

APPLICATION GUIDE

Guide to Registering as a Demand Response Service Provider in the NEM

This guide is to be used in conjunction with the Registering as a Demand Response Service Provider form and is not to be altered without the prior consent of AEMO.

Disclaimer

This Application Guide (this Guide) is made available to you on the following basis:

- | | |
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| Purpose | This Guide has been produced by the Australian Energy Market Operator Limited (AEMO) for the purposes of clause 2.1.3 of the National Electricity Rules (NER or Rules) to provide information about the process for becoming registered as a Participant in the National Electricity Market (NEM) as at the date of this publication. |
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Rules terms

Terms defined in the Rules are italicised, and have the same meaning, when used in this Guide. Any failure to italicise such a term in this Guide does not change its meaning under the Rules, unless this Guide specifies otherwise.

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1. Introduction

This Application Guide (this Guide) has been developed to help those completing an [Application for Registration – NEM – Demand Response Provider](#) form (Form). This Guide is to be used in conjunction with the Form.

If you require any further assistance, please contact onboarding@aemo.com.au or phone 1300 236 600 (International callers dial +61 3 9609 8000).

1.1 Purpose of this guide

This Guide steps through each section of the Form to ensure Applicants understand the information required and how to complete the Form.

Note: AEMO will only process an application form that has been filled in correctly and with all required attachments present.

This Guide covers the following:

- Registration as a DRSP
 - Classifying load as ancillary service load (ASL)
 - aggregating two or more loads so they are treated as one ASL for the purpose of central dispatch, if applicable.
 - Classifying ‘qualifying load’ as a wholesale demand response unit (WDRU)
 - aggregating two or more WDRU to be treated as one WDRU for the purpose of central dispatch, if applicable.

1.1.1 Requirement to register as a DRSP

Under clause 2.3B of the Rules, a person may apply to register in the category of *Demand Response Service Provider* (DRSP) as set out below:

- a) A person must not engage in the activity of offering and providing *wholesale demand response* or *market ancillary services* in accordance with Chapter 3 as a DRSP unless that person is registered by AEMO as a DRSP.
- b) To be eligible for registration as a DRSP, a person must obtain the approval of AEMO to classify a *load* as an *ancillary service load* in accordance with clause 2.3.5 or as a WDRU in accordance with clause 2.3.6.
- c) A DRSP’s activities only relate to loads it has classified (in its capacity as a DRSP) as ancillary service loads or as wholesale demand response units, and only while it is also registered with AEMO as a DRSP.

1.2 Other documents to be submitted

Applicants may need to submit other documents as evidence of their eligibility for registration. These requirements may vary depending on the classification request.

Please read the sections of the application form carefully and ensure the relevant documents are submitted, with each document clearly identified with the section it belongs to and numbered sequentially (for example: “Attachment to Section D2-1” or WDRU_NMI.csv).

Where changes to supporting information are required, the file name must reflect the change (“Attachment to Section D2-2”) and added to the zip file for reload.

Note: The csv filenames must never change as they are required to allow automated system processes and validation to avoid unnecessary delays in the assessment process.

1.2.1 Zip file contents – ASL

Applicants applying to be a DRSP to classify ASL need to provide information to AEMO in zip files. A zip file must contain information pertaining to each DUID. This includes:

- FCAS_Group.csv
- FCAS_GroupService.csv
- FCAS_NMI.csv
- FCAS_Device.csv

Another separate file must be submitted with the supporting information pertaining to each DUID. This includes:

- [Information on Control Equipment](#)
- Other supporting documents requested in the Form

1.2.2 Zip file contents - WDRU

Applicants applying to be a DRSP to classify WDRU need to provide information to AEMO in zip files.

A zip file must only contain information pertaining to each DUID. This includes:

- [WDRU_Group.csv](#)
- [WDRU_NMI.csv](#)
- [WDRU_NMI_ExclusionDay.csv](#)

Another separate file must be submitted with the supporting information pertaining to each DUID. This includes:

- [Information on Control Equipment](#)
- Other supporting documents requested in the Form

1.2.3 Zip file examples

The following are examples of expected zip file configurations:

Example 1. An applicant applying to register as a DRSP to classify ASL and aggregate, if applicable, using one DUID will submit two zip files containing information outlined in Section 1.2.1

Example 2. An applicant applying to register as a DRSP to classify ASL and aggregate, if applicable, using two DUIDs will submit two zip files with the csvs (one for each DUID), and two files with the supporting information for each DUID outlined in Section 1.2.1.

Example 3. An applicant has applied to register as a DRSP to classify ASL and aggregate, if applicable, using two separate DUIDs. AEMO has assessed and requested further information and/or clarification. To do this you must update the relevant documents within the zip file. You must also reflect that the document has been updated eg: "Attachment to Section D2-1" to "Attachment to Section D2-2". The entire zip file as outlined in Section 1.2.1 is then re-submitted to AEMO to be re-uploaded.

Example 4. An applicant applying to register as a DRSP to classify WDRU and aggregate, if applicable, using one DUID (group) will submit two zip file containing information outlined in Section 1.2.2.

Example 5. An applicant applying to register as a DRSP to classify WDRU and aggregate, if applicable, using two separate DUIDs (groups) will submit two zip files with the csvs (one for each DUID (group)), and two files with the supporting information for each DUID outlined in Section 1.2.2.

Example 6. An applicant has applied to register as a DRSP to classify WDRU and aggregate, if applicable, using two separate DUIDs (groups). AEMO has assessed and requested further information and/or clarification.

To provide this you must update the relevant documents and/or csv contained within the zip file.

- If information is to be changed within a csv the csv file name must remain the same, however the version field must be updated sequentially within WDRU_Group csv. The entire zip file as outlined in Section 1.2.2 is then re-submitted to AEMO to be re-uploaded.
- Other supporting documents must also reflect that the document has been updated eg: "Attachment to Section D2-1" to "Attachment to Section D2-2". The entire zip file as outlined in Section 1.2.2 is then re-submitted to AEMO to be re-uploaded.

Example 7. An applicant applying to register as a DRSP to classify the same load as both WDRU and ASL, and aggregate if applicable, using one DUID (group). This is considered a rare scenario and the applicant must discuss with AEMO prior to applying to register. The applicant must submit the first zip file containing information outlined in Section 1.2.1 and two zip files containing information outlined in Section 1.2.2.

Example 8. An applicant has applied to register as a DRSP to classify same load as both WDRU and ASL, and aggregate if applicable, using one DUID (group). AEMO has assessed and requested further information and/or clarification. To do this you must update the relevant documents and/or csv contained within the appropriate zip file.

- WDRU - If information is to be changed within a csv the csv file name must remain the same, however the version field must be updated sequentially within WDRU_Group csv. Other supporting documents must also reflect that the document has been updated eg: "Attachment to Section D2-1" to "Attachment to Section D2-2". The two zip files as outlined in Section 1.2.2 is then re-submitted to AEMO to be re-uploaded.
- ASL - If information is to be changed within a csv the csv file name must remain the same, however the version field must be updated sequentially within FCAS_Group csv. Other supporting documents must also reflect that the document has been updated eg: "Attachment to Section D2-1" to "Attachment to Section D2-2". The two zip files as outlined in Section 1.2.2 is then re-submitted to AEMO to be re-uploaded.

Note: To ensure your zip file is in the form prescribed by AEMO care must be taken to ensure:

- the csv filename has not been changed
- headers within the csv are not removed/modified/added
- the required formatting within the csv has been used. Refer to Appendix B - H
- the relevant csv files must remain in the zip, even if there are no changes:
 - three csv files for WDRU
 - four csv files for ASL
- the maximum zip file size limit is 20mb. Only if the zip file limit has been reached can supporting information be submitted to AEMO via email
- neither zip nor csv is to be password protected.

1.3 Fees

1.3.1 Registration Fee

All Applicants for registration must pay a Registration fee in accordance with AEMO's currently published [fee schedule](#).

The Registration fee of a DRSP includes one ASL or WDRU DUID. Each additional ASL or WDRU DUID, that is subject to the registration application, is charged an additional fee.

1.3.2 Participant Fees

Clause 2.11.1(b)(2) of the *Rules* provides that *Participant fees* should recover the budgeted revenue requirements for AEMO. Clause 2.11.1(b)(3) provides that the components of *Participant fees* charged to each *Registered Participant* should be reflective of the extent to which the budgeted revenue requirements for AEMO involve that *Registered Participant*.

Refer to the [AEMO website](#) for a summary of the Participant fees that are currently applicable.

2. Registration Procedure

Chapter 2 of the *Rules* deals with registration. Each prospective Applicant must apply to AEMO for registration by using the relevant application form.

The registration process for a DRSP consists of the following steps:

- Step 1 Submit the application form and all attachments in a zip file by email to: AEMO onboarding@aemo.com.au. Ensure every document clearly identifies the section of the Application Form it belongs to and is numbered sequentially (for example: "Attachment to Section D2-2"), csv names do not change.
- If the zip files are in a form not prescribed by AEMO then AEMO will be unable to 'receive' your application and commence the assessment process.
- For phone assistance, contact AEMO on 1300 236 600 (International callers dial +61 3 9609 8000).
- Step 2 On receipt of your application, AEMO will send an invoice for payment by electronic funds transfer (EFT).
- For information regarding participant registration fees, see Fees and Charges on the [AEMO website](#). Also see Section 1.3 Fees above.
- Step 3 AEMO will review the application and respond to you within 5 *business days* of receipt of the application (Clause 2.9.1(b), 2.3.5(c) or 2.3.6(c) of the *Rules*).
- Step 4 AEMO may request additional information or clarification of the information contained in the application. If such a request is made, you must supply the additional information or clarification within 15 *business days* of AEMO's request (2.9.1(c), 2.3.5(d) or 2.3.6(d) of the *Rules*) by providing an updated file within the zip. If the further information or clarification is not provided to AEMO's satisfaction within 15 *business days* of the request, your application may be deemed to have been withdrawn (2.9.1(c), 2.3.5(d) or 2.3.6(d) of the *Rules*).
- Step 5 Within 15 *business days* of receiving the application, or within 15 *business days* of receiving the requested additional information or clarification, AEMO will notify you of AEMO's determination. If successful, AEMO will advise any conditions of registration AEMO considers reasonably necessary and an effective date of registration. This date will be determined considering AEMO's software change management process.
- If AEMO rejects your application, you will be notified of the reason(s) (Clause 2.9.2(a) of the *Rules*).

Note: Regardless of outcome, application processing activities and timeframes are the same and carry the same overheads, so fees and charges are non-refundable.

3. Completing the Form

The Form is divided into sections noting that the completion of each section is dependent upon the Applicant's situation as declared in Section A. The Form sections covered in this guide are as follows:

- Section A. Participant Category
- Section B. Application Details

- Section C. Contact Details
- Section D. Required Information
- Section E. System Preparedness
- Section F. Information on Ancillary Service Load
- Section G. Information on Wholesale Demand Response Units
- Section H. IT Systems

3.1 Section A. Participant Category

This section is used to identify any categories of registration you are applying for. Please check the appropriate checkbox in this section.

Before selection, please read the [Electricity market participant](#) information on the AEMO website.

3.2 Section B. Application Details

3.2.1 Section B.1. Applicant details

Enter the details required in Section B.1. of the Form.

If there is an existing Participant ID for the applying category, you must provide the Participant ID in the field provided. If you are a new participant, you can suggest a Participant ID for your organisation. If the suggested Participant ID has been taken or the field is left blank, one will be provided by AEMO. Please take care in nominating the ID as AEMO's systems do not support changes once IDs have been allocated.

3.2.2 Section B.2. Declaration

You must formally apply for registration.

You must declare that you authorise, approve and accept that, in respect of this application and any related future application:


- AEMO may communicate with any person, as appropriate, including to verify information.
- AEMO may treat any communication on the Applicant's behalf, whether physical, or electronic through a login to AEMO's systems (including using access rights given by a Participant Administrator), as being by or to a person who is your:
 - authorised officer;
 - delegate, appointed by your authorised officer; or
 - agent, appointed by your authorised officer (including as primary contact in respect of the application), without AEMO requiring a separate letter of authority in this regard.
- AEMO may rely on any such communication, as being:
 - given by you, when given by the person;
 - given to you, when given to the person;
 - yours in respect of any acts, omissions, statements, representations and notices;
 - instructed by you, regardless of whether any such instruction has been given, or its terms; and
 - complete, true and correct.

This section of the form, where it exists, must be signed and dated by an authorised representative of your organisation as a declaration. Usually the authorised representative is a Chief Executive Officer / Head of Organisation, Company Secretary or holds a management position.

Note: Digital signatures are not permitted.

3.3 Section C. Contact Details

In this section you must provide contact details to assist with communication between AEMO and your organisation.

 Please clearly mark all attachments as "Attachment to Section C" and number each document consecutively. This information must be provided in each zip file you submit.

3.3.1 Section C.1. Registration contact

All Applicants must provide primary registration contact details in order to liaise with AEMO during the registration process.

3.3.2 Section C.2. Head office and branch contact details

You must provide AEMO with the current location and office contact details for your Head Office and any branches. Please copy and complete the table provided in the application form for each location.

3.3.3 Section C.3. Operational contacts

You must provide operational contact details. Note that these MUST be 24/7 contacts.

3.3.4 Section C.4. Personnel contacts

The mandatory contacts shown in the form must be provided before we can progress the application for consideration. For contact definitions please see Appendix A.

Check the appropriate checkboxes to confirm the minimum details required for each contact have been provided to AEMO.

Additional contact information may also be requested to avoid delays in communication between AEMO and the listed contacts.


Participants must notify AEMO as soon as reasonably practicable if contact details change. If contact details change during the registration process, please contact the [Onboarding team](#). If contact details change following registration, please contact the [AEMO Support Hub team](#).

3.4 Section D. Required Information

All documents required to be submitted to AEMO must be included as supporting information in the zip file. If your application requires multiple zip files to be submitted, then the supporting information must be included in a separate zip file for each associated csv file, to allow each grouping for classification and/or aggregation to be managed and assessed independently, although they will be determined for approval (or rejection) at the same time.

3.4.1 Section D.1 Partnership status

Where the Applicant is applying for registration on behalf of a partnership, the Applicant must check the 'Yes' checkbox and provide evidence of the legitimacy of the partnership, such as a partnership agreement. Once attached, check the checkbox under the "If Yes" option.


 Please clearly mark all attachments as "Attachment to D.1" and number each document consecutively. This information must be provided in each zip file you submit.

3.4.2 Section D.2 Trust status

Where the Applicant is acting in a trustee capacity, the Applicant must execute and return a [Trustee Deed Poll](#) ('Deed') in the form specified by AEMO. No changes are to be made to the form of Deed other than the completion of details where highlighted.

AEMO must be satisfied that an Applicant for registration will be able to meet its obligations under the *Rules*. Trustees, however, are generally not personally liable for obligations they incur on behalf of the trust. The purpose of the Deed, therefore, is to assure AEMO that the trustee's right of recourse to the property and assets of the trust remains in place for the purpose of meeting its *Rules* obligations, on an ongoing basis. Your application will not be successful without an acceptable executed Deed.

Once attached, check the checkbox under the "If Yes" option.

 Please clearly mark all attachments as "Attachment to D.2" and number each document consecutively. This information must be provided in each zip file you submit.


3.4.3 Section D.3 Organisational capability

To show that you are able to participate in the *NEM* as a DRSP, you must show that you have established resources, processes and procedures to ensure compliance with the *Rules*. To confirm this, you need to enclose the documents stated in this section into the zip file then check the appropriate checkboxes to confirm each document is attached.

The documents required are:

- An organisation chart or documents (such as *résumés* of key managers) demonstrating the necessary expertise to comply with the *Rules* including, where relevant, wholesale trading, operations management, settlements and risk.
- Demonstration that business and administrative policies and procedures are in place (policies and procedures under development will not suffice) – AEMO does not require actual copies, rather a list of policies and procedures in place relevant to the market and registrable capacity being applied for.
- If the Applicant has not participated in the *NEM* before but has participated in another relevant market, evidence of experience in a comparable electricity market structure, such as:
 - copies of electricity licences held in related markets;
 - duration of activity in those markets;
 - sales volumes and number of customers; and
 - details of any non-compliance with regulatory obligations in that market.
- An explanation of links with parent and other organisations that impact on your ability to comply with the *Rules*.

If you are unable to provide an attachment, please give a reason in the field "reason if not attached" provided. If not applicable, please specify "NA".

 Please clearly mark all attachments as "Attachment to D.3" and number each document consecutively. This information must be provided in each zip file you submit.

3.4.4 Section D.4 Financial viability

If you are registering as a *Market Participant*, to show that you have the financial viability to meet the prudential requirements in clause 3.3 of the *Rules*, you need to enclose the documents stated in this section. Once attached, check the appropriate checkboxes to confirm each document is enclosed in the zip file.

The documents required are:

- Copies of any recently audited financial statements. If this is not available for a new start-up company, you must provide copies of any recently audited financial statements of the parent companies.
- An explanation of any financial links with parent or other organisations.

If you are unable to provide an attachment, please give a reason in the field "reason if not attached" provided. If not applicable, please specify "NA".



Please clearly mark all attachments as "Attachment to D.4" and number each document consecutively. This information must be provided in each zip file you submit.

3.4.5 Section D.5 Regulatory compliance

To show that you are in a position to participate in the *NEM* as a DRSP, you must show that you comply with regulatory requirements. To confirm this, you need to enclose the documents stated in this section into the zip file then check the appropriate checkboxes to confirm each document is attached. Once attached, check the appropriate checkboxes to confirm each document is attached.

To confirm this, you need to enclose the following:

- You must confirm that you have either a required jurisdictional electricity licence or authorisation to carry on the activities of a DRSP, you are exempt from the jurisdictional requirements, or that no jurisdictional requirements apply in your case. If applicable, you must provide evidence of any licenses, authorisation or exemptions.
- You must confirm whether there are any current or previous non-compliances with regulatory obligations in respect of existing or proposed activities by any person associated with your application. If there are any non-compliances, you must provide details.

If you are unable to provide an attachment, please give a reason in the field "reason if not attached" provided. If not applicable, please specify "NA".



Please clearly mark all attachments as "Attachment to D.5" and number each document consecutively. This information must be provided in each zip file you submit.

3.4.6 Section D.6 Market Participant criteria

As a DRSP you must meet the Market Participant criteria in NER clause 3.3.1. Please confirm that you meet these requirements. If you do not, you are not eligible to be a DRSP.

3.4.7 Section D.7 Recipient Created Tax Invoice

You must submit your application along with a completed [Recipient Created Tax Invoice](#) (RCTI) agreement for AEMO to issue an RCTI.

If your company (having the same ABN as this application) has signed a current version of an RCTI agreement, you do not need to complete a new one. To see if your previously signed agreement is still current, check the **Last Updated** date in the latest Agreement's "notes for completion".



Please clearly mark all attachments as "Attachment to D.6" and number each document consecutively. This information must be provided in each zip file you submit.

3.4.8 Section D.8 Austraclear

AEMO uses an external electronic funds transfer system provided by Austraclear. To register as a *Market Participant*, an Austraclear membership number must be included on the application form. If you do not have an Austraclear membership number at the time of submitting the application, AEMO will record that as an outstanding item.

Austraclear membership is organised through the Australian Stock Exchange (ASX). See the [ASX website](#) for details. Once you have membership, enter your Austraclear membership number in the form field provided.

Note: Approval can take up to five weeks to obtain and all charges are payable direct to Austraclear.

If you want to use a third party's Austraclear account, you must provide AEMO with a [letter of authority](#) from the owner of that account granting access. Once enclosed in the zip file, please check the appropriate checkboxes.



Please clearly mark all attachments as "Attachment to D.7" and number each document consecutively. This information must be provided in each zip file you submit.

3.4.9 Section D.9 Credit support

Credit support will be required if you are applying to be registered as a DRSP, to classify WDRU, and you do not meet the acceptable credit criteria as detailed in Section 3.3.3 of the *Rules*.

A guarantee can be arranged through your financial institution and must be in the [AEMO Guarantee Pro-Forma](#) format. It should be checked by AEMO before its execution.

Drafts can be sent to prudentials@aemo.com.au. An original, signed copy must be submitted with your registration application or directly to an AEMO office. Refer to the following [procedure and guides](#) on AEMO's website for the AEMO Guarantee Proforma and the Credit Support Management Guide when preparing the guarantee.

3.5 Section E. System Preparedness

This section looks at preparing your system ready for use.

3.5.1 Section E.1. Operation and system readiness

The operation of the power system requires you to have robust communication mechanisms and 24-hour operational capabilities in place prior to registration.

Prior to registration you must provide AEMO evidence of your operational and system readiness, and demonstrate you are able to:

- participate in bidding and *central dispatch* processes;
- ensure appropriate personnel are always available to receive and immediately act upon *dispatch instructions* and operational communications on a 24/7 basis; and⁴
- where the telemetry and communications requirements in the [Wholesale Demand Response Guidelines](#) (WDRG) apply, provide real-time data to AEMO.

You must provide evidence of this as specified in the Form.

Please enclose a completed and signed [Application Capability Declaration](#).



Please clearly mark all attachments as '**Attachment to Section E.1**' and number each document consecutively before enclosing in the zip file.

3.5.2 Section E.2. Dispatch instructions

AEMO's primary interface for dispatch instructions is either AEMO's automatic generation control system (AGC) (for energy and regulation services only) or the Electricity Market Management System (MMS) Data Interchange.

Market Participants may choose to receive 5-minute dispatch instructions via SCADA but must be aware that AEMO considers this a secondary system and cannot monitor successful transmission of SCADA signals.

AEMO seeks to provide Market Participants with dispatch (energy and FCAS) targets and semi-dispatch caps in a reliable and robust way. The MMS Data Interchange system has been designed for this.

Although AEMO's SCADA can be used to provide dispatch targets, AEMO cannot ensure that the target is sent to and received by a Market Participant. Any interruptions to the SCADA signal could be in AEMO's systems or NSP systems, and may not be visible to AEMO. As such, a participant could be using an old or incorrect target and might be declared non-conforming as a result.

The AGC, which uses the SCADA communication paths, does not have this issue as the AGC recalculates the setpoints and sends the signals every 4 seconds.

3.6 Section F. Information on Ancillary Service Load

In Section F you must provide information for each *load* that you wish to classify as an ASL. This information must be included in the zip file for the applicable DUID.

3.6.1 Section F.1. Applying to classify ASL

Select whether you are going to register as a DRSP to classify load as ASL, or not.

3.6.2 Section F.2. ASL declaration

In this section, you must declare the following by checking in the appropriate checkboxes:

- The load being classified is a load,
- The application is not in respect of a market load that is a scheduled load,
- *Performance standards* for the *load* are in place, this would include connection agreements for the site(s), either specific connection agreements or deemed connection agreements,
- The DRSP have agreement(s) in place with the retail customer(s) at the relevant *connection point(s)* to allow the DRSP to control the *load(s)* as anticipated in the *market ancillary services specification (MASS)*,
- The *load* complies with all the relevant clauses of the MASS,
- There are no generating units at the NMI that are registered as a generator or need to be
- The load is not classified as a WDRU by a different person, and
- The load is not classified as an ASL by a different person

If one or more of the above are not marked, please give a reason in the 'Reason' field provided.

3.6.3 Section F.3. ASL identification

When a DRSP is applying to classify *load* as an ASL, NER 2.3.5(b) requires the DRSP to:

- Specify the *market ancillary services* they wish to provide using the load they are applying to classify as ASL
- Ensure the load is not a *market load* that is a *scheduled load*
- Identify each of the *load* to be used to provide the *market ancillary services*
- Demonstrate how the loads have the required equipment to provide market ancillary services and it will be capable of meeting or exceeding the relevant performance standards and specifications to AEMO's satisfaction.

The following table lists and describes the identifiers and names required to configure the Portfolio Management System (PMS) and [Electricity Market Management System](#) (EMMS). These will be used in the tables and csvs below.

Name/ID	Description	System
DUID	Dispatchable Unit Identifier. This ID cannot change.	EMMS/PMS
DUID name	This is the name of the DUID. This is also the same as the client group reference which is used in PMS. This cannot be changed once implemented into AEMO systems.	EMMS
Group	A group can contain one or more loads (identified by their NMI) which you wish to classify as an ASL. If there is more than one load, then you must apply to aggregate the loads, then be approved, such that the loads are treated as one ASL for central dispatch. A group will have one DUID.	PMS
Group name	This is the formal name of the group. This name is provided by you and is unique to your portfolio. The name is visible to you and AEMO and cannot be changed.	PMS
Participant ID	The Identifier for the Participant. An ABN can have many Participant IDs. A Participant ID can be linked to many DUIDs.	EMMS
Portfolio name	This is the name of your portfolio of groups. There must be only one portfolio in respect of one Participant ID, but you can have many groups in your portfolio.	PMS
Client group reference	This is the informal name of the group. This is also the same as the DUID name which is used in EMMS. This cannot be changed once implemented into AEMO systems.	PMS
FCAS_Group.csv	This is a csv file which identifies the group level information	PMS
FCAS_GroupService.csv	This is a csv which identifies the parameters of the FCAS trapeziums.	PMS
FCAS_NMI.csv	This is a csv which identifies the maximum ancillary service capacity for each service per NMI.	PMS

FCAS_Device.csv	This is a csv that identifies each of the devices and their control systems per NMI.	PMS
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In Section F.3 you must complete the table to identify the Client Group Reference, the DUID of the group and the number of individual loads contained within the group that you want to classify as ASL.

If you have more than one group in your application, you must submit the information for each group. If there is more than one load in the group, please also ensure Section F.4 is completed.

Note: All groups within your application must be considered for AEMO's approval at the same time to avoid additional administrative effort that will result in additional registration fees.

A group must have one DUID. The DUID must have one Client Group Reference (DUID name). If you are applying to create a new group, then you can suggest a DUID and Client Group reference for your group within the appropriate csv. AEMO will advise you of the suitability of these suggestions, prior to the establishment of the registration record.

The guidelines on how to determine the relevant identifiers are described below.

A new DUID must be allocated to each ASL for each region.

ASL controlled by the same technology types (switching control, variable control or combined) are to be aggregated together under either a switching DUID, variable DUID or a combined DUID.

The following naming guidelines apply to DUID(s) and Client Group reference(s):

- DUID is a maximum of 8 characters.
- IDs containing only alphanumeric characters are preferred. Special symbols (e.g. dashes, underscores) and the letter "O" are not acceptable.
- DUID and Client Group reference should follow the following naming convention:

Client Group Reference (20 characters)	Dispatchable unit identifier (8 characters)
<ul style="list-style-type: none"> • Will be prepended with DR • 1 character space • DRSP can nominate up to 12 characters which are an intuitive representation of the DRSP • 1 character space • A single-letter <u>Region ID</u>: S, V, T, N or Q • 1 character space • DUIDs will be appended with a sequential number, increasing by 1 from that DRSP last DUID in the same region 	<ul style="list-style-type: none"> • Will be prepended with DR • DRSP can nominate four characters which are an intuitive representation of the DRSP's name • DUIDs will be appended with a sequential number, increasing by 1 from that DRSP's last DUID.
DR <_ _ _ _ _ _ _ _ _ _> <_> <##> Eg: DR BLUE SKY S 1	DR <_> <_ _ _ _> <##> Eg: DRBLUE01

Note: Please take care in nominating these identifiers, as changes which are requested after names have been allocated are not supported.

3.6.4 Section F.4. ASL aggregation declaration

Indicate if you are applying to aggregate multiple loads into a single ASL and identify if the loads are in different regions.

If so, you must provide separate applications for each region as dispatch and settlement is region based.

Indicate if you are applying to aggregate multiple loads into a single ASL with different technology types for the same ancillary service.

If so, you must provide separate applications for each technology type as MASS and capacity assessments are technology type based for each ancillary service.

3.6.5 Section F.5. Market ancillary service information

In Section F.5 you must submit market ancillary service information.

3.6.5.1. Section F.5.1. Market ancillary services

You must complete and submit the following information for each group. Each group must have a separate zip file that includes the csv's listed below and supporting documentation must be submitted separate to the zip file.

- Information on Control Equipment. The Information on Control Equipment document needs to be sufficient for AEMO to understand how you are intending to respond to dispatch instructions with your plant. This is not in csv format. Please clearly mark as "Attachment Section F.5 IoCE".

CSV files:

- FCAS_Group.csv - This must be submitted in csv format, in strict accordance with the [template](#) which is published on AEMO's website. Appendix C of this Guide provides further information on how to complete the csv. This csv identifies DUID level information and contact information.
- FCAS_GroupService.csv - This must be submitted in csv format, in strict accordance with the [template](#) which is published on AEMO's website. Appendix D of this Guide provides further information on how to complete the csv. This csv identifies DUID level information and Schedule 3.1 bid and validation data for each group, including level of each market ancillary service the group will provide and enablement levels. This csv enables AEMO to assess whether you have provided information which is required to satisfy clause 2.3.5(b) of the *Rules*. The DUID level information must reflect any change you have requested in the FCAS_NMI csv.
- FCAS_NMI.csv – This must be submitted in csv format, in strict accordance with the [template](#) which is published on AEMO's website. Appendix B of this Guide provides further information on how to complete the csv. This csv identifies the NMIs which you wish to classify as a ASL to provide FCAS or to amend your existing portfolio. This csv enables AEMO to assess whether you have provided the information which is required to satisfy clause 2.3.5(b) of the *Rules*.
- FCAS_Device.csv – This must be submitted in csv format, in strict accordance with the [template](#) which is published on AEMO's website. Appendix E of this Guide provides further information on how to complete the csv. This csv identifies the devices located at each site providing the FCAS response.

Note: Please take care when creating the csv files. Information provided in the incorrect format will result in the file being rejected, therefore not loaded into PMS. This includes ensuring converting information from excel to csv hasn't truncated data and you do not include commas in your text.

Note: Each zip will create its own application as it pertains to one group. There must be one zip file for each group.

Note: Once you have successfully loaded your zip file you have an application in draft.

Note: The zip file must only include the four csv files.

Note: A single DUID may provide both ASL and WDR, to be co-optimised through NEMDE, with the following restrictions:

- The list of NMIs must be identical always.
- You could not add a NMI in respect of WDR where the NMI cannot also provide ASL, and vice versa.
- A technically satisfactory trapezium must be provided for the energy/ancillary services provision, to allow co-optimisation.

If you wish to pursue this construct, then AEMO considers that it would need to work through the scenarios with you, to ensure that the concepts will all work appropriately. You must contact AEMO prior to submitting your application.

The Registration Contact specified in the Form and in the FCAS_Group.csv must be the same. You must confirm the Registration Contact have been notified of their involvement with your application.

Note: All four csv files are always required in a .zip file, but some can contain headers only. When uploading a subsequent application to amend an existing group, the following files can contain headers only providing the application meets certain conditions.

File/s allowed to be empty	Combination of populated files	Conditions	Example scenario/s
None	FCAS_Group.csv; FCAS_GroupService.csv; FCAS_NMI.csv; and FCAS_Device.csv	Always allowed. Always required for the first application to create a new group.	Creating a new group. Adding new NMIs to an existing group.
FCAS_NMI.csv FCAS_Device.csv	FCAS_Group.csv; and FCAS_Group.csv	FCAS_Group.csv and FCAS_GroupService.csv must always be submitted with data. The FCAS_NMI.csv and FCAS_Device.csv can be empty only when group maximum capacity is not being changed or added from the current approved value in the group.	Updating the maximum upper angle of the group.
FCAS_Device.csv	FCAS_Group.csv; FCAS_GroupService.csv; and FCAS_NMI.csv	FCAS_Group.csv and FCAS_GroupService.csv must always be submitted with data. FCAS_Device.csv can be empty when the FCAS_NMI.csv file is provided with data and the Application Type field in the FCAS_NMI.csv contains only: 'AMEND', 'REMOVE' or 'DECLASSIFY'.	Amending NMI maximum capacity values. Declassifying NMIs from the group.



Please clearly mark all attachments as '**Attachment to Section F**' and number each document consecutively before enclosing in the zip file.

AEMO will review this information and indicate whether the ASL can be used to provide the nominated *ancillary services* in accordance with the MASS. The parameters that you specify, once registered in AEMO's [Market Management System \(MMS\)](#), will be used to validate *market ancillary service* bids that you submit.

3.6.5.2. Section F.5.2. Information on Control Equipment

In this section you must confirm the [Information on Control Equipment](#) (IoCE) document has been enclosed into the zip.

The IoCE has the following sections which need completing:

- Determination of ancillary service information.
 - You must confirm how you determined your loads can provide the ancillary services you wish to offer and meet the conditions specified in the MASS by checking one or more checkboxes and describing the details (if selecting 'Other') in this section
- Controls, communication and telemetry information.
 - In this section, you are required to:
 - describe the *facilities* you have installed to receive dispatch instructions for the enablement of each *ancillary service*,
 - describe the control facilities installed for each *ancillary service* in accordance with the MASS,
 - describe the monitoring facilities installed for each *ancillary service* in accordance with the MASS, including communications and telemetry, where applicable, and
 - provide test data that demonstrates provision of any fast, slow and/or delayed services applied for. This data is to be provided for all control equipment devices you are proposing to use and be in accordance with MASS.

3.7 Section G. Information on Wholesale Demand Response Units

Provide information for each *qualifying load* that you wish to classify as a WDRU.

3.7.1 Section G1. Applying to classify WDRU

Select whether you are applying to register as a DRSP and to classify *load*, that is *qualifying load*, as WDRU.

3.7.2 Section G.2. WDRU declaration

NER 2.3.6(e) requires AEMO to approve the classification of a *load* as a WDRU if AEMO is reasonably satisfied that the *load* meets specified requirements, this includes requirements in the [WDRG](#) Section 2.1

You must declare in Section G.2 that the loads meet the mandatory requirements. You will need to provide a reason if one or more of the mandatory requirements have not been met in the 'Reason' field provided.

Note: You must provide settlement data in five-minute intervals.

3.7.3 Section G.3. WDRU identification

When a DRSP is applying to classify load as a WDRU, NER 2.3.6(b) requires the DRSP to:

- identify the qualifying load,
- specify the proposed *maximum response component* (MRC) of the WDRU, and
- specify the proposed *baseline methodology* and *baseline settings* to apply to the WDRU.

The following table lists and describes the identifiers and names required to configure the Portfolio Management System (PMS) and [Electricity Market Management System](#) (EMMS). These will be used in the tables and csvs below.

Name/ID	Description	System
DUID	Dispatchable Unit Identifier. This ID cannot change.	EMMS/PMS
DUID name	This is the name of the DUID. This is also the same as Client Group Reference which is used in PMS. This cannot be changed once implemented into AEMO systems.	EMMS
Group	A group can contain one or more loads (identified by their NMI) which you wish to classify as WDRU. If there is more than one load you must apply to aggregate the loads, then be approved, so they are treated as one WDRU for central dispatch. A group will have one DUID.	PMS
Group name	This is the formal name of the group. This name is provided by you and unique to your portfolio. The name is visible to you and AEMO and cannot be changed	PMS
Participant ID	The Identifier for the Participant. An ABN can have many Participant IDs. A Participant ID can be linked to many DUIDs.	EMMS
Portfolio name	This is the name of your portfolio of groups. There must be only one portfolio to one Participant ID, but you can have many groups in your portfolio.	PMS
Client Group Reference	This is the informal name of the group. This is also the same as DUID name which is used in EMMS. This cannot be changed once implemented into AEMO systems.	PMS
WDRU_Group.csv	This is a csv file identifying the group level information.	PMS
WDRU_NMI.csv	This is a csv identifying each load you are applying to classify as WDRU.	PMS

In Section G.3 you must complete the table to identify the Client Group Reference and the DUID of the group and the number of individual loads contained within the group that you want to classify as WDRUs

If you have more than one group in your application, you must submit the information for each group. If there is more than one load in the group, please also ensure Section G.4 is completed.

Note: All groups within your application must be considered for AEMO's approval at the same time to avoid additional administrative effort that will result in additional registration fees.

You will require a DUID for each *region* and load forecasting area. Further information on load forecasting area boundaries are specified in Appendix D of the [Power System Operating Procedure \(SO OP 3710\)](#).

A DUID must have one Client Group Reference. When you submit your application, you can suggest DUID(s) and Client Group Reference(s) for your group(s). AEMO will advise you of the suitability of these suggestions prior to the establishment of the registration record.

The following guidelines apply to DUID(s) and Client Group Reference(s):

- DUID is a maximum of 8 characters.
- IDs containing only alphanumeric characters are preferred. Special symbols (e.g. dash, underscores etc.) and the letter "O" are not acceptable.
- A DUID and Client Group Reference should follow the following naming convention:

Client Group References (20 characters)	Dispatchable unit identifier (8 characters)
<ul style="list-style-type: none"> • will be prepended with <u>DR</u> • 1 character space • DRSP can nominate up to 12 characters that are an intuitive representation of the DRSP • 1 character space • followed by a single-letter <u>Region ID</u>: S, V, T, N or Q • 1 character space • DUIDs will be appended with a sequential number, increasing by 1 from that DRSP's last DUID in the same Region 	<ul style="list-style-type: none"> • will be prepended with <u>DR</u> • DRSP can nominate four characters that are an intuitive representation of the DRSP name • DUIDs will be appended with a sequential number, increasing by 1 from that DRSP's last DUID.
DR <_ _ _ _ _ _ _ _ _ _> <_> <##> Eg: DR BLUE SKY S 1	DR<_><_ _ _> <##> Eg: DRBLUE01

Note: Please take care in nominating these identifiers as changes requested after DUID(s) and Client Group References have been allocated are not supported.

You must complete and submit the following together in one zip file. There must be one zip file for each group:

- Information on Control Equipment. The [Information on Control Equipment](#) document needs to be sufficient for AEMO to understand how you are intending to respond to dispatch instructions with your plant. This is not in csv format. Please clearly mark as "Attachment Section G.3 IoCE".
- WDRU_NMI – This must be submitted in csv format, in strict accordance with the [template](#) which is published on AEMO's website. Appendix F of this guide provides further information on how to complete the csv. This csv identifies the loads you wish to classify as WDRU and enables AEMO to assess whether you have provided information required to satisfy NER 2.3.6(b).
- WDRU_Group – This must be submitted in csv format, in strict accordance with the [template](#) which is published on AEMO's website. Appendix H of this guide provides further information on how to complete the csv. This csv identifies DUID level information and *Schedule 3.1 bid and validation data*

for each group, including the loads you wish to aggregate, and enables AEMO to assess whether you have provided information required to satisfy NER 2.3.6(b) and the WDRG.

If you do not have telemetry and if:

- you are applying to be exempt from Section 3 of the WDRG you must complete the Telemetry Exemption field within the WDRU_Group csv with 'Y' or 'Yes' and attach supporting documents into the zip file with your reasoning why the group should be exempt and how it meets the WDRG on this matter. If you select 'Y' or 'Yes' it indicates that your request to be exempt needs to be assessed by AEMO.
 - you are not applying to be exempt from Section 3 of the WDRG you must complete the Telemetry Exemption field within the WDRU_Group csv 'N' or 'No' and attach supporting documents into the zip file with your reasoning why the group does not have telemetry and why you are not applying to be exempt from having telemetry.
- WDRU_NMI_ExclusionDay - The [WDRM – Baseline Eligibility Compliance and Metrics Policy](#) includes two types of exclusion days which are days that will not be included when assessing the NMI for baseline eligibility. When applying to classify WDRU(s) you must advise AEMO of any eligibility exclusion days. They must be submitted in strict accordance with the [template](#) published on AEMO's website. Appendix G of this guide provides further information on how to complete the csv file.

Note: Please take care when creating the csv files, information provided in the incorrect format will result in the application not being accepted as received. This includes ensuring converting information from excel to csv hasn't truncated data and you do not include commas in your text.

Note: The csv filenames must never change.

The Registration Contact specified in the Form and in the WDRU_Group.csv must be the same. You must confirm the Registration Contact and the Telemetry contact have been notified of their involvement with your application.

Note: There is the possibility of allowing a single DUID to provide both ASL and WDR, and be co-optimised through NEMDE, with the following restrictions:

- The list of NMIs would always have to be identical
- You could not add a NMI for WDR that cannot also do ASL and vice versa
- There would need to be a technically satisfactory trapezium provided for the energy/AS provision to allow co-optimisation.

If you wish to pursue this construct AEMO considers that it would need to work through the scenarios with you to ensure that the concepts will all work appropriately. Please contact AEMO prior to submitting your application.



Please clearly mark all attachments, unless otherwise specified, as '**Attachment to Section G.3**' and number each document consecutively before enclosing in the zip file.

3.7.4 Section G.4. WDRU Aggregation information

NER 3.8.3(a2) requires that DRSPs who wish to aggregate two or more WDRUs so they are treated as one WDRU for the purpose of *central dispatch* must apply to AEMO to do so.

NER 3.8.3(b2) and WDRG Section 2.2 specify conditions that must be met before AEMO can approve an aggregation.

Select whether you are applying to aggregate two or more WDRUs as one WDRU for the purpose of *central dispatch*.

If:

- you are applying to classify more than one load as WDRU and then aggregate them to be one WDRU for the purpose of central dispatch, and
- the application, if approved, would result in the aggregation of WDRUs at or behind a single TNI with an aggregate NMI-Level MRC of 5 MW or greater,

you will need the endorsement from the DNSP(s) whose network the loads are connected to. If the loads are connected to more than one DNSP, you will need the endorsement of all the DNSPs involved. Any endorsement should clearly stipulate the NMIs in each aggregation and each NMI's MRC. If an endorsement process has resulted in the requirement to split an aggregation then the details of each aggregation (NMI(s), NMI MRC) and the required constraints to be applied should be provided.

For each of the groups identified above in Section H.3 which have more than one individual WDRU, please provide the Client Group Reference and the number of individual WDRUs you want to aggregate as one WDRU and confirm they are located within the same *region* and load forecasting boundary.

Note: If the WDRUs within a group are not in the same *region* or load forecasting boundary, then you will need to apply to aggregate them separately.



Please clearly mark all attachments, unless otherwise specified, as '**Attachment to Section G.4**' and number each document consecutively before enclosing in the zip file.

3.7.5 Section G.5. Obligations and Compliance

It is important for anyone considering applying to be a DRSP to familiarise themselves with the NER along with related procedures, and in particular the [WDRG](#), the [Wholesale Demand Response Dispatch Conformance Framework](#), [Dispatch Operating Procedure](#) (see 'SO_OP_3705 – Dispatch') and the [Baseline Eligibility Compliance and Metrics Policy](#) published on AEMO's website.

You are asked to declare you understand:

1. Under clause 3.8.3(b3) when approving an application for aggregation AEMO may impose on a DRSP such terms and conditions as AEMO determines, which may include specification of MRC of the aggregated WDRU and the circumstances AEMO requires aggregated WDRU to be disaggregated. This is true for both AEMO required disaggregation or DRSP requested aggregation.

The DRSP must comply with the conditions under NER clause 3.8.3 (b4).

Note: DRSPs who wish to reaggregate existing/new WDRU(s) into existing/new aggregation(s) so each aggregation is treated as 1 WDRU must apply to AEMO to do so using NER 3.8.3(a2). Please refer to Subsequent WDRU application form.

2. A DRSP must notify AEMO if a load which the DRSP has classified as a WDRU ceases to be a qualifying load:
 - as soon as practicable; and
 - in any event, no later than 10 business days after the DRSP becomes aware of this cessation.

This load ceases to be classified as a WDRU, from the time the DRSP gives this notice (NER 2.3.6(k) and (l)).

The DRSP must then submit bids to vary the available capacity of the remaining WDRUs, if any, within the aggregated WDRU group and review whether the Schedule 3.1 bid and offer validation needs to be updated.

Note: DRSPs who wish to vary their Schedule 3.1 bid and validation data will need to apply to AEMO to do so.

3. A DRSP may notify AEMO that the DRSP wishes to terminate its classification of a load as a WDRU, in the same way that any Registered Participant may terminate classifications of relevant loads. This notice must specify a date on which the DRSP wishes the termination to occur (NER 2.10.1(a)(1) and (c)).

In the event a DRSP terminates its classification of a load, the DRSP must:

- specify a prospective effective date of the load's termination;
- from this effective date:
 - submit dispatch bids with zero availability in respect of the terminated load; and
 - specify a value of 0 MW in the Schedule 3.1 bid and offer validation data, if the DUID-Level MRC of the remaining aggregated WDRU(s) is < 1 MW.

Note: A DRSP who wishes to:

- terminate its classification should refer to [Deregister from the NEM](#).
- vary their Schedule 3.1 bid and validation data will need to apply to AEMO to do so.

4. DRSP may elect to withdraw a baseline non-compliant WDRU from an aggregated WDRU (NER 3.10.4(c)), either:

- temporarily, until the WDRU ceases to be baseline non-compliant or
- permanently

Note: Under the Baseline Eligibility Compliance and Metrics Policy Section 4.7.2.2 (d) If the removal of the WDRU is to be permanent the DRSP must request declassification for the WDRU and request a *maximum responsive component* for the aggregated WDRU.

Note: A DRSP who wishes to:

- terminate its classification as a DRSP should refer to [Deregister from the NEM](#).
- vary their Schedule 3.1 bid and validation data will need to apply to AEMO to do so.

5. As a term and condition of AEMO approving a classification/aggregation application under NER 2.3.6/3.8.3, if subsequently an aggregation's DUID-Level MRC becomes <1 MW, then AEMO will request the declassification and disaggregation of all the aggregated loads, unless AEMO is reasonably satisfied by a contrary reason which the DRSP gives in response (eg. the DUID-Level MRC will be ≥ 1 MW in future, notwithstanding a DRSP's termination of a load's classification). This is to avoid any loads being inappropriately classified with no prospect of participating in the market or providing the service to which their classification relates.

3.8 Section H. IT Systems

When appropriate, Applicants need to provide AEMO with IT system information.

3.8.1 Section H.1. MarketNet connection

All participants requiring access to AEMO's IT market systems must have access to AEMO's private network called MarketNet. As part of processing an application, AEMO's network specialist will liaise with your IT Technical Network Contact (or third party as organised by you) to setup a primary and secondary connection according to your request. You must acknowledge that accessing this system includes MarketNet and associated costs.

In this section, you need to select 'Yes' if you require a new MarketNet connection and provide the information requested or select 'No' if you have access to an existing connection or do not require one.

For details regarding MarketNet options and entitlements, see the [Guide to Information Systems](#) on the AEMO website.

You must acknowledge to use AEMO systems for the purposes of a DRSP you will need a MarketNet Connection. Associated costs will be required to be paid.

3.8.2 Section H.2. IT Notifications email address

It is important to receive AEMO notifications regarding IT changes or outages that may impact your business, including gas FRC Hub notifications (if applicable).

Please have your IT staff set up and maintain a group email address with an appropriate distribution list for this to occur (individual email addresses are not accepted).

Once established, enter your organisation's email address in the space provided.

3.8.3 Section H.3. e-Hub access

AEMO has a private communication platform called e-Hub which supports the exchange of information between participants and AEMO using APIs. The e-Hub is accessible over MarketNet or the internet.

The e-Hub includes:

- An API Developer portal
- An API Gateway

Not all applicants require e-Hub access and access may be optional or mandatory. An example where a DRSP might wish access is if they have agreed to obtain metering data from a Meter Data Provider through the e-hub. If you require e-Hub access, select 'Yes' then fill in the appropriate fields, or select 'No' if you do not.

To access, an AEMO-signed TLS certificate is required, please see the [Manage TLS Certificates](#) guide.

Note: Metering data is generally transacted between participants using the B2B e-Hub as the communication tool. Participants can arrange to have metering data sent via a different mechanism but both the initiating and receiving party must agree to this mechanism. The B2B e-Hub is the preferred method to ensure standardisation of transactions and communications.

If you want to use the B2B e-Hub, then you must get your DRSP participant id that has been created for you accredited.

Please refer to the links below for more information:

- [AEMO | Business-to-business procedures](#)
- [B2B e-Hub Accreditation Application Form](#)
- [B2B e-Hub Participant Accreditation and Revocation Process](#)
- [Guide to MSATS B2B E-Hub Self Accreditation](#)

Contact Definitions

Contact type	Definition
Control Room	Group contact details of control room, for physical plant operations. Control room must be contactable 24/7. Control room phone number should not be a mobile number or desk number of an individual. It is the Applicant's responsibility to ensure the control room phone is physically staffed at all times or transfers incoming calls to rostered individuals who can receive calls at all times.
Clearing – Primary	Responsible for Austraclear trades.
Clearing – Secondary	Secondary to above.
Company Secretary	Secretary or assistant to the Head of Organisation.
Corporate Relations Manager	Responsible for issues relating to external communication.
Dispute Management	First point of contact for the notification of disputes under NER Clause 8.2.
Emergency Messaging System	Contact who receives Whispir emergency messages. In the event of failure of the normal Market Notice message system, AEMO will communicate with registered participants using the AEMO Emergency Messaging System (Whispir). You may provide up to 5 contacts of this type.
Head of Organisation	The Managing Director or Chief Executive Officer of the Applicant organisation.
Intermittent Generator Availability	Person responsible for updating the intermittent generation availability in the MMS portal for semi and non-scheduled generators
IT notifications email address	Note: See 'IT Notifications email address' in the Form as these details are added there. Distribution list email setup on the participant side (it is not an AEMO email address). The IT notifications email address allows the participant to manage recipients of any changes or business impact communications. Examples of messages sent to the generic email address include the AEMO Help Desk Bulletin and Change Notices.
IT Security – Primary	Primary IT contact for participant security and systems access. Will receive the MarketNet credentials needed for access to AEMO's market systems (MMS and MSATS) from AEMO's Information and Support Hub. This will occur after AEMO implements the participant in pre-production. They become the initial MSATS participant administrator.
IT Security – Secondary	Secondary to above. Must be available 24/7.
IT Technical Network	To setup your MarketNet connection (if requested). Provision and maintenance of the network connection to MarketNet requires a suitably qualified network specialist who is ready for contact from AEMO's network specialists. This is particularly important for the security-sensitive and time-critical nature of installation and maintenance of network connections.
Operations – Bidding	First point of contact for clarification of bids and offers in the spot market. Must be available 24/7.
Operations – Manager	Person responsible for day-to-day operations at the power station. First point of contact for physical operation of plant.

Contact type	Definition
Operations – Shift Supervisor	Senior on shift who manages power station controllers.
Operations – Trading Manager	Senior person within organisation with extensive knowledge of spot market operations.
Prudentials – Primary	Responsible for trading limit breaches and bank guarantees.
Prudentials - Secondary	Secondary to above.
Registration	AEMO Onboarding's primary point of contact with the Applicant in regard to their registration. Able to liaise extensively within their organisation and with the different teams in AEMO. This person nominated in this Form must also be specified in the WDRU_Aggregation.csv.
Telemetry	Responsible for the remote monitoring and control signals exchanged with AEMO in respect of the generating system. For semi-scheduled generators, this includes signals required under the Energy Conversion Model.
Senior to Settlements Mgr	For example, Chief Financial Officer or General Manager.
Settlements - Manager	Senior person within organisation with extensive knowledge of Settlement processes. Nominated 'Registration' contact in Settlements Direct. Receives formal correspondence such as Maximum Credit Limit (MCL) Letters, and is contacted if there are Settlements queries.
Trading Room	Group contact details of trading room or trading desk, for bidding operations. Trading room must be contactable 24/7. Trading room phone numbers should not be a mobile number or desk number of an individual. It is the Applicant's responsibility to ensure the trading room phone is physically staffed at all times or transfers incoming calls to rostered individuals who can receive calls at all times.

FCAS_NMI.csv

Please refer to the following table when creating the csv file to identify the loads and their FCAS capability.

Header in CSV	Required Format
NMI Appendix B.	<ol style="list-style-type: none"> 1. Required; and 2. Must be unique to your ABN 3. Must be 10 digits 4. NMI must be status "A" (active) in MSATS e.g. cannot be D,X,G,N etc. 5. Must not be classified or in assessment for any other market participant.
Site Name	<ol style="list-style-type: none"> 1. Required; and 2. When provided, it must be minimum 3 and maximum 50 characters in length.
Role	<ol style="list-style-type: none"> 1. Required, identifies the role the participant has in relation to the load that is the subject of the application. 2. Must be, Market Customer, SGA or DRSP
Declassification date	<ol style="list-style-type: none"> 1. Required if application type is 'declassify' 2. Date must be within 14 days of the submission of the application to AEMO. 3. Must be in the following format: <ul style="list-style-type: none"> – dd/mm/yyyy or d/mm/yyyy
Application Type	<ol style="list-style-type: none"> 1. Required; and 2. Value in this column must be: <ul style="list-style-type: none"> ○ New: a new load, identified by the NMI, to be classified, and aggregate if applicable. ○ Amend: attributes for a classified NMI changes. ○ The amendment of one or more NMI maximum capacities for any service will result in the reassessment of the DUID-level maximum capacity. ○ Declassify: a connection point's classification is to be terminated. ○ Declassification of classification do not need AEMO's approval. Therefore, the deregistration effective date will be as the date inserted into PMS deregistration effective date. This cannot be changed once submitted. ○ Add: add a previously classified connection point, as identified by it's NMI, to this DUID from another.

Header in CSV	Required Format
	<ul style="list-style-type: none"> Remove: move a connection point, as identified by it's NMI, from this DUID to another.
Lower Frequency Setting	<p>This setting identifies the lower FCAS frequency deviation setting of a switching controller or the upper limit of the frequency dead-band of a variable controller.</p> <ol style="list-style-type: none"> Required; and Must be 3 decimal places Must be 5 digits e.g. 50.150 Hz
Raise Frequency Setting	<p>This setting identifies the raise FCAS frequency deviation setting of a switching controller or the lower limit of the frequency dead-band of a variable controller.</p> <ol style="list-style-type: none"> Required; and Must be 3 decimal places Must be 5 digits e.g.,49.850 Hz
Max Cap LOWER1SEC	<ol style="list-style-type: none"> Required; and Must be the MW value Must be 3 decimal places Must be 0.000 MW if not registering in the LOWER1SEC market
Max Cap LOWER6SEC	<ol style="list-style-type: none"> Required; and Must be the MW value Must be 3 decimal places Must be 0.000 MW if not registering in the LOWER6SEC market
Max Cap LOWER60SEC	<ol style="list-style-type: none"> Required; and Must be the MW value Must be 3 decimal places Must be 0.000 MW if not registering in the LOWER60SEC market
Max Cap LOWER5MIN	<ol style="list-style-type: none"> Required; and Must be the MW value Must be 3 decimal places Must be 0.000 MW if not registering in the LOWER5MIN market
Max Cap RAISE1SEC	<ol style="list-style-type: none"> Required; and Must be the MW value Must be 3 decimal places Must be 0.000 MW if not registering in the RAISE1SEC market

Header in CSV	Required Format
Max Cap RAISE6SEC	<ol style="list-style-type: none"> 1. Required; and 2. Must be the MW value 3. Must be 3 decimal places 4. Must be 0.000 MW if not registering in the RAISE6SEC market
Max Cap RAISE60SEC	<ol style="list-style-type: none"> 1. Required; and 2. Must be the MW value 3. Must be 3 decimal places 4. Must be 0.000 MW if not registering in the RAISE60SEC market
Max Cap RAISE5MIN	<ol style="list-style-type: none"> 1. Required; and 2. Must be the MW value 3. Must be 3 decimal places 4. Must be 0.000 MW if not registering in the RAISE5MIN market

FCAS_Group.csv

Appendix C.

Please refer to the following table when creating the csv file to submit information relating to the ASL group.

Header in CSV	Required format
Application Reference	<p>This reference is used to identify your PMS application. It must not change throughout this application's lifecycle. This is not a system generated identifier.</p> <ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 3 and maximum 50 characters long; and 3. Must be unique across PMS. <p>Ensure this reference is intuitive to your portfolio and the individual PMS application.</p>
Application Version	<p>This number identifies the version of the application submitted to AEMO. Eg If this is the initial submission then the version will be 1. Should you need to provide further information or clarification then the next submission the version will be 2 etc.</p> <ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 50 characters;
Client Group Reference	<p>This is the informal name of the group, and is also considered the 'DUID name'.</p>

Header in CSV	Required format
	<ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 20 characters.
Group Name	<p>A group can contain one or more loads (identified by their NMI) that you wish to classify as ASL.</p> <p>This is the formal name of the group. This name is provided by you and unique to your portfolio. The name is visible to you and AEMO and cannot be changed.</p> <ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 50 characters; 3. Must have only one group in one .csv (e.g. cannot have two+ groups); and 4. Must be unique to your portfolio.
Technology Type	<ol style="list-style-type: none"> 1. Required; and 2. Either Switching, Variable or Combined
DUID	<p>This is the dispatchable unit identifier. This ID cannot change.</p> <ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 3 and maximum 8 characters; and 3. Must be unique in EMMS production.
Region	<ol style="list-style-type: none"> 1. Required; and 2. Must be only one of the following dispatch regions: <ol style="list-style-type: none"> a. NSW1 b. QLD1 c. SA1 d. TAS1 e. VIC1
Registration Contact Name	<ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 50 characters.
Registration Contact Position	<ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 50 characters
Registration Contact Email	<ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 5 characters and maximum 250 characters; and 3. Must be a valid email address

Header in CSV	Required format
Registration Contact Phone	<ol style="list-style-type: none"> Required; and Must be 8-10 digits only; Must be provided if Registration Contact Mobile is not provided; and No spaces. <p>Ensure phone number is not truncated</p>
Registration Contact Mobile	<ol style="list-style-type: none"> Required; and Must be 10 digits only (Australian mobile format without '+61'); Must be provided if Registration Contact Phone is not provided; Must start from '04'; and No spaces. <p>Ensure phone number is not truncated</p>

FCAS_GroupService.csv

Appendix D.

Please refer to the following table when creating the csv file to identify the exclusion days. This csv must be included in the zip, even if you have no exclusion days to report.

Header in CSV	Required format
Bid Type	<ol style="list-style-type: none"> Required Must be one of LOWER1SEC, LOWER6SEC, LOWER60SEC, LOWER5MIN, RAISE1SEC, RAISE6SEC, RAISE60SEC, RAISE5MIN
Maximum Capacity	<ol style="list-style-type: none"> Identifies the maximum capacity of each service provided by the group Must be an integer, rounded down to the nearest MW.
Minimum Enablement	<ol style="list-style-type: none"> Required; and Must be an integer Must be the MW value Will be 0 MW for a non-scheduled load
Maximum Enablement	<ol style="list-style-type: none"> Required; and Must be an integer Must be the MW value Will be 0 MW for a non-scheduled load
Maximum Lower Angle	<ol style="list-style-type: none"> Required; and Must be an integer Will be 90° for a non-scheduled load
Maximum Upper Angle	<ol style="list-style-type: none"> Required; and Must be an integer Will be 90° for a non-scheduled load

FCAS_Device.csv


Please refer to the following table when creating the csv file to identify the exclusion days. This csv must be included in the zip, even if you have no exclusion days to report.

Header in CSV	Required format
Appendix E. NMI	<ol style="list-style-type: none"> 1. Required 2. Must be unique to your ABN 3. Must be 10 digits; 4. NMI must be status "A" (active) in MSATS e.g. cannot be D,X,G,N etc. 5. Must not be classified or in assessment for any other market participant.
Device Type	<ol style="list-style-type: none"> 1. Required; 2. Contains the primary technology used to deliver FCAS. Some examples of Device type are Storage or Load 3. Must be between 3-50 characters 4. Must be alphanumeric string
Device Manufacturer	<ol style="list-style-type: none"> 1. Required; 2. Contains the name of the device manufacturer 3. Must be between 3-50 characters 4. Must be alphanumeric string
Device Model	<ol style="list-style-type: none"> 1. Required; 2. Contains the Model and version number of the device 3. Must be between 3-50 characters 4. Must be alphanumeric string
Number of Devices	<ol style="list-style-type: none"> 1. Required; 2. Must be 1-9999 digits 3. Must be numeric 4. Must be integer
Control box model	<ol style="list-style-type: none"> 1. Required; 2. Contains the name of the control box 3. Must be 3-50 characters 4. Must be alphanumeric string
Control Box Identifier Appendix F.	<ol style="list-style-type: none"> 1. Required; 2. Contains the Model and version number of the control box 3. Must be 1-9999 4. Must be numeric 5. Must be integer

WDRU_NMI

Please refer to the following table when creating the csv file to identify the qualifying load and provide specific information in respect their MRC and baseline requirements.

Header in CSV	Required Format
NMI	<ol style="list-style-type: none"> 1. Required 2. Must be unique to your ABN 3. Must be 10 digits; 4. Must have one of Meter Type 1, 2, 3, 4, and must be capable to provide settlement data in five-minute intervals. 5. Must be classified as 'large' in MSATS, unless classified as 'small' and the NERR aggregated premises declaration has been provided; and 6. NMI must be status "A" (active) in MSATS e.g. cannot be D,X,G,N etc.
Site Name	<ol style="list-style-type: none"> 1. Required; and 2. When provided, it must be minimum 3 and maximum 50 characters in length.
Retail Customer	<ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 and maximum 120 characters in length.
NERR aggregated premises	<ol style="list-style-type: none"> 1. Must be provided if NMI classification is Small 2. Value must only be one of 'Y', 'N', 'Yes', and 'No'; and 3. Cannot be 'Y' or 'Yes', if Aggregation Region = VIC1.
Baseline Methodology ID	<ol style="list-style-type: none"> 1. Required 2. The Baseline Methodology ID (BLM ID) must exist in Baseline Methodology Register; 3. The BLM ID must be current in the Baseline methodology register; and 4. Must only be alphanumeric.
MRC (MW)	<ol style="list-style-type: none"> 1. Required; and 2. Must be a number greater than 0 with up to 3 decimal places. Acceptable format example: <ol style="list-style-type: none"> 1. a positive integer that is without a decimal (e.g. 1, 2, 4, 20 etc.); 2. a positive number with up to 3 decimal values (e.g. 1.1 or 10.12 or 20.123); and 3. a positive number that has a decimal but with no decimal value. E.g. when '10.' is provided then the system will add '0' after '10.' e.g. '10.0'.
MRC Reason	<ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 120 characters. 3. If more than 120 characters required to explain MRC reason then please attach a supporting document. 4. Do not use non-alpha numeric symbols

Header in CSV	Required Format
	<p> Please clearly mark all attachments, unless otherwise specified, as 'Attachment to Appendix F' and number each page consecutively before enclosing in the zip file.</p>
Application Type	<ol style="list-style-type: none"> 1. Required; and 2. Value in this column must be 'New'.
Declassification date	<ol style="list-style-type: none"> 1. Required if application type is 'declassify' 2. Date must be within 14 days of the submission of the application to AEMO. 3. Must be in the following format: <ol style="list-style-type: none"> 1. dd/mm/yyyy or d/mm/yyyy

WDRU_NMI_ExclusionDay

Please refer to the following table when creating the csv file to identify the exclusion days. This csv must be included in the zip, even if you have no exclusion days to report.

Header in CSV	Required format
Appendix G.	<ol style="list-style-type: none"> 1. Must be provided; 2. Each NMI can be repeated on different rows and do not need to be in consecutive rows; and 3. When provided, each NMI in this file must also exist in WDRU_NMI.csv file (based on exact match)
Exclusion day start date	<ol style="list-style-type: none"> 1. Where a NMI is provided in this file an exclusion start date must be provided; 2. Start date must be in a format of: dd/mm/yyyy or d/mm/yyyy; 3. Only one date must be provided; and 4. Must be a historical date. <p>Date ranges provided as Exclusion Days are all inclusive. i.e. the start and end dates are considered exclusion days as well as the days within the range.</p>
Exclusion day end date	<ol style="list-style-type: none"> 1. Where a start date is provided in this file an exclusion end date must be provided; 2. End date must be in a format of: dd/mm/yyyy or d/mm/yyyy; 3. End date must always be the same day as the exclusion start date or later; 4. Only one date must be provided; and 5. Must be a historical date. <p>Date ranges provided as Exclusion Days are all inclusive. i.e. the start and end dates are considered exclusion days as well as the days within the range.</p>
Exclusion day reason	<ol style="list-style-type: none"> 1. Where a NMI is provided in this file an exclusion day reason must be provided; and 2. Reason must be between 1 and 120 characters long.

WDRU_Group

Please refer to the following table when creating the csv file to submit information relating to the WDRU group.

Header in CSV	Required format
Application Reference	<p>This reference is used to identify your application. It must not change throughout this application's lifecycle. This is not a system generated identifier.</p> <ol style="list-style-type: none"> 1. Required; 2. Must be minimum 3 and maximum 50 characters long; and 3. Must be unique across PMS. <p>Ensure this reference is intuitive to your portfolio and the individual PMS application</p>
Application Version	<p>This number identifies the version of the application submitted to AEMO. Eg If this is the initial submission then the version will be 1. Should you need to provide further information or clarification then the next submission the version will be 2 etc.</p> <ol style="list-style-type: none"> 1. Required; 2. Must be minimum 1 character and maximum 50 characters;
Group Name	<p>A group can contain one or more loads (identified by their NMI) that you wish to classify as WDRU.</p> <p>This is the formal name of the group. This name is provided by you and unique to your portfolio. The name is visible to you and AEMO and cannot be changed.</p> <ol style="list-style-type: none"> 1. Required; 2. Must be minimum 1 character and maximum 50 characters; 3. Must have only one group in one .csv (e.g. cannot have two+ groups); and 4. Must be unique to your portfolio.
Registration Contact Name	<ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 50 characters.
Registration Contact Position	<ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 50 characters

Header in CSV	Required format
Registration Contact Email	<ol style="list-style-type: none"> 1. Required; 2. Must be minimum 5 characters and maximum 250 characters; and 3. Must be a valid email address
Registration Contact Phone	<ol style="list-style-type: none"> 1. Required; 2. Must be 8-10 digits only; and 3. Must be provided if Registration Contact Mobile is not provided. 4. No spaces <p>Ensure phone number is not truncated</p>
Registration Contact Mobile	<ol style="list-style-type: none"> 5. Required; 6. Must be 10 digits only (Australian mobile format without '+61'); 7. Must be provided if Registration Contact Phone is not provided; and 8. Must start from '04'. 9. No spaces <p>Ensure phone number is not truncated</p>
Client Group Reference	<p>This is the informal name of the group, and is also considered the 'DUID name'.</p> <ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 20 characters.
DUID	<p>This is the dispatchable unit identifier. This ID cannot change.</p> <ol style="list-style-type: none"> 1. Required; 2. Must be minimum 3 and maximum 8 characters; and 3. Must be unique in EMMS production.
MRC (MW)	<p>This is the DUID-level MRC</p> <ol style="list-style-type: none"> 1. Required; 2. Must be integer value (no decimals accepted) 3. Must be a positive number no less than 1; and 4. Must accept minimum 1 to maximum 4 digits only. Note: 10000+ and 'MW' unit / text is not accepted. 5. Must be rounded down to the full integer that can be dispatched
MRC Reason	<ol style="list-style-type: none"> 1. Required; and 2. Must be minimum 1 character and maximum 120 characters

Header in CSV	Required format
	3. Do not use non-alpha numeric symbols.
Maximum Ramp Rate (MW/minute)	<ol style="list-style-type: none"> 1. Required; 2. Must be a positive number greater than 1; and 3. Must be minimum 1 to maximum 4 digits only.
Region	<ol style="list-style-type: none"> 1. Required; and 2. Must be only one of the following dispatch regions: <ol style="list-style-type: none"> a) NSW1 b) QLD1 c) SA1 d) TAS1 e) VIC1
Telemetry Status	<ol style="list-style-type: none"> 1. Required; and 2. Must be a value of: Y, Yes, N, or No and any caps (upper, mix, lower caps) are accepted.
Telemetry Exemption	<p>If Telemetry Exemption is yes, you are applying to be exempt from the requirements of Section 3 of the Wholesale Demand Response Guidelines.</p> <ol style="list-style-type: none"> 1. Accepted values are: Y, Yes, N, or No and any caps (upper, mix, lower caps) are accepted; and 2. Must be provided only when SCADA Status is 'n / no'.
Telemetry Contact Name	<ol style="list-style-type: none"> 1. Must be provided when Telemetry Status is 'yes'; and 2. Must be minimum 1 character and maximum 50 characters.
Telemetry Contact Position	<ol style="list-style-type: none"> 1. Must be provided only when Telemetry Status is 'yes'; and 2. Must be minimum 1 character and maximum 50 characters.
Telemetry Contact Email	<ol style="list-style-type: none"> 1. Must be provided only when the Telemetry Status is 'yes'; 2. Must be minimum 5 characters and maximum 250 characters; and 3. Must be a valid email address.
Telemetry Contact Phone	<ol style="list-style-type: none"> 1. One of Telemetry Contact Phone or Mobile must be provided only when Telemetry Status is 'yes'; 2. Must be 8-10 digits only; and 3. No spaces. <p>Ensure phone number is not truncated</p>

Header in CSV	Required format
Telemetry Contact Mobile	<ol style="list-style-type: none"> 1. One of Telemetry Contact Phone or Mobile must be provided only when Telemetry Status is 'yes'; 2. Must be provided only when Telemetry Status is 'yes'; 3. Must be 10 digits only; 4. Must start from '04'; and 5. No spaces. <p>Ensure phone number is not truncated</p>