



Wholesale Demand Response impacts on distribution networks - Workshop 2

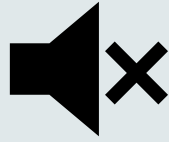
10:30am – 12:30pm (AEDT), Friday 11 December 2020

**PLEASE NOTE THIS MEETING WILL BE RECORDED FOR
THE PURPOSE OF PREPARING MINUTES**

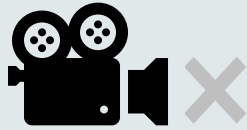
*We acknowledge the
Traditional Owners of country
throughout Australia and recognise
their continuing connection to
land, waters and culture.*

*We pay our respects to their
Elders past, present and emerging.*

Online forum housekeeping



1. Please mute your microphone, this helps with audio quality as background noises distract from the information being shared.



2. Video is optional, but having it turned off helps with webinar performance and minimises distractions.



3. We ask that you utilise the Chat function for any questions or comments you may have if you are unable to use audio.



4. If you have dialled in via phone, could you please email your name and organisation to WDR@aemo.com.au for our records.



5. Be respectful of all participants and the process.

AEMO Competition Law Meeting Protocol

AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO regarding proposed reforms or other initiatives, all participants agree to adhere to the CCA at all times and to comply with this Protocol. Participants must arrange for their representatives to be briefed on competition law risks and obligations.

Participants in AEMO discussions **must**:

1. Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
2. Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
3. Immediately and clearly raise an objection with AEMO or the Chair of the meeting if a matter is discussed that the participant is concerned may give rise to competition law risks or a breach of this Protocol

Participants in AEMO meetings **must not** discuss or agree on the following topics:

1. Which customers they will supply or market to
2. The price or other terms at which Participants will supply
3. Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid
4. Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)
5. Refusing to supply a person or company access to any products, services or inputs they require

Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer terms and conditions, supply terms and conditions, sales, marketing or procurement strategies, product development, margins, costs, capacity or production planning.

Agenda

NO	TIME (AEDT)	AGENDA ITEM	RESPONSIBLE
1	10:30am – 10:35am	Welcome and introductions	Ruth Guest (Chair)
2	10:35am – 10:40am	Session purpose and objectives	Ruth Guest
3	10:40am – 11:10am	Responses to actions from previous workshop	Ruth Guest
4	11:10am – 11:40am	WDR Guidelines	Greg Ruthven
5	11:40am – 11:45am	Next steps and meeting close	Ruth Guest

Purpose and objectives

Ruth Guest

Forum Objectives

- **Purpose:** a second workshop for exploring Wholesale Demand Response (WDR) impacts on DNSPs.
- **Objectives:**
 - Endorse meeting notes from prior workshop
 - Respond to topics and action items that were raised at the first DNSP meeting on 26 October 2020
 - Discuss aspects of the draft WDR guidelines that affect DNSPs
 - Establish next steps

Responses to actions from previous workshop

Ruth Guest

Responses to previous meeting's actions (1/4)

#	Topic	Action	Response
1	Overview of WDR mechanism rule	<p>AEMC to provide reasoning for historical information on the specific location of where WDR was provided not being made available to market participants.</p>	<p>The Commission, in the WDR final determination, did not consider it was necessary for the mechanism to provide historical information on the amount and specific location of WDR to market participants. The final rule provides DNSPs with information on which NMI's are engaging in WDR and DNSPs have access to metering data for each NMI on their networks.</p> <p>Through this data the Commission considered that DNSPs would be able to assess which customers are engaging in WDR and each consumption profile. DNSPs also have the ability to engage, on commercial terms, with large demand responsive customers to assist with the operational management of their networks. AEMO will also publish information on WDR collected through the demand side participation portal.</p> <p>Additionally, as noted in the final determination - <i>until it becomes apparent how much wholesale demand response is provided through the mechanism, it is not clear whether additional information regarding its dispatch would meaningfully improve DNSPs' ability to operate their networks.</i></p>
2	AEMO's WDR implementation program	<p>AEMO to investigate how DNSPs will have visibility of WDR at a connection point where that CP is assigned in CATS to an Embedded Network Manager instead of the DNSP.</p>	<p>On the basis that DNSPs require it for system/supply, security, reliability/safety, or proper market operation, AEMO may provide:</p> <ul style="list-style-type: none"> • Mapping of DUID: NMIs for TNIs of DNSP • Information on NMI-Level Maximum Responsive Component (MRC) • Information which relates to DNSP's network, but without direct connection, e.g. at child CP connected to parent CP that can impact DNSP's network. <p>AEMO is exploring how to identify these connection points and considering reports that include this detail.</p>

Responses to previous meeting's actions (2/4)

#	Topic	Action	Response
3	WDR impacts on DSNPs	AEMO to investigate the issues around whether there will be any interaction between WDR and the NER 4.3.5 (a) requirement of a 60 % automatic interruptible load requirement.	NSPs have to demonstrate 60% automatic interruptible load under normal conditions. Under normal conditions, WDR will likely not be occurring.
4		AEMO to clarify any interactions between WDR and "pain sharing".	Pain sharing occurs across regional or organisational boundaries. Proportion of shedding is pre-defined and pre-documented under normal conditions. WDR will therefore not impact the quantum of load shed.
5	Workshop: Further WDR issues and opportunities	AEMO to investigate whether there are any confidentiality barriers to providing DNSPs with real-time information on WDR events	<p>AEMO considers that it may not provide DNSPs with other information, as a default proposition. See also issue #1 in the WDR Guidelines discussion.</p> <p>The WDRM is intended "not to provide more information" to NSPs, for purposes of NSPs' interests in network service compliance/planning (AEMC, Final Determination, pages 147-8). For reasons of cost and policy established by the AEMC this functionality is not being considered at this time.</p> <p>However, AEMO does recognise that this is a growing area of interest and our DER program is working with multiple DNSPs to find ways to share data in relation to VPP operations and the trialling of Distribution Marketplaces (Project Edge).</p> <p>This is also the subject of work being undertaken by the ESB P2025 market redesign project which is set to produce a Maturity plan to define roles and responsibilities with the outcome being AEMO and DNSPs working together to encourage greater demand side participation.</p>

Responses to previous meeting's actions (3/4)

#	Topic	Action	Response
6	Workshop: Further WDR issues and opportunities	AEMO to establish whether a DNSP would be provided with the information about locations and impact of aggregation for all the customers within the aggregation in the case where a WDR aggregation comprised of multiple distribution and/or transmission- connected customers.	<p>On the basis that DNSPs require it for system/supply, security, reliability/safety, or proper market operation, AEMO may provide:</p> <ul style="list-style-type: none"> • Mapping of DUID: NMIs for TNIs of DNSP • Information on NMI-Level Maximum Responsive Component (MRC) • Information which relates to DNSP's network, but without direct connection, for example: <ul style="list-style-type: none"> • TNSP CP that can impact DNSP's network • Neighbouring DNSP, but in same aggregation (e.g. Victoria where there is more than 1 DNSP) <p>AEMO is exploring how to identify these connection points and considering reports that include this detail.</p>
7		AEMO to establish a process to enable WDR disaggregation requests.	AEMO will engage with stakeholders on this process in Q2, 2021
8		<p>For the purposes of registering WDR aggregations, AEMO to articulate:</p> <ul style="list-style-type: none"> • the distribution network information it would like to hold • how that information could be accessed by various participant types e.g. potential DRSPs 	<p>AEMO is still considering and needs to understand in greater detail what DNSPs can feasibly provide.</p> <p>In this meeting, AEMO will explore various options with DNSPs for how DNSP impacts can be taken into account in aggregation assessments (see slide 17 below).</p>

Responses to previous meeting's actions (4/4)

#	Topic	Action	Response
9		Attendees to provide indicative views on furnishing AEMO with information on the weaker/stronger areas of their networks for the purposes of assessing proposed WDRU aggregations during the registration process.	<p>Three DNSP responses. Key points:</p> <ul style="list-style-type: none"> • System strength is affected by the relative size of any change rather than the absolute change and is location dependent. • More efficient to manage aggregations proactively during the application registration stage rather than reactively • Standardising information exchange between DNSPs and AEMO would be useful • Resource availability to provide timely information could be an issue.
10	Workshop: Further WDR issues and opportunities	AEMO to provide explanation of when DNSPs will/will not have access to telemetry data.	<p>AEMO considers that it may not provide DNSPs with other information, as the default proposition.</p> <p>The WDRM is intended “not to provide more information” to NSPs, for purposes of NSPs’ interests in network service compliance/planning.” [AEMC, Final Determination, pages 147-8]</p> <p>However, AEMO does recognise that this is a growing area of interest and our DER program is working with multiple DNSPs to find ways to share data in relation to VPP operations and the trialling of Distribution Marketplaces (Project Edge).</p> <p>This is also the subject of work being undertaken by the ESB P2025 market redesign project which is set to produce a Maturity plan to define roles and responsibilities with the outcome being AEMO and DNSPs working together to encourage greater demand side participation.</p>
11	General questions	Attendees to provide feedback on the format of the workshop and suggestions for future improvements.	No responses received

WDR Guidelines

Greg Ruthven

Potential points of DNSP interaction within scope of WDR Guidelines

1. Arrangements for the provision of information about WDRU MRC, baseline methodology and baseline settings
2. Decision to approve/reject classification of a load as WDRU
3. Decision to approve/reject aggregation of WDRUs for the purpose of central dispatch

Draft WDR guidelines:

1. Provision of WDRU data

WDRM Rule explicit on access to baseline data for DRSPs and retailers: NMI, DUIDs, MRC, baseline methodology/settings, dispatch data

No NER provision for baseline data to be shared with DNSPs

NER 7.15.6(a): "Baseline data is confidential and must be treated as confidential information in accordance with the Rules"

NEL 54G(1): AEMO is authorised to disclose protected information if the disclosure is necessary for:

- the safety, reliability or security of the supply of electricity or the national electricity system
- the proper operation of the NEM

Publicly available WDR data:

- Bid and offer validation data for DUID: DRSP, DUID, region, MRC
- Dispatch data for DUID: bids, dispatch instructions, availabilities (day D+1)

DNSPs will see DRSP role in MSATS, metering data

For transparency, AEMO preference is to describe any provision of confidential information to DNSPs in the WDR Guidelines

Indicative draft determination questions

- Why does on-market WDR participation trigger a need for DNSPs to receive additional information?
- What WDR data would be valuable to DNSPs? How would it be used?
- What are the justifications for provision of confidential WDR data to DNSPs, which would satisfy the high threshold in the NER?

Draft WDR guidelines:

2. WDRU Classification

Decision contingent upon AEMO satisfaction that:

- A. **NER 2.3.6(e)(2)**: "the *load* is able to be used to provide [WDR] in accordance with the *Rules*"
- B. **NER 2.3.6(e)(4)**: "adequate communications and/or telemetry" is in place

AEMO may approve subject to terms and conditions that AEMO considers necessary to ensure that the NER can be met.

AEMO's initial proposal re telemetry:

- Required for individual WDRUs or aggregations with MRC \geq 5 MW
- May be required $<$ 5 MW in congested areas of the power system
- Exemption process
- Mandatory data: single stream per DUID, estimated MW deviation
- Power System Data Communications Standard

Indicative draft determination questions

- What input do DNSPs consider they can/should provide in respect of item A, including any limitations/constraints on the ability of a WDRU to participate?
- If any limitations are suggested for a WDRU:
 - Why does WDR participation trigger these limitations?
 - Why do such limitations not apply today?
- Do DNSPs receive SCADA for any individual loads today?
 - If so, what are the options for onward provision to AEMO?
- Do DNSPs consider that they require WDRU telemetry data where they don't already have SCADA visibility?
 - If so, why does WDR participation trigger this requirement? Why is it not required today?

Draft WDR guidelines:

3. WDRU aggregation

NER 3.8.3(e): AEMO must approve/reject application within 20 business days

NER 3.8.3(b2)(2): Decision contingent upon AEMO satisfaction that "*power system security* must not be materially affected by the proposed aggregation"

AEMO initially proposed that security assessment required where:

- Required for aggregations with MRC \geq 5 MW
- May be required $<$ 5 MW in congested areas of the power system.

Aggregation to be approved unless AEMO considers that it will need to represent the WDRUs as two or more DUIDs within constraints.

AEMO may approve subject to terms and conditions that may include circumstances in which AEMO may require an aggregation to be split.

AEMO considering process to include DNSP input into assessment.

Indicative draft determination questions

- Under what circumstances may an aggregation be acceptable to AEMO but problematic for a DNSP?
- Could DNSPs provide AEMO with set criteria for aggregation of WDRUs in their distribution networks, that would support AEMO's assessment of an application to aggregate WDRUs? If not, why not?
- If AEMO was to provide details of a proposed application to a DNSP for review/endorsement, how long would be needed to assess and advise AEMO?
- If a DRSP was to approach a DNSP before applying to AEMO to aggregate (such as through the connection enquiry process) could DNSPs provide endorsement to the DRSP that would be on-forwarded to AEMO?
 - How long would such an assessment take? Do any assessment time limits apply?
 - What would be the cost for a DRSP?

Next steps

Ruth Guest

Next steps

- Reconvene in early 2021 during consultation period for draft WDR Guidelines (between 14 Jan and 12 Feb 2021), likely in early Feb.

MEETING CLOSE

Thank you for your attendance
and participation!



AEMO

AUSTRALIAN ENERGY MARKET OPERATOR