

Guide to NEM Prudential Dashboard

4.01 Draft May 2020

Provides an understanding of the NEM Prudential Dashboard interface

Important Notice

PURPOSE

This Guide to NEM Prudential Dashboard (guide), prepared by the Australian Energy Market Operator (AEMO), provides guidance for NEM Prudential Dashboard under the National Electricity Rules (NER)(Rules).

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4.01 Imports version from Word, updates name to AEMO standards and updates content to cover the current NEM Prudential Dashboard web portal. Last update: Monday, 11 May 2020 2:58 PM

DOCUMENTS MADE OBSOLETE

The release of this document changes any previous versions of Guide to NEM Prudential Dashboard and Prudential Dashboard Support Information.

FEEDBACK

Your feedback is important and helps us improve our services and products. To suggest improvements, please contact AEMO's support hub.

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Purpose

This document provides an understanding of the NEM Prudential Dashboard interface in the EMMS web portal.

Audience

This document is relevant to market participants in the NEM who require an understanding of the NEM Prudential Dashboard web interface in the EMMS web portal.

What's in this guide

- Introduction above describes the purpose. audience, what's in this guide and how to use this guide.
- Chapter 1 Need to know on page 7 provides information you need to know before using NEM Prudential Dashboard.
- Chapter 1 About NEM Prudential Dashboardon page 1 provides an overview of the NEM Prudential Dashboard, who it is for, and how to use it.
- Chapter 3 Dashboard Elements on page 14 explains the interface and provides details about the different elements of the NEM Prudential Dashboard.
- Needing Help on page 30 provides information to assist participants with IT related issues, requesting assistance from AEMO, and using the Set Participant option.
- Rules Terms on page 32 provides a list of National Electricity Rules (NER) terms used throughout this guide.

References on page 36 contains a list of resources mentioned throughout this guide.

Glossary on page 33 explains the terms and abbreviations used throughout this guide.

Index on page 37 provides and easy way to find what you are looking for.

How to use this guide

- This guide is written in plain language for easy reading.
- Where there is a discrepancy between the National Electricity Rules (NER), and information or a term in this document, the National Electricity Rules (NER) takes precedence.
- Where there is a discrepancy between the , and information or a term in this document, the take precedence.
- Text in this format indicates there is a resource on AEMO's website, for details, see References on page 36
- Text in this format indicates a link to a related resource.
- Actions to complete in the web portal interface are **bold and dark grey**.
- Rules terms used throughout this guide are listed on page 32 and defined in the National Electricity Rules (NER).
- Glossary terms are capitalised and have the meanings listed against them (see page 33).
- References to time are Australian Eastern Standard Time (AEST).

Chapter 1 Need to know

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System requirements

You access the web application using a web browser. You require:

- The website address where the application is located on AEMO's network:
 - Pre-production: https://portal.preprod.nemnet.net.au
 - Production: https://portal.prod.nemnet.net.au

The web application runs on both Windows and Unixlike operating systems.

- Markets Portal help: https://portal.preprod.nemnet.net.au/help
- A compatible web browser. For help, see **Supported web browsers**.
- Access to MarketNet. If your company is a registered participant, you probably already have access because it is set up during the registration process. For more details, see Guide to Electricity Information Systems.
- A monitor capable of 1024 x 768 screen resolution.
- A user ID and password provided by your company's participant administrator (PA) who controls access to AEMO's market systems. For more details see Guide to User Rights Management.

PAs are set up during the registration process, if you don't know who your company's PA is, contact AEMO's support hub.

Environment access

The Markets Portal gives you a clear indication of the environment you are working in by providing a different background colour for the menu:

- The pre-production environment has a green menu background
- The production environment has a blue menu background.

= AEMO Markets Portal (pre- production)	ľ	Markets Portal application Australian Energy Market Operator Limited (NEMMCO) Participant User V	?
MMS	-	Data Model Files Subscription for Australian Energy Market Operator Limited	
Market Info	+	NOTE:	
Settlements	+	The latest version of the MMS Data Model is v4.27. The previous or legacy version is v4.26 You should subscribe to the new version of any legacy files you are currently subscribed to. Please ensure new files are processing	
Offerer & paissions	t	successfully before unsubscribing from legacy files.	

User rights access

To access NEM Prudential Dashboard, Participant Users must have the appropriate user rights access. The access right determines the functionalities and transactions you can use to access the web portal, batch interfaces, FTP, and API services.

Participant Administrators (PAs) authorise Participant User access in MSATS. The initial PA is set up by the AEMO system administrator as part of the registration process.

Your company's participant administrator (PA) grants you permission to use NEM Credit Support.

The entity required for access is:

 PRUDENTIAL_DASHBOARD: EMMS - Settlements - View Prudentials

Set participant

Where a Participant User has user rights assigned by more than one Participant ID, the Participant User selects the Participant ID they want to represent using the **Set Participant** option. For help, see **Setting a participant on page 1**. For more details about participant administration and user rights access, see Guide to User Rights Management.

Chapter 2 About NEM Prudential Dashboard

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The National Electricity Market is supported by a strong prudential framework so all participants that are owed money on settlement days have the confidence of receiving payment without delay. A critical element of the framework is the concept of Outstandings, being the total amount owing but not yet paid or settled. Outstandings are compared to the Trading Limit for each participant consistently throughout each business day to assess whether the Prudential Requirements are satisfied. If the outstandings exceed the trading limit, then AEMO may issue a call notice to the Market Participant. A call notice triggers an obligation under the National Electricity Rules for the participant to get the outstandings back to the typical accrual level by 11:00 AM on the next business day. This is a strong driver for each participant to manage its outstandings so that the Trading Limit is never exceeded.

The day-to-day calculation of the outstandings takes into account the latest versions of settlement calculations covering settlement days which have not yet been paid, and other transactions such as ex post Reallocations and security deposits, which may have been locked in but have not yet been incorporated within the settlement calculations.

This guide describes the information presented on the dashboard so that the participant can interpret and act responsibly to satisfy the NEM Prudential Requirements.

What NEM Prudential Dashboard is for

The NEM Prudential Dashboard provides each Market Participant with their latest prudential information. The dashboard data is updated throughout the day, including weekends and public holidays, as new prudential information becomes available. It gives a snapshot at any given time of how the participant is doing prudentially and provides readily accessible input needed for prudential management decisions.

The NEM prudential dashboard interface displays the following information:

- 1. A Trading Limit reached warning.
- 2. An early payment reminder banner for participants registered as early payers.
- 3. A Trading Margin display.
- A summary of the participant's prudential parameters, including,MCL, Credit Support, Prudential Margin, Trading Limit, Outstandings and Typical Accrual.

The dashboard displays the information for the Participant ID(s) identified in the dashboard title only.

- 5. A graph showing Outstandings, Trading Limit, and Credit Support over a 30 day period.
- 6. The Outstandings Component listed by billing week.
- 7. A list of Security Deposits that have been lodged but not yet returned.
- 8. A list of Reallocations.

					🔢 🚹 Trading lir	nit reached. Urge	nt action require	d										
			2	Note: You ha	ive nominated an early p	ayment for this s	ettlement. Payme	ent is to occur o	on 24/03/20 via									
COMPANY ID	D 3 TRADING MARGIN		PANY ID		any ID 3 TRADING MARGIN			-		3 TRADING MARGIN				ARY	SETTLEMENT	r	FINAL	
Company	pany ID \$		\$		13/01/202	20 10:10	20/03/2 YEAR 2020 W		20/03/20 YEAR 2020 WEE		25/03/2 YEAR 2020 W							
Summary	4				Prudential Graph			5				ŧ						
Max Credit Limit			50		0													
Credit Support			\$0		1000													
Prudential Margin			\$0															
Trading Limit																		
Trading Margin																		
Outstandings					Dec		Dec 18 Dec 2		Dec 27 Dec 30	Jan	Jan 05 Jan 08	Jan 11						
Typical Accrual					Trading Lim	it Outsta	ndings —— C	redit Support										
For All Calendars cli	ick here																	
A					For Security Deposits Procedures	and Templates click here			For Reallocation Procedures	click here								
Outstandings Compo	ionents 6			Ŧ	For Security Deposits Procedures Security Deposits 7	and Templates click here		Ŧ	For Reallocation Procedures Reallocations	click here		Ŧ						
Year	Week	Version	Status	Amount		and Templates click here Amount	Lodged M	± latures		click here Amount	Start	≜ End						
		Version 12	Status		Security Deposits 7		Lodged M		Reallocations 8		Start							
Year	Week			Amount	Security Deposits 7		Lodged M		Reallocations 8	Amount	Start							
Year 2019	Week 50	12	FINAL	Amount	Security Deposits 7		Lodged M		Reallocations 8	Amount	Start							
Year 2019 2019	Week 50 51	12	FINAL	Amount	Security Deposits 7		Lodged M		Reallocations 8	Amount	Start							
Year 2019 2019 2019	Week 50 51 52	12 11 10	FINAL PRELIM PRELIM	Amount	Security Deposits 7		Lodged M		Reallocations 8	Amount	Start							
Year 2019 2019 2019 2020	Week 50 51 52 1	12 11 10 10	FINAL PRELIM PRELIM PRELIM	Amount	Security Deposits 7		Lodged M		Reallocations 8	Amount	Start in 4 items							
Year 2019 2019 2020 2020	Week 50 51 52 1	12 11 10 10	FINAL PRELIM PRELIM PRELIM	Amount	Security Deposits 7	Amount			Reallocations 8	Amount								

The dashboard offers market participants the same information AEMO uses to asses prudential positions. This allows market participants to have information readily available all the time especially during the high price periods, no longer dependent on AEMO staff to advise their trading position the next morning. This guide describes the information presented on the dashboard so that market participants can interpret the display and act appropriately to satisfy all NEM Prudential Requirements. Retailer outstandings are generally greater than zero and should be monitored regularly. There are many many reasons outstandings may be impacted from one hour to the next such as a change to regional reference price (RRP) or a change to a retailer's customer numbers. An example dashboard for a typical retailer can be seen below:

COMPANY ID Company	ID	TRADING MARGIN			time (AEST) 2019 10:31	11/0	FINAL 9/2019 1019 WEEK 33		PRELIMINARY 13/09/2019 YEAR 2019 WEEK 36		SETTLE 13/09 YEAR 2010	/2019
Summary					Prudential Graph							ŧ
Max Credit Limit												
Credit Support												
Prudential Margin						_				_		
Trading Limit												
Trading Margin												
Outstandings						Aug 09 Aug 12	Aug 15	Aug 18 Aug 21	Aug 24 Aug 27	Aug 30	Sep Sep 05	Sep 08
Typical Accrual					Trading Limit	- Outst	andings	Credit Support				
For All Calendars click I					For Security Deposits Procedures a				For Reallocation Procedures click			
Outstandings Component				±	For Security Deposits Procedures a Security Deposits	nd Templates click here			Por Reallocation Procedures click R Reallocations	here		*
Year	Week	Version	Status	Amount	10	Amount	Lodged	Matures	ID C	Amount	Start	End
2019	33	12	PENDING	î			05/09/2019	13/09/2019				
2019	34	10	PREUM	100								
2019	35	0	PRELIM	100								
2019	30	CURRENT	ESTIMATE									
2019	37	CURRENT	ESTIMATE									
SUBTOTAL					SUBTOTAL	\$-3,000,000	in 1 item		SUBTOTAL	\$0	in 0 item	
					Incl in Final	50			Incl in Outstandings	\$0		
					Adjustment to Outstandings	\$-3,000,000			Adjustment to Outstandings	\$0		

Generators are market participants and have the same prudential obligations as retailers but are less likely to be in a position where outstandings are greater than zero. The dashboard provides generators with useful information about their accrued financial position with AEMO.

COMPANY ID	/ ID	TRADING MARGIN			TIME (AEST) 2019 10:31		FINAL 09/2019 R 2019 WEEK 33			PRELIMINARY 13/09/2019 YEAR 2019 WEEK 26		13/	17TLEMENT 09/2019 R 2019 WEEK 33
Summary					Prudential Graph								
Max Credit Limit		50	0		2.000.000								
Credit Support		si	0		o	_			_				-
Prudential Margin		54	0						_				
Trading Limit		51	0		[[~								
Trading Margin					-								
Outstandings					Jun 24	Jun 27 Jun	30 Jul	301.06 301.0	9	3ul 12 3ul 15	3ul 18	30/21 30/24	341 27
Typical Accrual		\$	127,165		Trading Limi	t	Outstandings	Credit Support					
For All Calendars click	, here				For Security Deposits Procedures	and Templates click	here			For Reallocation Procedures click	r here		
Outstandings Compone				±	Security Deposits	and remplated click			Ł	Realocations			
Year	Week	Version	Status	Amount	ID	Amount	Lodged	Matures		ID	Amount	Start	End
2019	27	11	PENDING	\$-54,081						201 RS	\$227,207	01/01/2019	31/12/2019
2019	28	9	PRELIM	\$-121,784						201 RS	\$17,911,929	02/04/2019	02/09/2019
2019	29	10	PRELIM	\$-81,486									
2019	30	CURRENT	ESTIMATE	\$-745,503									
2019	31	CURRENT	ESTIMATE	\$-173,476									
SUBTOTAL				\$-1,176,330	SUBTOTAL	\$0	in 0 item			SUBTOTAL	\$18,139,136	in 2 items	
					Incl in Final	\$0				Incl in Outstandings	\$18,139,136		
					Adjustment to Outstandings	\$0				Adjustment to Outstandings	\$0		

Who can use NEM Prudential Dashboard

Registered Market Participants, and AEMO have access to the information in the system in accordance with the National Electricity Rules (NER).

How to use NEM Prudential Dashboard

The NEM Prudential Dashboard is part of AEMO's Electricity Market Management System (EMMS) web portal. It is a web-based application accessed using MarketNet and a web browser (for system requirements, see System requirements on page 1).

Accessing NEM Prudential Dashboard

The dashboard is accessed through the MMS login screen.

- 1. Using your web browser, access the web portal, either:
 - 5MS Staging:

Contact your local participant super user to be included on the access control list. Further information regarding access is available from the AEMO Helpdesk.

https://portal.5ms.staging.test.market net.net.au/#/menu

- Pre-production: https://portal.preprod.nemnet.net.au/
- Production: https://portal.prod.nemnet.net.au/
- 2. Click Energy Market Systems and sign in using the user ID and password provided by your company's Participant Administrator (PA).
- 3. Click MMS, then Settlements, then View Prudentials, and then click View Prudential Forecast.

≡	AEMO Markets Portal	
MM	IS	
Ма	rket Info	+
Set	tlements	
Set	tlements Direct	+
Vie	w Prudentials	-{
Vie	w NEM Prudential Dashb	5
Vie	w NEM Prudential Forecas	it s

4. The web application displays, similar to the screenshot below.

					Iradi	ng limit reached. Urge	in action require	ea						
				Note: You	have nominated an e	arly payment for this s	ettlement. Paym	nent is to occur o	on 24/03/20 via					
COMPANY ID	IPANY ID		TRADING MARGIN		STAT	US TIME (AEST)	PRELIMI	NARY	SETTLEMENT		FINAL			
Company	ID \$		Company ID		\$		13/01/2	2020 10:10	20/03/ YEAR 2020 1		20/03/202 YEAR 2020 WEEK 8		25/03/2 YEAR 2020 W	
Summary					Prudential Graph									
tax Credit Limit			\$0		۰									
redit Support			\$0											
udential Margin			\$0											
rading Limit														
rading Margin										L				
												Jan 11		
-					Tra	Dec 12 Dec 15	Dec 18 Dec	21 Dec 24	Dec 27 Dec 30	Jan Ja	an 05 Jan 08	2011.02		
ypical Accrual					For Security Deposits Pro			Credit Support	For Reallocation Procedures clic		an us Jan US			
pical Accrual or All Calendars click utstandings Compone		Version	Status	Amount		ding Limit Outstan	ndings ——				Start	End		
pical Accrual r All Calendars click tstandings Componi ar	nents	Version 12	Status		For Security Deposits Pro	ding Limit Outstan	ndings ——	Credit Support	For Reallocation Procedures clic Reallocations	k here				
pical Accrual r All Calendars click utstandings Component ar	week				For Security Deposits Pro	ding Limit Outstan	ndings ——	Credit Support	For Reallocation Procedures clic Reallocations	k here Amount	Start	End		
pical Accrual r All Calendars click utstandings Compone ar 19 19	Week 50	12	FINAL		For Security Deposits Pro	ding Limit Outstan	ndings ——	Credit Support	For Reallocation Procedures clic Reallocations	k here Amount	Start	End		
rpical Accrual ar All Calendars click utstandings Component sar 119 119 119	Week 50 51	12	FINAL		For Security Deposits Pro	ding Limit Outstan	ndings ——	Credit Support	For Reallocation Procedures clic Reallocations	k here Amount	Start	End		
vpical Accrual ar All Calendars click utstandings Compone ear 019 019 019 020 020	Neek 50 51 52	12 11 10	FINAL PRELIM PRELIM		For Security Deposits Pro	ding Limit Outstan	ndings ——	Credit Support	For Reallocation Procedures clic Reallocations	k here Amount	Start	End		
vpical Accrual or All Calendars ellick utstandings Compone ear 019 019 019 019 020 020 020	Week 50 51 52 1	12 11 10 10	FINAL PRELIM PRELIM PRELIM		For Security Deposits Pro	ding Limit Outstan	ndings ——	Credit Support	For Reallocation Procedures clic Reallocations	k here Amount	Start	End		
vistandinga or All Calendars click utstandings Compon ear 019 019 019 019 019 019 019 019 019 019	Week 50 51 52 1	12 11 10 10	FINAL PRELIM PRELIM PRELIM		For Security Deposits Pro	drig Umit Outzar cedures and Temolales click here Amount	dings —	Credit Support	For Realiscation Procedures clic Relatications ID	k here Amount	Start	End		

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The dashboard is comprised of several elements presented on a single web browser screen. Dollar values are presented in the dashboard as whole numbers for reasons of presentation. Most items within the dashboard have hover text to assist with navigation and understanding of the elements within the screen. Each of the dashboard elements is discussed below.

Title and Status

The title identifies the prudential dashboard screen and the Market Participant to which the prudential information relates.

Commonly, a participant company has a single participant identifier or ParticipantID, but there are some market participants that have more than one. AEMO prudential monitoring is based on the company assessment and amounts are not separated by Participant IDs. The prudential information displayed is an aggregation of the relevant data from each of the ParticipantIDs used in trading by that market participant.

The prudential status displays an effective time and date when the prudential information shown on the dashboard screen was determined. It is the actual time and date of the most recent prudential assessment carried out within AEMO's Market Management System.

COMPANY ID	TRADING MARGIN	STATUS TIME (AEST)	PRELIMINARY	SETTLEMENT	FINAL
Company ID	\$	13/01/2020 10:10	20/03/2020	20/03/2020	25/03/2020
			YEAR 2020 WEEK 11	YEAR 2020 WEEK 8	YEAR 2020 WEEK 9

The time and date denote the time that new prudential information became available, typically it is today's date.

For example, when there have been high prices the previous day, participants may need to provide security deposits or additional credit support to manage their outstandings below their trading limit before the official daily assessment at 11:30 AM (Sydney time). To record any transactions that were completed after the routine daily run, AEMO re-processes the prudential information. The dashboard is updated accordingly, and shows a new prudential status time. The time change is reflected on the dashboard screens of all participants, even though there may be no change in the prudential information.

Prudential assessment runs are triggered during the day as new prudential information becomes available. This is be required, for instance, to capture changed credit support values for one or more participants who lodged or exchanged guarantees with AEMO earlier that day. Or, to reflect a more up-to-date settlement calculation that has become available.

Calendar dates

The information appearing on the top of the screen provides dates for issue of the next Preliminary statement and Final Statement, as well as the date of the next Settlement, so that market participant processes associated with these events are readily synchronised.

STATUS TIME (AEST)	PRELIMINARY	SETTLEMENT	FINAL
13/01/2020 10:10	20/03/2020	20/03/2020	25/03/2020
	YEAR 2020 WEEK 11	YEAR 2020 WEEK 8	YEAR 2020 WEEK 9

On settlement day, a Retailer typically makes a payment to AEMO which reduces outstandings and increases the trading margin. Conversely, a generator typically receives a payment from AEMO which increases outstandings and reduces the Trading Margin.

Early Payments

This section is relevant to those market participants who have elected to pay their weekly settlement amount early, as outlined in the Early Settlement Payment Procedure.

Note: You have nominated an early payment for this settlement. Payment is to occur on 24/03/20 via						
COMPANY ID	TRADING MARGIN	status time (Aest) 13/01/2020 10:10	PRELIMINARY 20/03/2020 YEAR 2020 WEEK 11	SETTLEMENT 20/03/2020 YEAR 2020 WEEK 8	FINAL 25/03/2020 YEAR 2020 WEEK 9	

Participants may elect to pay their settlement amount on the business day prior to the scheduled settlement day. The early payments table only appears if the market participant, who owes money to AEMO, is scheduled to make an early payment for the current settlement week. The table appears at the top of the dashboard in an orange box. Any early payment will offset the outstandings amount.

Prudential parameters

The main parameters are set out in the central area of the screen as a simple list of dollar values.

Summary	
Max Credit Limit	
Credit Support	
Prudential Margin	
Trading Limit	
Trading Margin	
Outstandings	
Typical Accrual	

To get more information on the Prudential parameters, hover your mouse over the parameter name. For example, if you hover your mouse over Credit Support, the following information appears.

Maximum Credit Limit

The Maximum Credit Limit (MCL) is the latest effective maximum credit limit determined by AEMO for the Market Participant. It is equal to the value shown



Total amount of active bank guarantees currently held by AEMO less any amounts drawn down. If the Credit Support amount is less than the MCL then the difference must be provided in bank guarantees to AEMO by 10.30 AM today.

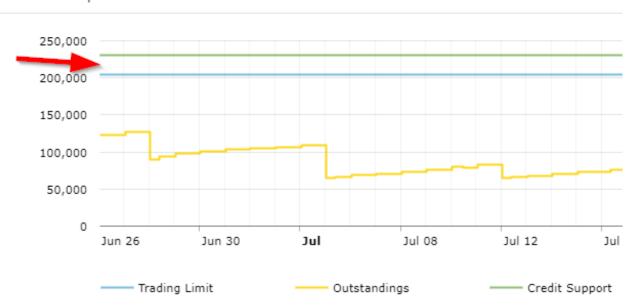
on the most recent MCL review letter issued by AEMO. For a participant that is normally owed money by AEMO, such as a generator, the MCL is typically zero but not always.

Credit support

Credit Support is the total of all current credit support instruments (bank guarantees) that have been lodged with AEMO by the Market Participant, less any amounts drawn by AEMO under the terms of those instruments. Market Participants must maintain credit support at a value equal to or greater than the MCL.

Prudential margin

The prudential margin is the current value determined by AEMO for the Market Participant. It is equal to the value shown on the latest effective MCL review letter issued by AEMO. It represents the buffer between the credit support and trading limit.



Prudential Graph

Trading limit

The trading limit is the maximum value that outstandings can attain before AEMO issues a warning. The participants have between the 1:00 am Prudential run and 11:30 am to take action. AEMO may issue a call notice if they fail to do so. The trading limit is equal to credit support minus the prudential margin, and can be negative.

Trading margin

The trading margin is the difference between the trading limit and the outstandings. It is the value of trading liability that can still be incurred without exceeding the trading limit and triggering a call notice from AEMO. A negative trading margin indicates that the outstandings have exceeded the trading limit.

Outstandings

The outstandings is the current value of net trading liability to AEMO. It is calculated from the outstandings components (see Outstandings components on page 22) together with credit for any current security deposits (section 3.5) and ex-post reallocations that have been registered (see Security deposits on the next page). A retailer typically has a positive outstandings amount which means that the retailer owes money to AEMO. Outstandings may be negative, in which case the participant (normally a generator) would be in net credit with AEMO.

Typical accrual

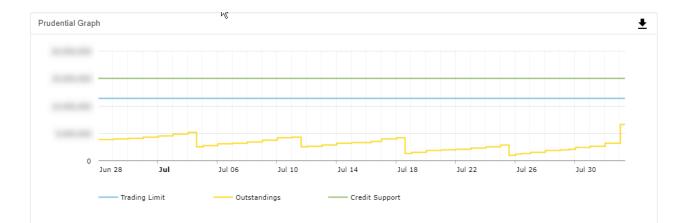
The Typical Accrual (TA) is the value that outstandings would have been if the spot price was at average levels. The TA is calculated using the relevant regional average loads and prices and GST factor as indicated in the participant's latest effective MCL review and as used in the MCL calculation. The volatility factor is not applied in determining TA, which is the value to which outstandings must be reduced in responding to a call notice.

The actual number of days which have not been settled is used, rather than the 42 days in the MCL calculation. Hence the TA typically increases through the week, and drops to a minimum on each settlement day.

The call amount component of a call notice can be calculated by subtracting the typical accrual from the outstandings.

Prudential graphs

The prudential graph appears at the middle right of the screen and shows a five-week history of daily outstandings, credit support and trading limit. This graph captures the prudential parameter data during the outstanding period that appears on the dashboard including today.



The horizontal axis is time in days while the vertical axis is dollars.

A typical retailer graph is shown above. The horizontal axis will be positioned at zero dollars. The horizontal axis will be at the bottom of the graph for a typical retailer as it's outstandings are greater than zero.

- Outstandings are compared to the participant's trading limit on each business day. If the outstandings exceed the trading limit, then AEMO may issue a call notice to the participant.
- The outstandings trace represents a saw-tooth pattern. Each day outstandings will increase to include yesterday's energy purchases. On settlement day outstandings will be reduced by one week's worth of energy purchases.

A typical generator graph is shown below. The horizontal axis will be positioned at zero dollars.



- The horizontal axis will be at the top of the graph for a generator as a generator's outstandings are typically less than zero. In other words a generator graph will typically be an upside-down retailer graph.
- The outstandings trace represents a saw-tooth pattern of credits instead of debits. Each day outstandings will decrease to include yesterday's energy sales. On settlement day outstandings credits will be increased by one week's worth of energy sales.

Security deposits

Security deposits are presented as negative amounts on the dashboard as they represent amounts paid to AEMO, which reduce outstandings.

Security deposits are relevant mainly to retailers as it is rare that generators provide security deposits.

Security Deposits			
ID	Amount	Lodged	Matures
201 RS	\$-910,000	19/07/2019	16/08/2019
201 RS	\$-190,000	23/07/2019	23/08/2019
SUBTOTAL	\$-1,100,000	in 2 items	
SUBTOTAL Incl in Final	\$-1,100,000 \$0	in 2 items	

The current security deposits lodged with AEMO are shown in the table at the middle right of the dashboard screen. The table gives a breakdown for deposits which have been lodged but not yet returned. The sub-total indicates the security deposit amounts that have been lodged but not been returned.

Security deposits are returned on final settlement statements as per participant's instruction, and so the liability shown on the statement decreases by the amount of the security deposit. A pending status amount may or may not include returned security deposits depending on the stage of the security return process when the settlement calculation is performed. A final status amount will always include returned security deposits. For clarity, the amount being returned (if any) is shown underneath the sub total and is described as **Incl in Final**. Accordingly, security deposits included as credits in pending amounts or appearing as credits on final statements are excluded from the net credit carried forward into the calculation of outstandings.

CSV file

The download button ($\stackrel{\bullet}{\frown}$) at the top right of the security deposits table produces a csv file of the complete list of security deposit provisions plus any return amount.

Template link

A link to the <u>Security Deposit Arrangements</u> page on the AEMO website is available above the Security deposit table.

Reallocations

This section lists all reallocations currently affecting the participant's Outstandings.

Reallocations			
ID	Amount	Start	End
201 RS	\$-555,000	01/07/2019	02/09/2019
201 RS	\$-1,485,000	01/07/2019	02/09/2019
SUBTOTAL	\$-2,040,000	in 2 items	
SUBTOTAL Incl in Outstandings	\$-2,040,000 \$-2,040,000	in 2 items	

Reallocations can be lodged through AEMO's web portal at any time, but are not included in outstandings components until a settlement calculation for the relevant period has been processed. The reallocation amounts not yet included in a settlement calculation are provided as adjustment to outstandings. Ex ante reallocations are not included within settlement calculations and never appear within adjustment to outstandings.

As an ex post reallocation example, after a daily run for a high-priced day is completed, a generator and retailer may lodge an ex post reallocation for that high-priced day to reduce cash settlement obligations for the retailer and increase the liability for the generator.

The reallocation would be registered immediately subject to the standard procedure, but the retailer's credit for this transaction would not appear on a settlement statement until the preliminary statement is prepared, up to 10 days later. Accordingly, the reallocations that are not yet included in a settlement run are listed as an adjustment to outstandings.

Similarly, a reallocation request lodged after the processing of the relevant preliminary statement would appear in this table as an adjustment to outstandings.

All reallocations lodged with AEMO are displayed in the table. The sub total includes all reallocation amounts that relate to the current Outstandings period.

CSV file

The download button ($\stackrel{\bullet}{\frown}$) at the top right of the reallocations table produces a text file that lists all current reallocations that have a bearing on outstandings.

Outstandings components

For All Calendars clic Outstandings Compo				<u>+</u>
Year	Week	Version	Status	Amount
2019	27	11	PENDING	^
2019	28	9	PRELIM	
2019	29	10	PRELIM	
2019	30	CURRENT	ESTIMATE	
2019	31	CURRENT	ESTIMATE	_
SUBTOTAL				

This section is relevant to both generators and retailers.

The outstandings components are shown in the table at the top left of the dashboard page. The table gives a week-by-week breakdown of the participant's trading liability, for those weeks that have occurred but have not yet been settled. Each weekly amount is derived from the latest available version of the settlement calculation. The status of that run (final, pending, preliminary etc) is also shown. For participants that have a single participant identifier, the values shown in this table correspond to the values shown on the relevant settlement statement. For market participants with more than one participant identifier, the value will be the arithmetic sum of the values on each of the relevant statements.

Final status

Final status is displayed when a settlement calculation has been completed and has been posted to support a Final Statement. Assuming that a final statement is due to be issued on a Wednesday, it will remain in the components table until Friday morning, which is settlement day. It is assumed that settlement for the liability amount shown on the final statement will be transacted prior 10:30 AM and therefore is not considered as part of the official outstandings calculation for the day.

Note that if payment of the settlement amount is not completed by 10:30 AM (Sydney time) on settlement day, a default event has occurred and the NEM default and suspension procedures are triggered

Pending status

Pending status is displayed when a settlement calculation has been completed to support a final statement, but is not a final version ready for posting. If posting day for a final statement is on a Wednesday, the pending values may be prepared up to three business days earlier (on Friday). This results in pending statement values being recognised in outstandings immediately and included in the latest prudential assessment. Pending values are given priority as soon as they become available because they are based on the most up to date metering data.

The pending status will remain on the components table until the final statement is posted. The pending amount should not be relied upon as a settlement amount as it can change between pending and final status.

Preliminary status

This is the most common status appearing in the outstandings components table. This status indicates that the value shown in the **Amount** column is supported by the Preliminary Statement issued (or about to be issued) for that billing week.

It is possible for a preliminary statement amount to be included in outstandings even if it has not been posted. If posting day for a preliminary statement is on a Friday, the preliminary statement values may be prepared up to two days earlier (on Wednesday), resulting in preliminary statement values being recognised in outstandings immediately and included within the latest prudential assessment. Preliminary statement values are given priority as soon as they become available because they are derived from actual metering.

Estimate status

Early on each day, a daily settlement calculation is performed to estimate the value of market trading for each participant on the previous trading day. When actual energy data is not available, the net energy produced by generators is estimated from dispatch targets and the net energy consumed by retailers at each transmission connection point is estimated by apportioning the regional energy across all market customers in the region using scaling factors derived from a previous day for which metering is available. The estimated energy is then applied as input to the full range of settlement calculations (including ancillaries, fees and settlement residue distribution) to determine the estimated daily liability. The liability is the sum of the results for all the complete days traded so far in the current billing week.

CSV file

The download button ($\stackrel{\bullet}{\frown}$) at the top right of the components table allows the user to produce a text file in comma separated variable format as a simple way of downloading electronically the data shown in the table.

Chapter 4 NEM Alert Notifications

This chapter provides details on the notifications you can subscribe to in the Settlements Direct web portal. You can subscribe to each notification separately. The notifications for NEM Prudential Dashboardare as follows:

- Daily Prudential Position: a notification is sent to subscribed NEM participants on schedule and includes the following information:
 - Company Name
 - Company ID
 - Outstandings
 - Trading Limit
 - Trading Margin
 - Prudential breach (or not)
- Trading Limit Breach: an alert is triggered to inform the subscribed NEM participants that they have breached their trading margin. The alert includes the following information:
 - Trading margin breach details
 - Security deposit requirements
 - Action to take
 - Who to contact
- Unsuccessful Early Payment: an alert is triggered to inform the participant that the early payment they had elected to make was unsuccessful. The alert includes the following information:
 - Details of the payment
 - Requirement for Settlement Day
 - Actions to take
 - Who to contact

Setting up notification messages

To configure Reallocations notification messages, you must make sure you are subscribed to the Data Subscription web application.

Add Participant Users as Participant Contacts

- 1. On the MSATS web portal, click **Participants** and then **Participant Contacts**.
- 2. On the Participants Contacts List page, click New about the Actions column.
- 3. Enter the information for the participant you want to add.
- 4. Under the Contact Type dropdown, select S.
- 5. Click Save.

Subscribe to notifications of Settlement Direct

- In the EMMS Markets Portal, click MMS > Settlements Direct > Subscriptions.
- 2. In Category, select NEM Alerts, Reminders and Notifications.
- 3. In the **Type** dropdown options, select from the following notification types:
 - For a daily update on your prudential position, choose the Daily Prudential Position Actual (Morning).
 - For trading limit breach alert, choose the Trading Margin Breach.
- 4. Select Email or Notify by SMS.
- 5. Click Submit.

Prudential position notification

The prudential position notifications are sent to the subscribed NEM participants on schedule (business days at 1 pm) each afternoon on the business day. The notification includes the following information:

Participants are subscribed to the Data Subscription as a part of the registration process. For more information, see <u>Guide to Data</u> <u>Subscription</u>

For more details, see Creating a new contact section in the <u>Guide to</u> <u>MSATS Web Portal</u>.

For more details, see Creating a new contact section in the Guide to MSATS Web Portal.

- Company Name
- Company ID
- Outstandings
- Trading limit
- Trading margin
- Prudential breach (or not)

Sample email

Subject: NEM Prudential Forecast <YYYY-MMM-DD>

Body:

<COMPANY_NAME> (<COMPANY_ID>) NEM Prudential Position for <YYYY-MMM-DD>

Outstandings: -999,999,999.00 Trading Limit: -999,999,999.00 Trading Margin: -999,999,999.00 Prudential breach [YES | NO]

Questions? contact AEMO prudential team at prudentials@aemo.com.au

Sample SMS

NEM Position <YYYY-MMM-DD>,<COMPANY_NAME>: <Outstanding:-999,999,999.00> <Limit:-999,999,999.00> <Margin:-999,999,999.00> <In breach (or not)>

Trading margin breach notification

The trading margin breach notifications inform the participants that they have breached their trading margin. The notification includes the following information:

- Margin breach details
- Security deposit requirements
- Action to take
- Who to contact

This alert is triggered on the following conditions:

- If the trading margin is less than zero from the first prudential run of the day, an alert is sent requiring the trading margin resolution by 11:30 am on the same day.
- If the trading margin is less than zero from a prudential run (other than the first prudential run) on the day, an alert is sent requiring resolution of the trading margin breach by 11:30 am the next business day.

Sample email

Subject: NEM Trading Margin Breach Resolve [TODAY | TOMORROW] by 11;30 am

Body: Your company is in breach of the trading margin:

Outstandings: -999,999,999.00 Trading Limit: -999,999,999.00 Trading Margin: -999,999,999.00

Can you please eiter reallocation, lodge a security deposit or a bank guarantee before 11:30 am AEST [TODAY | TOMORROW]. Any security deposits lodged with AEMO will need to be provided in cleared funds no later than 11:30 am.

If you require more information please contact AEMO prudential team at prudentials@aemo.com.au.

Sample SMS

NEM <COMPANY_NAME>Trading Margin Breach Resolve [TODAY | TOMORROW] by 11:30 am. More info prudentials@aemo.com.au

Unsuccessful early payment alert

The early payment unsuccessful alert is triggered on schedule (business day at 5:01 m) to inform the participant that the early payment they had elected to make was unsuccessful. The alert includes the following information:

- Details of the payment
- Requirement for Settlement Day
- Actions to take
- Who to contact

Sample email

Subject: NEM Early payment has failed

Body: NEM Early payment has failed:

Your company has elected to pay one day earlier than the settlement deadline. However, the early payment was not received by the due date. Please ensure that trade is entered and authorised for settlement on <YYYY-MMM-DD>.

Please note that failure to pay AEMO (in cleared funds) by the 10:30am Sydney time deadline on settlement day will result in a default event under the National Electricity Rules.

If you require more information please contact AEMO prudential team at **prudentials@aemo.com.au**.

Sample SMS

NEM <COMPANY_NAME> Early payment has failed. Please ensure that trade is ready for settlement by 10:30am Sydney time on <YYYY-MMM-DD>. More info prudentials@aemo.com.au.

Needing Help

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AEMO's support hub

IT assistance is requested through one of the following methods:

• Phone: 1300 AEMO 00 (1300 236 600)

For non-urgent issues, normal coverage is 8:00 AM to 6:00 PM on weekdays, Australian Eastern Standard Time (AEST).

• The Contact Us form on AEMO's website.

Information to provide

Please provide the following information when requesting assistance from AEMO:

- · Your contact details
- Company name
- Company ID
- System or application name
- Environment: production or pre-production
- Problem description
- Screenshots

For AEMO software-related issues please also provide:

- Participant ID (if Data Interchange (DI) problem)
- Version of software
- Properties or log files

AEMO recommends participants call AEMO's support hub for all urgent issues, whether or not you have logged a call using the contact us form.

Feedback

To suggest improvements to this document, please contact the AEMO's support hub.

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Glossary

AEMO Communication

An email from AEMO to a distribution list of Registered Participant contacts broadcasting NEM-related information.

AEST

Australian Eastern Standard Time

Data Interchange

A set of cooperating applications used to replicate data between AEMO's energy market systems and a participant's DBMS conforming to the MMS Data Model.

Data Model

The definition of the interface to participants of data published by AEMO for gas or electricity. A database conforming to the Data Model can contain a local copy of all current participant-specific data recorded in the main database. The Data Model includes database tables, indexes, and primary keys.

EMMS Markets Portal

Wholesale Electricity Market Management System; software, hardware, network and related processes to implement the wholesale energy market.

Ex Ante

Lodged before the target trading intervals occur, when the volume and price are unknown.

Ex Post

Lodged after the target trading intervals occurred, where the volume and price are known.

FTP

File transfer protocol

FTP Gateway

Uses FTP protocol to deliver communications.

FTP Protocol

A B2B e-Hub and EMMS delivery method.

MarketNet

AEMO's private network available to participants having a participant ID

MCL

Maximum Credit Limit

MW Megawatt

MWh Megawatt hour

NEMDE National Electricity Market Dispatch Engine

NEMweb

Public market data in csv file format: http://www.nemweb.com.au/

PA

participant administrator

Participant Administrator

Your company's PA set up by AEMO during registration

Participant File Server

The publishing point from AEMO systems to participant systems. Each participant is allocated an account and access to private and public areas. Participants are responsible for interfacing with the participant file server.

Participant ID

Registered participant identifier; A company can have more than one Participant ID.

Participant User

An end-user, using AEMO's participant energy market systems to view and retrieve information on behalf of a participant ID. The participant users access rights are created and maintained by the participant ID's Participant Administrator.

Participant User ID

The user ID you used to login to the system.

POE

Probability of Exceedence

Pre-production

AEMO's test system available to participants

Production

AEMO's live system

RRP

Region Reference Price

Set Participant

Where a Participant User has user rights assigned by more than one participant ID, the Participant User can select the participant ID they want to represent using the Set Participant option in the web portals.

TA

Typical Accural

URM

User Rights Management; see the Guide to URM on AEMO's website

VPN

Virtual Private Network

XML

eXtensible Mark-up Language.

Zip

A file containing business data with filename extensions of .zip, are compressed, and contain one file with a filename extension of .XML. The XML file contains the XML coded message data.

References

- <u>Guide to User Rights Management</u>, assists Participant Administrators to manage their Participant User's access to AEMO's systems. It also explains how to set up single user IDs for use with the Set Participant function in AEMO's web portals.
- Guide to Electricity Information Systems, comprehensive guide providing an overview of AEMO's market systems used by participants. It is relevant to IT decision making during participant onboarding and provides an understanding of the IT systems requiring set up.
- Guide to MSATS Web Portal, provides details on how Participant Administrators can authorise Participant Users to access the Markets Portal.

It is important to ensure that you are reading the current version of any document.

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