
4.	Enel X	<p>In response to IP section 3.4:</p> <p>Enel X supports AEMO’s proposed approach to align with the WDR rule change; a Load-on field will also be included in this DSPI Portal update to support AEMO’s identification of programs that include loads, embedded generation and storage that are flexible at times of minimum demand (or responding to low/negative spot prices in general)</p>	Noted



No.	Consulted person	Issue	AEMO response
5.	Enel X	In response to IP section 3.5: Enel X agrees with this approach in principle, to replace the two text fields with specific responses in principle, but in our view only, only the following should be mandatory fields: <ul style="list-style-type: none"> • Name of program • NEM region • Maximum response / firm MW 	See Section 4.2
6.	Enel X	In response to IP section 3.6: Regarding timing of the portal, Enel X supports having the portal open year-round to support participant entry if it provides value to AEMO operations for upcoming summers. Our preference would be to have submission window that does not coincide with a holiday period, when internal resources may be limited.	See Section 4.3
7.	Enel X	In response to IP section 3.8: There should be a simple upload process with a simple CSV template in the way data is uploaded to adjust the Region field (and any other fields if applicable).	See Section 4.4
8.	Enel X	In response to IP section 3.10: Regarding Collecting contact details. Adding mandatory fields within the DSPI Portal for the primary and secondary contact person should only be done once at the start of the process, and not for every DSP site for which a survey must be submitted.	See Section 4.5
9.	Enel X	In response to IP section 4.1: Enel X supports AEMO's proposed approach to providing more upload options within the DSPI Portal.	Noted
10.	Enel X	In response to IP section 4.2: Enel X supports AEMO's approach to providing resources to assist participants with the DSPI portal, provided that the DSPI Portal itself is intuitive, straightforward to use and provides a positive user experience. The Guide should only be used as a reference document (secondary tool). We seek clarification from AEMO on what is meant by the third point that "asset only" components do not need to be entered into the portal.	See Section 4.6 and 4.7