

# Wholesale Demand Response DNSP Endorsement Guide for Networks

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## Key Information

<b>Title</b>	Wholesale Demand Response DNSP Endorsement Guide for Networks
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## Objective

The objective of this informal guideline is to provide:

- a. A nationally consistent approach for DNSP endorsement process to Wholesale Demand Response.
- b. Alignment with the relevant Australian Standards

This document aims to assist Distribution Network Service Providers (DNSPs) in developing appropriate and fit for purpose design solutions to be applied to Wholesale Demand Response.

This document is intended to complement, but not substitute or override, a number of regulations and Australian Standards. The aim is to provide additional information to guide the development of appropriate, fit for purpose and consistent design solutions for the Wholesale Demand Response.

This document does not stipulate prescriptive details in the design, construction, operation and maintenance of DNSP processes. Consistency of approach in the detail will be delivered by way of this document together with the relevant legislation, Industry Guidelines and standards.

## Scope

The document provides a basic overview of DNSP endorsement for WDR. This document is limited to what is allowable under the National Electricity Law (NEL), the National Electricity Rules (NER) and the AEMO Wholesale Demand Response Guideline.

## Referenced Documents

The following documents are referred to in this document:

Document Code	Title
N/A	AEMO Wholesale Demand Response Guidelines V1.0
N/A	National Electricity Law Version 15.4.2021
N/A	National Electricity Rules Version 164

## Definitions

AEMO	Australian Energy Market Operator Limited
ENA	Energy Networks Australia
DNSP	Distribution Network Service Provider
DNSP Endorsement	The endorsement by a DNSP of an aggregation of WDRUs for the purpose of central dispatch
DRSP	Demand Response Service Provider
MRC	Maximum responsive component
NEL	National Electricity Law
NER	National Electricity Rules
NMI	National Metering Identifier
WDR	Wholesale demand response
WDRU	Wholesale demand response unit

# What is the DNSP endorsement?

The wholesale DRM allows a DRSP to apply to AEMO to aggregate two or more WDRUs for the purposes of central dispatch if specified conditions are met. To approve an aggregation of WDRUs, AEMO must be satisfied that power system security will not be materially affected by the proposed aggregation.<sup>1</sup> The DNSP endorsement will be used to help AEMO with this assessment.

AEMO's WDR guidelines state that a DNSP endorsement is required where a DRSP's proposed aggregation:

- would add one or more WDRUs to an aggregated DUID; and
- includes WDRUs at or behind a single transmission node with an aggregate maximum responsive component (MRC) of 5 MW or greater.

## Principles for the endorsement process

This section sets out the principles that DRSPs and DNSPs should adhere to in the DNSP endorsement process.

DRSPs should:

- provide all information required by the DNSP in its DNSP endorsement application form
- provide other information reasonably requested by the DNSP to enable the DNSP to carry out its assessment
- make staff available to discuss DNSP endorsement applications before, during and after the endorsement process
- notify the DNSP if it will be proceeding directly to AEMO for aggregation approval as a result of the DNSP not providing its endorsement/rejection within the 25 business day period.

DNSPs should:

- publish all information relevant to the DNSP endorsement application, including process, forms, applicable fees, contact details, and any jurisdictional considerations, on their website

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<sup>1</sup> See NER 3.8.3(b2).

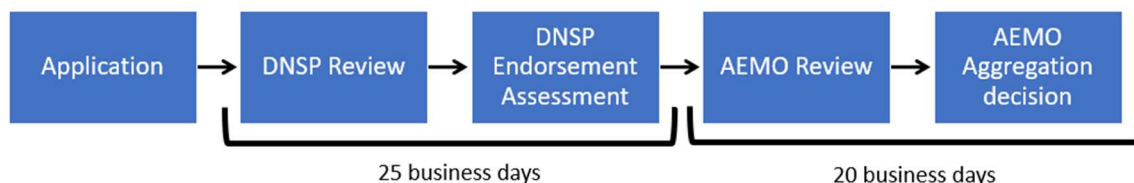
- provide the DRSP with clear reasoning for requesting any additional information, and explain how that information will support its assessment and aligns with the purpose and scope of the endorsement
- use best endeavours to finalise its assessment within the 25 business day timeframe
- make staff available to discuss DNSP endorsement applications before, during and after the endorsement process
- notify the DRSP of the likely outcome of its endorsement assessment and any conditions before the assessment is finalised.

## Process overview

This is the high-level process by which the DNSP Endorsement as mentioned in the AEMO Wholesale Demand Response Guidelines<sup>2</sup> is carried out.

It is important to note that this informal guideline is subsidiary to the National Electricity Law, the National Electricity Rules and the AEMO Wholesale Demand Response Guidelines.

Final approval of the WDR aggregation is subject to AEMO's final determination as outlined in their guideline.



**Figure 1: DNSP Endorsement Process**

### 1.1 Application stage

In this stage the DRSP is expected to have contracted with a customer to legally act on their behalf in interactions with AEMO and the relevant DNSP(s). The application for DNSP Endorsement should identify and include the following information;

1. Evidence that the customer has authorised the DRSP applicant to act on their behalf
2. Number of sites in the proposed aggregation
3. Combined MRC of the proposed aggregation
4. Confirmation from DRSP that the proposed operating protocol does not deviate from the customer's connection agreement

<sup>2</sup> [https://aemo.com.au/-/media/files/stakeholder\\_consultation/consultations/nem-consultations/2020/wdr-guidelines/final-stage/wholesale-demand-response-guidelines-mar-2021.pdf?la=en](https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2020/wdr-guidelines/final-stage/wholesale-demand-response-guidelines-mar-2021.pdf?la=en)

5. Participating NMI(s)
6. For each NMI
  - A. Participating asset type(s)
  - B. Individual Maximum Response Component
  - C. A description of the expected ramp/step-down and ramp/step-up profile of that NMI's MRC when activated, and associated time frames. Note that, given the nature of demand response, linear ramps are not expected.<sup>3</sup>
  - D. A description of the operating procedure/protocol for activating the demand response

When classifying a load for participation in the WDR mechanism, DRSPs will be required to provide a declaration to AEMO that the load meets the mandatory requirements to classify a load as a WDRU.<sup>4</sup> Given this, DNSPs can assume that the load meets these requirements for the purposes of the endorsement and thus should not need to re-confirm it.

It is expected that the DNSPs will develop their own templates for DNSP endorsement applications requiring this basic information. Further details over and above these basic criteria may be requested by the DNSP to assist in their review of the application, where that information is required to achieve the objective of the DNSP endorsement. The DNSP should provide the DRSP with clear reasoning for requesting any additional information and explain how that information will support its assessment.

It is in all parties' best interest to make a complete application with the information above as a minimum.

DNSPs may levy a fee to provide a DNSP endorsement.

DNSPs should provide as much transparency of DNSP endorsement process and fees as possible, including by publishing the following on their website:

- the DNSP endorsement application form
- any applicable fees for an endorsement assessment, and any applicable fees for an amendment to an existing aggregation (e.g. to add /remove NMIs)
- the details of who DRSPs should contact for further information and advice.

It is possible that a proposed aggregation will span more than one DNSP's network area. Where that is the case, the DRSP should consult with the relevant DNSPs before submitting a DNSP endorsement application to determine the most appropriate process and any applicable fees.

## 1.2 DNSP Review stage

In this stage the DNSP will assess the application to determine whether the proposed operation of the aggregation, relative to the unaggregated operation of the same NMIs, is likely to have a material impact on power system security. Specifically, DNSPs will make a decision based on the following considerations;

1. Impact of aggregation on safety and reliability to other customers, specifically:
  - A. Impact of aggregation on local network voltage
  - B. Impact of aggregation on existing protection devices and settings

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<sup>3</sup> Given the duration of dispatch will depend on price and other factors, DRSPs may be unable to provide information about the likely duration of dispatch.

<sup>4</sup> These requirements are set out in the NER, the WDR guideline and AEMO's load classification application form.



## 2. Other jurisdictional or local factors

This is not an exhaustive list of tasks undertaken in the review and it is likely that each DNSP will develop appropriate processes that satisfy internal/external requirements and resource availability. Where additional processes or information will be required, the DNSP should specify this clearly in its application form and other documentation relating to the DNSP endorsement.

To the extent possible, DNSPs should conduct the assessment on the basis of the information provided to it by the DRSP and any relevant data available to it.

Note that AEMO's final determination on the WDR guidelines state that:

- the customer and the DRSP are responsible for ensuring that the participation of that customer in the WDRM is consistent with the terms of its connection agreement
- the assessment that forms the DNSP Endorsement should not be contingent on future network investment.

Constant engagement and communication between the DRSP applicant and the DNSP is strongly encouraged during this period to minimise the risk of delays or application rejection.

As per Figure 1. DNSPs have 25 business days to review the application, communicate as necessary with the DRSP applicant and provide a decision on DNSP endorsement of the aggregation.

If the application is incomplete, has missing data or if further details from the DRSP are pending then the DNSP may flag this as a potential cause of concern with AEMO when AEMO make their final determination.

## 1.3 DNSP Endorsement Assessment stage

The decision to endorse or not endorse an application is subject to the DNSP's discretion, however the NER & NEL state that AEMO will provide the final approval or rejection of aggregations after consulting with the relevant stakeholders.

AEMO has advised that a DNSP's assessment of a proposed aggregation will result in an endorsement or rejection of the proposed aggregation, as well as advice of any restrictions that must be imposed on the aggregation, such as ramp rate limits, to ensure that the dispatch of WDRUs will not infringe the technical envelope.

A DNSP would only reject a proposed aggregation where it considered that the WDRUs within the proposed aggregation need to be represented as two or more DUIDs in constraints used in central dispatch. If this occurred, AEMO presumes that the DNSP would advise AEMO of any constraints to be applied to the DUIDs in the central dispatch process.

As such, the outcome of the DNSP Endorsement Assessment will be one of the following:

1. Endorsement without change
2. Endorsement with conditions requiring a constraint in dispatch
3. Not endorsed with reasons and recommendations

DNSPs should consult with the DRSP on any proposed conditions of endorsement before the completion of the endorsement process. This will provide the DRSP the opportunity to make changes to the proposed aggregation such that it could be endorsed without conditions, and/or discuss the proposed conditions with its customers.

A complete application will also require the contact details of a primary and back up DNSP contact so that it is clear to all parties who should be contacted if there are any queries.

Any conditions imposed on the endorsement should not be predicated on a change to the customer's connection agreement. Instead both parties should seek to resolve conditions on a case-by-case basis that is mutually agreeable.

After 25 business days has elapsed and if the DRSP does not receive DNSP endorsement or any response from the DNSP, then the DRSP is able to go directly to AEMO and request approval.

It is expected that AEMO will communicate with the relevant DNSP(s) for further consultation if there is any ambiguity in the application before advising the DRSP applicant of its final decision.

A DNSP endorsement (or endorsement with conditions) does not have an expiration date. As noted above, it is ultimately AEMO's responsibility to determine whether the proposed aggregation can be approved, and the term of that approval.

## Adding/removing NMIs to/from an endorsement

Once approved, a DRSP may seek to add additional NMI(s) to an existing aggregation, or remove NMI(s). In many cases it would not be efficient or necessary to require a complete re-approval of the aggregation.

DNSPs have several options to accommodate this, including:

- Setting a cap on maximum aggregation size in a DNSP endorsement, below which the DRSP can add NMIs and not require the DNSP to conduct an additional assessment.
- Putting in place a shorter endorsement process by which the DRSP would provide information relating to the change only, and the DNSP assessing that change from the original endorsement.

DNSPs should endeavour to provide transparency of how it will accommodate the addition/removal of NMIs from an existing endorsement.

Overall, how this is ultimately managed should remain consistent with the process outlined above.

This has been prepared by Energy Networks Australia for the benefit of its members. A full list of member businesses is available at [www.energynetworks.com.au/ena-members](http://www.energynetworks.com.au/ena-members)

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