EMMS - Release Schedule and Technical Specification – SRA - October 2019

1.00 Draft August 2019

Pre-production: Monday 2 September 2019

Production: Tuesday 1 October 2019

Important Notice

PURPOSE & AUDIENCE

This document describes the technical changes required to participant's systems for the Settlement Residue Auction and Data Model Release (Release). The Australian Energy Market Operator (AEMO) provides this information as a service targeting business analysts and IT staff in participant organisations. It provides guidance about the changes to their market systems under the National Electricity Rules (Rules), as at the date of publication.

HOW TO USE THIS DOCUMENT

- If you have questions about the business aspects of these changes, please see Consultations on AEMO's website.
- This document is written in plain language for simple reading. Where there is a discrepancy between the NER, Auction Rules, or procedures and information or a term in this document, the Rules and procedures take precedence.
- The references listed throughout this document are primary resources and take precedence over this document.
- Unless otherwise stated, you can find resources mentioned in this guide on AEMO's website.
- Text in this format is a link to related information.
- **Text in this format** indicates a reference to a document on AEMO's website.
- Text in this format is an action to perform in the MSATS Web Portal.
- Glossary terms are capitalised and have the meanings listed against them in the Glossary.
- Rules terms defined in the NER or SRA Auction Rules are listed in the Rules Terms section.
- References to time are Australian Eastern Standard Time (AEST).
- Please read the legal terms below.

LEGAL TERMS

All terms that include the words 'sales', 'sold' and other similar derivatives, are used for convenience only throughout this document and such terms should instead be taken to mean 'cancelled', 'cancellation' and 'cancel' etc. In all cases, these terms have the meaning Units held by SRA participants whose ownership has been cancelled with AEMO.

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VERSION HISTORY

1.00 Revised technical specification, see Changes in this version on page 1.

DOCUMENTS MADE OBSOLETE

The release of this document changes only the version of EMMS - Release Schedule and Technical Specification – SRA - October 2019.

SUPPORT HUB

To contact AEMO's Support Hub use Contact Us on AEMO's website or Phone: 1300 AEMO 00 (1300 236 600) and follow the prompts.

Contents

1. **Introduction**

This EMMS - Release Schedule and Technical Specification – SRA - October 2019 (Release) includes changes related to participants' IT systems for the Settlement Residue Auction (SRA) Secondary Trading project, Forecasting Systems Remediation project, and Electricity Data Model v4.29.

1.1 Changes in this version

Details of a new NEM report, SROFFER. For details, see SROFFER report on page 31.

Additional changes to the Electricity Data Model, including changes for the Unconstrained Intermittent Generation Forecast (UIGF). For details, see Unconstrained Intermittent Generation Forecast on page 32.

Package	Table	Change
DISPATCH	DISPATCHREGIONSUM	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CLEAREDMW SS_WIND_CLEAREDMW SS_SOLAR_COMPLIANCEMW SS_WIND_COMPLIANCEMW
IRAUCTION	RESIDUE_CON_DATA	SECONDARY_UNITS_SOLD NUMBER(18,8)
	SRA_CASH_SECURITY	CASH_SECURITY_ID VARCHAR2(36) LASTCHANGED column
	SRA_FINANCIAL_AUC_MARDETAIL	CASH_SECURITY_ID VARCHAR2(36)
	SRA_FINANCIAL_AUC_RECEIPTS	UNITS_SOLD NUMBER (18,8) UNIT_PURCHASED NUMBER(18,8) UNITS_SOLD NUMBER(17,5) PROCEEDS_AMOUNT NUMBER(18,8)
	SRA_FINANCIAL_AUCPAY_DETAIL	ALLOCATION NUMBER (18,8) MAXIMUM_UNITS NUMBER(18,8) UNITS_SOLD NUMBER(18,8) SHORTFALL_UNITS NUMBER(18,8)
	SRA_OFFER_PRODUCT	OFFER_PRICE NUMBER (18,8)

Package	Table	Change
P5MIN	SRA_PRUDENTIAL_CASH_SECURITY	CASH_SECURITY_ID VARCHAR2(36)
	SRA_PRUDENTIAL_COMP_POSITION	PARTICIPANTID VARCHAR2(10)
	SRA_PRUDENTIAL_EXPOSURE	SRA_QUARTER NUMBER (3,0) MAX_TRANCHE NUMBER (2,0) CANCELLATION_VOLUME NUMBER(18,8)
	P5MIN_REGIONSOLUTION	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CLEAREDMW SS_WIND_CLEAREDMW SS_SOLAR_COMPLIANCEMW SS_WIND_COMPLIANCEMW
PDPASA	PDPASA_REGIONSOLUTION	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CAPACITY SS_WIND_CAPACITY SS_SOLAR_CLEARED SS_WIND_CLEARED
PRE_DISPATCH	PREDISPATCHREGIONSUM	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CLEAREDMW SS_WIND_CLEAREDMW SS_SOLAR_COMPLIANCEMW SS_WIND_COMPLIANCEMW
STPASA_SOLUTION	STPASA_REGIONSOLUTION	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CAPACITY SS_WIND_CAPACITY SS_SOLAR_CLEARED SS_WIND_CLEARED

1.2 Audience

The primary audience is business analysts and IT staff in participant companies.

A secondary audience is Participant Administrators providing rights to their Participant User to access AEMO's systems.

1.3   Schedule

Scheduled for:

- Pre-production: Monday 2 September 2019
- Production: Tuesday 1 October 2019

1.4   Approval to change

AEMO request approval to proceed from all participant change controllers by close of business: 12 September 2019.

1.5   Proposed timeline

The dates for the Market System User Group Meetings (MSUG) are tentative. AEMO send an invitation one week prior to the meeting.

Milestone	Date	Description
Approval required	12 September 2019	Final date for participant approval of this Release.
Revised Technical Specification	August 2019	Further details of the changes to assist IT staff with their own technical implementation.
Pre-production refresh	Not required	Refresh of the pre-production system with data refreshed from the production system. An outage of up to five days can occur to the pre-production environment during this period. Participant access is not restricted, however, AEMO do not guarantee the pre-production data content or system availability. During the refresh, access to other AEMO systems such as AWEFS, EMMS, OPDMS, and STTM may be intermittently affected.
Pre-production implementation	26 August 2019 – 29 August 2019	AEMO implements components of the Release to pre-production for participant testing. AEMO has full access to the system during this period. Participant access is not restricted; however, the data content or system availability is not guaranteed. If possible, AEMO will make the pre-production environment available to SRA Auction Participants earlier. The pre-production implementation and availability dates are the latest possible scenario.
Pre-production available	Monday 2 September 2019	Testing period begins for participants.

Milestone	Date	Description
Pre-production Data Model scripts release	Monday 2 September 2019	Participant Data Model scripts released.
User group meeting: pre-production review	19 September 2019	Market systems user group meeting to review the implementation of this pre-production release.
Production implementation	23 September 2019 – 26 September 2019	AEMO implements the release to production.
Production systems available	Tuesday 1 October 2019	Production systems available to participants
User group meeting: post-implementation review	15 October 2019	Market systems user group meeting to review the implementation of the production release.

2. Secondary Trading in SRA

2.1 Overview

Settlements residue arises in the National Electricity Market (NEM) because the amount paid by Market Participants to AEMO for spot market transactions usually differs from the amount paid by AEMO to other Market Participants for spot market transactions.

When AEMO uses generation in one Region to meet demand in another Region, and the Regional Reference Prices differ, inter-regional residue arises. AEMO runs Settlements Residue Auctions (SRA) to auction Settlement Residue Distribution (SRD) Units giving SRA Auction Participants a right to a part of the residue accumulated over a Directional Interconnector. For more details, see the **Guide to the Settlements Residue Auction**.

> **For convenience throughout this document, we use the terms 'sales', 'sold', and other derivations. These terms mean 'cancelled', 'cancellation', 'cancel', and so on and refer to Units held by SRA Auction Participants whose ownership AEMO has cancelled.**

> **To offer Units in an Auction, participants must sign and submit a new Auction Participant Agreement (APA).**

2.2 Secondary trading

This project deals with an amendment to Rule 3.18 allowing the incorporation of secondary trading into the Auction Rules.

Secondary trading allows SRA Auction Participants owning Settlement residue distribution agreement (SRDA) Units purchased in an earlier Tranche to Offer them into the Auction in a later Tranche.

If the Units Offered successfully clear in the Auction, AEMO cancels the participant's ownership, but they are still obliged to pay for their original allocation.

The Settlement Residue Committee (SRC) has focussed on limiting changes to bidding for Units, while providing the necessary information for SRA Auction Participants to reconcile their position.

2.3   Rules and procedures

AEMO implements SRA Secondary Trading in line with:

1.   The **National Electricity Rules, chapters 3.18, 3.3.8A**, and **3.3.13A**.

2.   The **Settlements Residue Auction Rules** (Auction Rules).

3.   The **Auction Participation Agreement (APA).**

4.   The **Settlement Residue Distribution Agreement (SRDA).**

2.4   Changes for secondary trading

To support secondary trading in SRA, with the delivery of this project, the following items are added or changed:

1.   **SRA Registration Process**: To cancel Units in an Auction, SRA Auction Participants must submit and execute a new **Auction Participant Agreement** (APA) that includes this right.

2.   **Cash Security:** A new obligation for Participants to provide collateral to cover a Trading Position in the SRA market. For details, see Providing cash security on page 7.

3.   **Offer submission** is new Auction functionality, see page 7.

4.   **SRA Quarterly Settlements**: Inclusion of Cancelled Units, see page 13.

5.   **NEM Weekly Settlement**: Inclusion of cancellation fees, see page 13.

6.   Changes to the underlying SRA calculation. For details see Settlements Residue Auction Rules.

7.   **SRA Auction interface** in the Markets Portal, see page 14**.**

8.   **Electricity Data Model**, see page 30.

2.5   Providing cash security

To make an offer the SRA Auction Participant's Trading Margin must remain greater than or equal to zero. At any time, SRA Auction Participants can provide Cash Security to AEMO of any amount to increase their Trading Limit, thus increasing their Trading Margin.

To provide Cash Security:

1. SRA Auction Participants complete the Cash Security Email Template and email to clearing@aemo.com.au

2. AEMO enters a matching transaction in the SRA Auction Participant's Clearing Account following their email instructions.

3. Once the trade settles in the Clearing Account, the Cash Security reflects in the SRA Auction Participant's prudential details. For details, see View prudential details on page 29.

3. Offer submission

3.1   Submit offer - new

- For each Auction, the system overwrites an earlier Offer File with a current Offer File. For example:

> The SRA Auction accepts Offer and Bids Files in the same time frame (when the auction is open) but you must submit them separately.

> You submit an Offer File at 8:00 am with 16 Offers.

> You submit another Offer File at 8:06 am with only one Offer.

The Auction runs with the Offer File made at 8:06 am and the system discards the 8:00 am Offer File.

- Offer parameters are:
  - Offer Price: > 0
  - Tranche
  - Directional Interconnector
  - Units Offered: > 0 and <= the units currently held by the participant, whole numbers only

- AEMO processes Offers for single Unit Categories and Relevant Quarters only. There are no Linked Offers.

- The system validates all Offers and returns a validation or rejection notification. For details, see Offer validation on page 11.

- You can cancel an Offer File by submitting an empty Offer File using any of the Ways to submit an offer below.

3.2   Ways to submit an offer file

1. Manually on the Markets Portal **SRA Enter Offer** interface, see Enter offers on page 14.

2. Copy a previously created Offer from the Markets Portal, see Copy an offer on page 17.

3. Upload a prepared Offer from your local folder to the Markets Portal, see Import an offer file on page 18.

4. Manually upload or FTP your prepared Offer directly on the **Participant File Server/<Participant ID>/Export/IRSR folder**. To ensure inclusion of your Offer in the Auction, check for a valid acknowledgment in the **/Import/IRSR_Ack folder**.

> **For more details about Participant Administration, see Guide to User Rights Management**.

5. Use Data Interchange to automate submission of your prepared Offer. For help, see **Concise Guide to Data Interchange**.

3.3   User rights access

For Participant User access to all SRA interfaces (web, FTP, and file upload), Participant Administrators (PAs) select the following entity in the MSATS Web Portal:

> **For help preparing your csv file, see NEM Settlement Residue Auction Interface Guide**.

- EMMS - SRA (Settlement Residue Auction)

3.4   Prepare a csv offer file

The easiest way to prepare an Offer File is to export an existing Offer from the Markets Portal, see View public offers on page 21.

3.4.1 Offer naming

You submit Offers with the following filename format:

<ParticipantID>_SROFFER_<AuctionID>.<Ext>

where:

- **ParticipantID**: Your Participant ID. The Participant ID in the filename must match the Participant ID of the Participant File Server <Participant ID> folder. For example, an Offer with the filename ALPHA_SROFFER_A201812.csv must be submitted to the Participant File Server\ALPHA\Export\IRSR folder.

- **AuctionID**: The unique identifier of the SRA Auction. You can find the Auction ID on the **Settlements Residue Auction** > Auction notices web page.

- **Ext**: The csv file extension.

3.4.2 Csv file structure

Record and subtype

Record type	Subtype	Version	Description
SRA	OFFER	1	One record for each Offer

Record fields

The details in this section are duplicated for each Offer, see Example csv offer file below.

Field Name	Data Type	Description
AUCTIONID	String	The unique Auction ID. Must match the Auction ID in the Offer File
OPTIONID	Integer	The unique Offer ID. You can have many Offer IDs in an Offer File
TRANCHEID	String	The unique Auction Tranche ID where the Units are sold
INTERCONNECTORID	String	The unique Directional Interconnector ID
REGIONID	String	The unique from Region ID for the Directional Interconnector
OFFER_PRICE	Number	The Offer price
OFFER_UNITS	Integer	The quantity of Units Offered

Example csv offer file

	A	B	C	D	E	F	G	H	I	J	K
1	C	NEM	SRBID	ENERGY	NEMMCO	2019/15/04	17:11:33				
2	C	SETTLEMENTS RESIDUE OFFER	For Auction Id	A201906							
3	I	SRA	OFFER	1	AUCTIONID	OPTIONID	CONTRACTID	INTERCONNECTORID	REGIONID	OFFER_PRICE	OFFER_UNITS
4	D	SRA	OFFER	1	A201906	1	C2019Q2T12	VIC1-NSW1	VIC1	100	1
5	D	SRA	OFFER	1	A201906	1	C2019Q3T11	VIC1-NSW1	VIC1	10	1
6	D	SRA	OFFER	1	A201906	1	C2019Q4T07	VIC1-NSW1	VIC1	200	10
7	D	SRA	OFFER	1	A201906	1	C2019Q4T12	VIC1-NSW1	VIC1	20	3

Example csv offer for the same Contract ID and different Option IDs

	A	B	C	D	E	F	G	H	I	J	K
1	C	NEM	SRBID	PARTID	NEMMCO	2019/15/04	17:11:33				
2	C	SETTLEMENTS RESIDUE OFFER	For Auction Id	A201803							
3	I	SRA	OFFER	1	AUCTIONID	OPTIONID	CONTRACTID	INTERCONNECTORID	REGIONID	OFFER_PRICE	OFFER_UNITS
4	D	SRA	OFFER	1	A201803	1	C2018Q2T12	NSW1-QLD1	NSW1	1	1
5	D	SRA	OFFER	1	A201803	2	C2018Q2T12	NSW1-QLD1	QLD1	2	2
6	D	SRA	OFFER	1	A201803	3	C2018Q2T12	V-SA	VIC1	3	3
7	D	SRA	OFFER	1	A201803	4	C2018Q2T12	VIC1-NSW1	VIC1	4	4
8	D	SRA	OFFER	1	A201803	5	C2018Q2T12	V-SA	SA1	5	5

Example empty csv offer file

An empty Offer File as no D rows that would normally have the offer details.

> **If any part of the Offer File fails validation, the whole submission is rejected.**

	A	B	C	D	E	F	G	H	I	J	K
1	C	NEM	SRBID	ENERGY	NEMMCO	2019/15/04	17:11:33				
2	C	SETTLEMENTS RESIDUE OFFER	For Auction Id	A201906							
3	I	SRA	OFFER	1	AUCTIONID	OPTIONID	CONTRACTID	INTERCONNECTORID	REGIONID	OFFER_PRICE	OFFER_UNITS

3.5   Offer validation

The following validations apply to submitted Offers:

1. The Participant ID is a registered SRA Auction Participant.

2. The Participant ID has signed the new version of the APA allowing them to Offer and Cancel Units.

3. .The SRA Auction Participant has a unit allocated to them for that Category and Relevant Quarter that is not already cancelled.

4. The SRA Auction Participant has enough Trading Limit (Cash Security) to keep their Trading Margin equal to or greater than zero.

5. The Auction is open. For help, see SRA Dates 2019 and 2020. The Auction ID is valid.

6. The Tranche ID is valid.

7. The Directional Interconnector ID and From Region ID are valid.

8. The Offer quantity is an integer value.

3.6   Valid offer acknowledgement

3.6.1 Acknowledgement file name

The Offer acknowledgement files are csv with the following filename format: **<SubmissionFileName>_<SuccessIndicator>.<Ext>** where:

*   **SubmissionFileName**: The filename of the original file submission, minus the extension.

*   **SuccessIndicator**: **A** = successful and **C** = failed.

*   **Ext:** The file extension of the original file submission, less the first character.

For example, a successful acknowledgement of an Offer File submitted by participant ALPHA is:

ALPHA_SROFFER_A201606.I01 is ALPHA_SROFFER_A201606.A01.

3.6.2 Acknowledgement contents

- The acknowledgement file has one record type: **ERRORMSG,SRA,1**.

- Each record has a single field: **ERROR_MESSAGE**.

- For a successful acknowledgement, there is an **I** record in the output but no corresponding **D** records with error messages.

3.6.3 Example successful acknowledgement

	A	B	C	D	E	
1	I	ERRORMSG	SRA	1	ERROR_MESSAGE	
2						
3						

3.6.4 Example unsuccessful acknowledgement

	A	B	C	D	E
1	I	ERRORMSG	SRA	1	ERROR_MESSAGE
2	D	ERRORMSG	SRA	1	Bid Price must be greater than zero for auction [A201606] option [1]
3	D	ERRORMSG	SRA	1	Bid Price must be greater than zero for auction [A201606] option [5]

3.7   Bid file format

The Bid File and Bid acknowledgement formats do not change for this project. For details, see **NEM Settlement Residue Auction User Interface Guide**.

3.8   Cancelling offers

You can cancel an entire Offer File in the Markets Portal SRA interface. For help, see Cancel an offer file on page 20.

4. SRA Quarterly and Weekly Statements

4.1.1 SRA quarterly statement

The quarterly statement for SRA Auction Participants has the following new line items:

1. Cancellations

2. Cash Security

    a. Returned

    b. Interest

> You can find examples and further details about draft statements on the SRA Secondary Trading Project web page under Guidance Material.

The added line items provide information regarding where AEMO returned Cash Security no longer required to maintain a participant's Trading Margin above zero.

4.1.2 Weekly statement

Changes to the weekly statement line items include:

- The calculation of the Units where residue takes into consideration any Cancelled Units.

- The fee calculation changes to consider the new fee structure to comply with the Auction Rules.

- The **Auction Fees** column presents the aggregate of the allocation and cancellation fees, pro-rated against each Directional Interconnector.

5. Markets Portal

5.1 Enter offers

To access **Enter Offers**, click **SRA,** and then **Enter Offer**. On the **Enter SRA Offers** interface, SRA Auction Participants can:

> **The numbers on the example screenshots refer to the numbered explanations.**

1. Access the interface during the Offer Period while the Auction is open, otherwise a message displays advising the Auction is closed.

2. Enter their Offer for a one-hour session. A message displays towards the end of the session to confirm if you want to continue or end the session. If you want to keep your data click **Continue**.

3. Submit up to 2000 different Offers in each Offer File for an open Auction.

> **The last valid Offer File submitted and acknowledged is the Active Offer, replacing all earlier submitted Offers. The Active Offer is highlighted on the View Offers interface and is the Offer processed when the Auction closes.**

4. Submit and create Offers with one Offer ID and Price for one Tranche, Directional Interconnector and a specified number of Units. You can have many Offers in an Offer File.

5. Click **New Offer** to enter or insert a new Offer into the Offer File. See Enter new offer on page 16.

6. Import a prepared csv file Offer to the Auction for submission. For help, see View offers on page 17.

7. Export Offers to their local computer in a csv file. For help, see Export an offer file on page 20.

8. Edit the Offer details on the interface before submitting. For help, see Edit an offer on page 18.

9. Submit the entered or imported Offer:

    a. For a successful Offer, the status changes to **Valid** on the **View Offers** interface (see Figure 4 on page 17).

b.The SRA system does not process: Offers **not submitted**, **invalid**, or **deleted**.

Figure 1 Clear unsubmitted offers

c. A message displays if an SRA Auction Participant submits an Offer after the Auction is closed.

d.Invalid Offers have an orange indicator, see Figure 2 below.
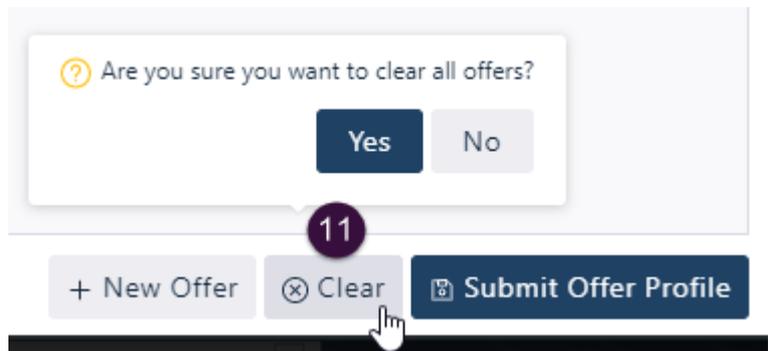
10. Delete Offers, see Figure 2 below.

11. **Clear** all unsubmitted Offers. See Figure 1.

12. View Offers by **Flat**, **Offer ID**, **Directional Interconnector**, and **Tranche**. The default view is Flat. See Figure 2 below.

13. Cancel an Offer, see Figure 2 below.

Figure 2 Offer File example

5.2 Enter new offer

To enter a new offer, click **SRA,** then **Enter Offer** and then **New Offer.** On the **New Offer** interface, SRA Auction Participants can, for each Offer, enter the following details and click Add to add the Offer to the Offer File (see Figure 3 below).

> **A message displays if any fields are blank or invalid. For help, see Offer validation on page 11.**

All fields are required (see Figure 3 below):

1. **Offer Price**
    Enter a price without the dollar sign, either manually or using the arrows. A valid price is greater than zero and has up to five decimal points.

2. **Tranche**
    Select a valid Tranche from the drop-down menu.

3. **Directional Interconnector**
    Select a valid Directional Interconnector from the drop-down menu.

4. **Offered Units:** Enter the number of Units, either manually or using the arrows. The Units Offered must be greater than zero.

Figure 3 Enter new offer

5.3   View offers

Once an Auction closes, SRA Auction Participants can use this interface to see their total number of Offers cleared.

To view your submitted Offers, click **SRA,** and then **View Offers**. On the **SRA View Offers** interface (see Figure 4 below), SRA Auction Participants can:

1. View their current open Offers, regardless of how you submitted them (see Ways to submit an offer file on page 8).
The default display is the current open or latest Auction. Displayed are:

   a. The **Auction ID**

   b. The **Load Date Time**

   c. The **File Name**

   d. The **Status**

2. To see the Offers in the Offer File, click **View Offers** next to the Offer File.

3. To view Offers for earlier Auctions, click the **Auction ID** drop-down arrow and select the Auction.

4. To sort Offers, click the arrows next to the **Load Date Time**, **File Name**, or **Status** headings.

Figure 4 View offer example
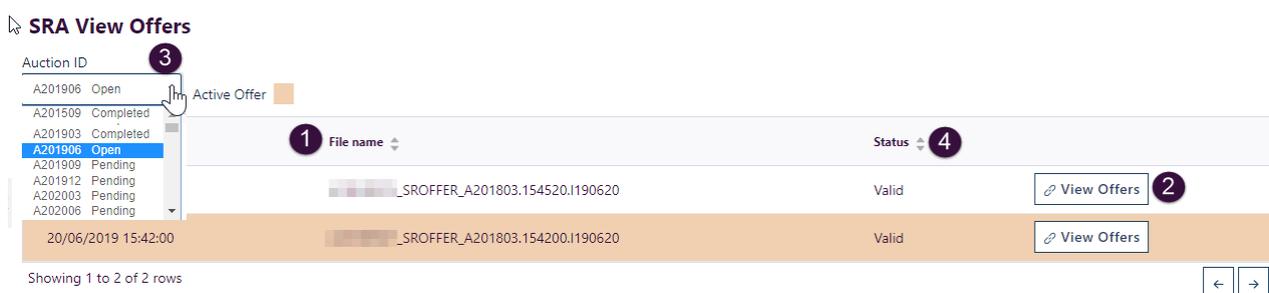
5.4   Copy an offer file

To copy an Offer File:

1. Click **SRA,** and then **View Offers**.

2. On the **SRA View Offers** interface find the Offer you want to copy and click Offer.

   For help finding and sorting Offers, see Figure 4 above.

5.5 Edit an offer

On the **SRA Enter Offer** interface, you can edit the Offer ID / Price, Tranche, Directional Interconnector, and Units Offered directly on the interface by clicking the field and typing the change. For details, see Figure 2 on page 15.

5.6 Import an offer file

1. On the **Enter SRA Offers** interface, click **Import Offers** (see Figure 2 on page 15). The **Import Offers from CSV File** window displays where you can do one of the following:

   a. Click **Choose Files** and select your prepared csv file or files from your local folders. For help, see Prepare a csv offer file on page 9.

   b. Drag the prepared csv file or files from your local folder onto the area on the pop-up window.

2. If the file is valid it is loaded, otherwise a message displays.
   Figure 5 is an example of an invalid Offer File upload. For help understanding messages, see Offer validation on page 11.

Figure 5 Invalid Offers File upload
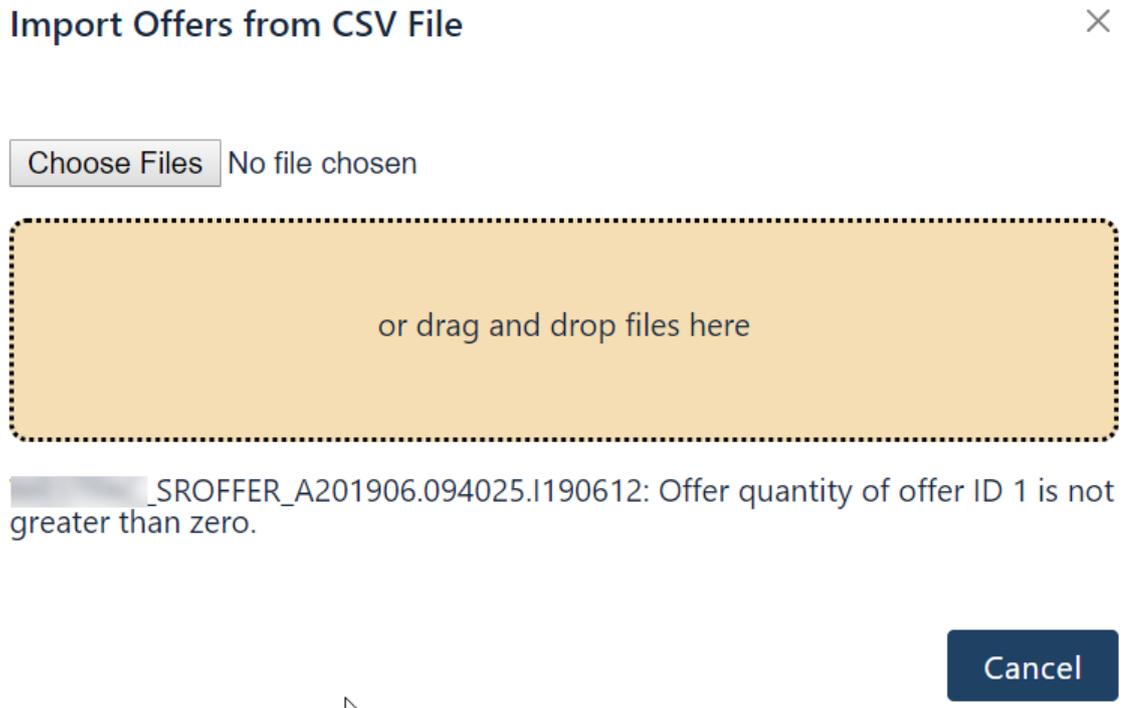
Import Offers from CSV File   ✕

Choose Files No file chosen

or drag and drop files here

_____SROFFER_A201906.094025.I190612: Offer quantity of offer ID 1 is not greater than zero.

Cancel

3. Click **Import Loaded Files**.

4. The SRA Enter Offer interface displays with your loaded Offer. If required you can make changes before submitting, see Edit an offer on page 18.

5. Click **Submit Offer**. If the Offer File is valid, the status changes to **Valid** in the **View Offers** interface (see Figure 4 on page 17).
   Otherwise fix the validation error and resubmit. For help, see Offer validation on page 11.

Figure 6 Import offer file example
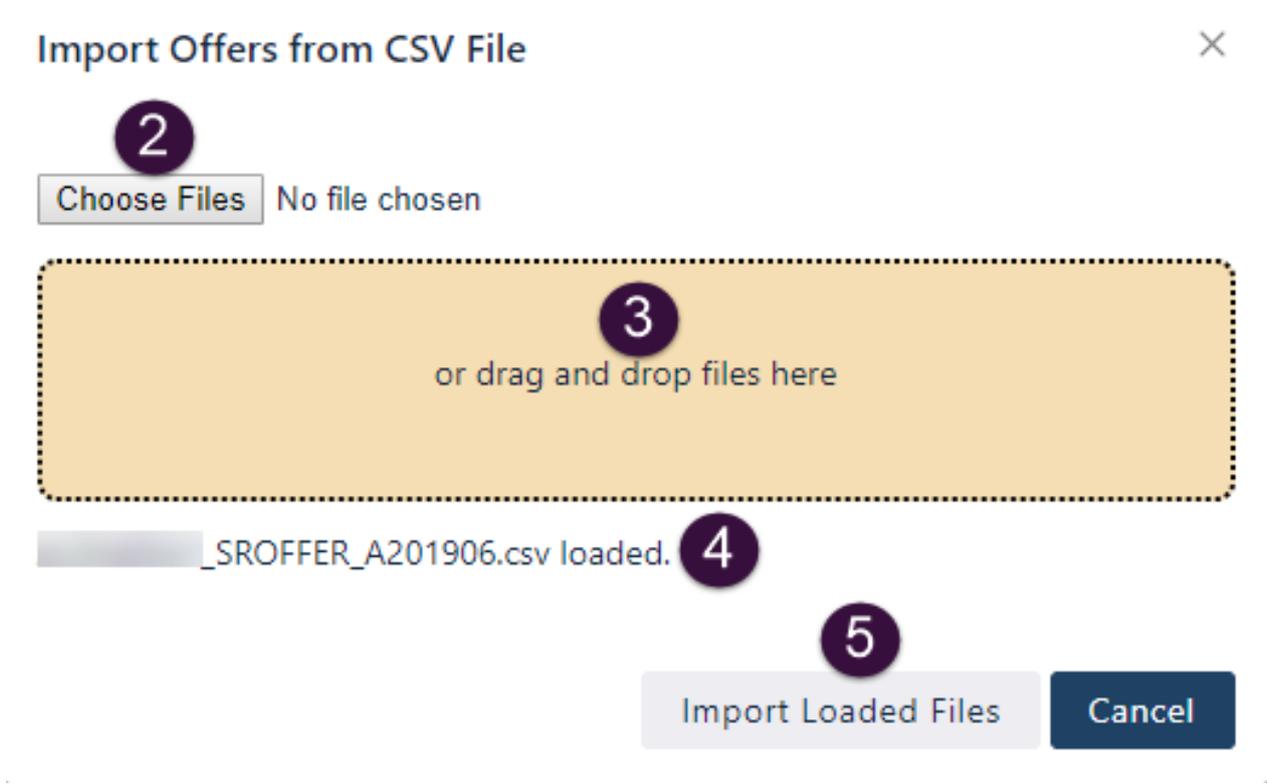
5.7 Export an offer file

1. On the **Enter SRA Offers** interface, click **Export Offers** and save the file to your local folder (see Figure 2 on page 15).

   For help finding and sorting Offers, see Figure 4 on page 17.

5.8 Cancel an offer file

Cancelling an Offer File means the last valid Offer File you enter is empty, therefore no Offers are submitted in the Auction.

1. To cancel an Offer File, click **SRA,** and then **Enter Offer**.

2. The **SRA Enter Offer** interface displays, at the bottom of the interface, click **Cancel Offer**. For help, see Figure 2 on page 15.

3. Your latest Offer File submission displays. If it is the correct Offer File, click **Cancel Offer** and **Yes** to **Are you sure you want to cancel this submission?**

4. On the cancellation successful message, click **Close**. You now have no submitted Offer Files in the Auction.
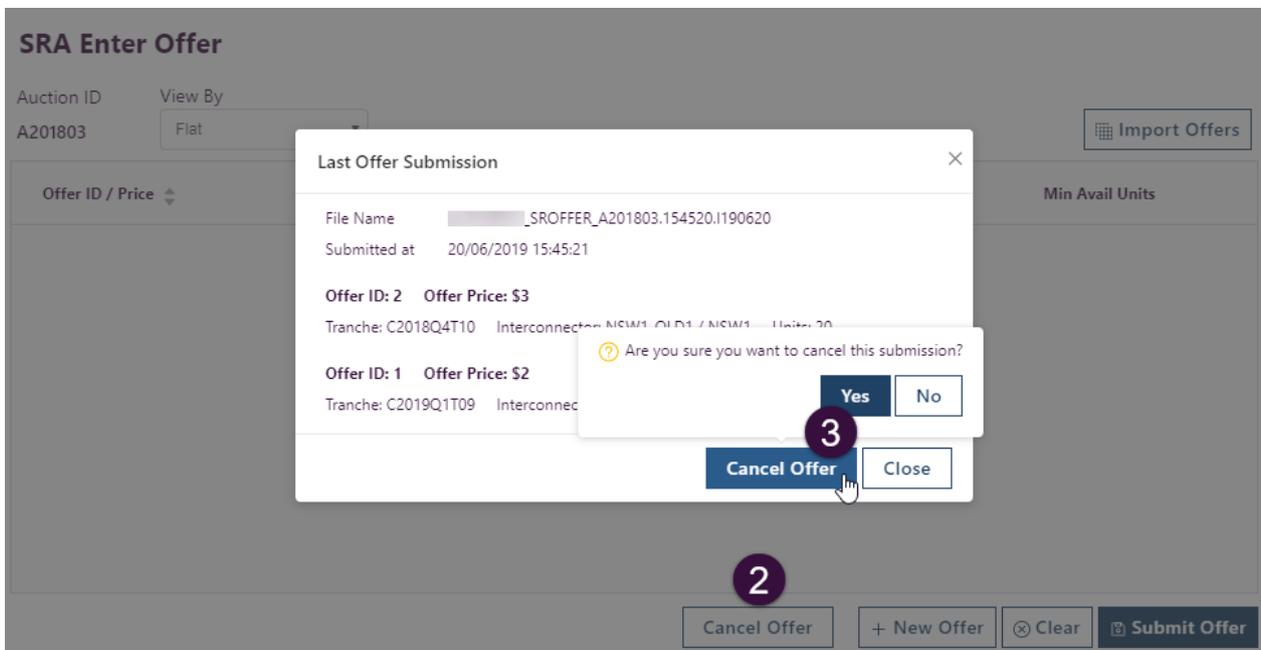
5.9   Cancel an offer in an offer file

Submit a new Offer File, excluding the Offer you want to cancel. For help, see Enter new offer on page 16.

Public Offer information is anonymous.

5.10 View public offers

Once an Auction closes, SRA Auction Participants can use this interface to view all public Offers.

To view public Offers, click **SRA,** and then **View Public Offers** (see Figure 7 on page 22).

SRA Auction Participants can:

1. Export public Offer details to a csv file. See Import an offer file on page 18.

2. Select the **Auction ID** drop-down arrow to view the public Offers for each Auction.

3. View public Offers by Flat, Offer ID, Directional Interconnector, and Tranche. The default view is Flat.

4. View the following public Offer details for the selected Auction:

    a. Offer ID/Price

    b. Tranche

    c. Directional Interconnector

    d. Units Offered

    e. Clearing Price

Figure 7 View public offers example

5.11 View calendar

The **SRA Calendar** displays:

1. The **Auction Date** range: Four years in the past and three years in the future.

2. The **Quarter** range: One year in the past and three years in the future.

3. The minimum number of Units available in the Auction for the Relevant Quarter and Directional Interconnector. The calendar does not display information about Offered or Cancelled Units.

4. A key describing the Auction status.

Figure 8 View Calendar example

5.12 View quarter

5.12.1 Unit holdings summary

The following items are added to the **SRA View Quarter Unit Holdings Summary** section:

1. The number of **Max Units** offered based on the entire Quarter.

2. The number of **Cancelled Units**.

3. The **Cancellation Payment** amount.

4. The **Current Holding** column displays how many units you currently hold, including subtracting Cancelled Units from the total Allocated Units.

5.12.2 Unit holdings

The following items are added to the **SRA View Quarter Unit Holdings** section:

1. The number of **Min Avail Units** offered based on a Tranche of a Quarter.

2. The number of **Cancelled Units**.

3. The **Cancellation Payment** amount.

Unit Holdings									View By: Directional Interconnector ▼		
Tranche	Auction Fee	Min Avail Units	Units Allocated	Unit Price	Current Holding	Purchase Payment	Cancelled Units	Cancellation Payment	Originally Purchased	Returned Units	Transfe
Directional Interconnector: NSW1-QLD1 / NSW1											
		495	450		5	$1,975.00	0	$0.00	5	0	0
Directional Interconnector: NSW1-QLD1 / QLD1											
		1,100	1,000		0	$0.00	0	$0.00	0	0	0
Directional Interconnector: V-SA / SA1											
		704	640		0	$0.00	0	$0.00	0	0	0
Directional Interconnector: V-SA / VIC1											
		803	730		18	$63,917.95	0	$0.00	18	0	0

5.12.3 Billing section view by billing week

Under **Billing**, if **View By** is **Billing Week,** reconciliation details for the selected Quarter display. These columns are highlighted in red because they are confidential and only seen by the logged in Participant ID:

1. **Directional Interconnector**

2. **Gross IRSR Received**

3. **Fees Payment**: Stays the same with changes to the calculation as additional fees are incurred for Cancelled Units..

4. **Net IRSR Received**

> For more details, see **the SRA Secondary Trading Project web page under Guidance Material and the Settlements Residue Auction Rules**.

Directional Interconnector	Gross IRSR Received	Fees Payment	Net IRSR Received
Billing Week: 201914			
NSW1-QLD1 / NSW1	$0.00	$0.00	$0.00
NSW1-QLD1 / QLD1	$421,697.88	-$7,368.90	$414,328.98
V-SA / SA1	$1,947.40	-$153.90	$1,793.50
V-SA / VIC1	$982.39	-$982.39	$0.00
VIC1-NSW1 / NSW1	$64,338.48	-$389.55	$63,948.93
VIC1-NSW1 / VIC1	$149.30	-$149.30	$0.00
	$489,115.45	-$9,044.04	$480,071.41
Billing Week: 201915			

5.12.4 Billing section view by directional interconnector

> **The red highlighting indicates the columns are confidential and only seen by the logged in Participant ID.**

Under **Billing**, if **View By** is **Directional Interconnector** reconciliation details for the selected Quarter display:

> **For more details, see the SRA Secondary Trading Project web page under Guidance Material and the Settlements Residue Auction Rules.**

1. **Billing Week**

2. **Gross IRSR Received**

3. **Fees Payment**: Remains the same with changes to the calculation as additional fees are incurred for Cancelled Units. For more details, see Settlements Residue Auction Rules

4. **Net IRSR Received**

Billing	①	②	③	④	View By Directional Interconnector
	Billing Week	Gross IRSR Received	Fees Payment	Net IRSR Received	
	Directional Interconnector: NSW1-QLD1 / NSW1				
	201914	$0.00	$0.00	$0.00	
	201915	$0.00	$0.00	$0.00	
	201916	$0.00	$0.00	$0.00	
	201917	$4.98	-$4.98	$0.00	
	201918	$109.54	-$109.54	$0.00	
	201919	$31.81	-$31.81	$0.00	
	201920	$10.12	-$10.12	$0.00	
	201921	$0.00	$0.00	$0.00	
	201922	$69.49	-$69.49	$0.00	
		$225.94	-$225.94	$0.00	
	Directional Interconnector: NSW1-QLD1 / QLD1				

5.13 View auction

The current holdings calculation is updated to subtract Cancelled Units.

Changes to the **SRA Calendar** interface include:

1. The number of **Min Avail Units** offered based on a Tranche of a Quarter.

2. The number of **Cancelled Units**.

3. The **Cancellation Payment** amount.

Figure 9 View auction

5.14 View transfers, returns

The change is improvements to the interface only.

SRA View Transfers, Returns

Transfers   View By Flat ▼

Transfer ID	From Participant ID	To Participant ID	Tranche	Directional Interconnector	From Region	Units Transferred	Comments

Showing 1 to 0 of 0 rows   ← →

Returns   View By Flat ▼

Transfer ID	From Participant ID	Tranche	Directional Interconnector	From Region	Units Transferred	Comments

Showing 1 to 0 of 0 rows   ← →

5.15 View bids

The change is improvements to the interface only.

SRA View Bids

Auction ID

A201903 ▼ Active Bid

Load Date Time ⇕	File name ⇕	Status ⇕	
15/03/2019 10:51:24	WEB_A201903_20190315105124.csv	Valid	🔗 View Bids
15/03/2019 10:45:23	WEB_A201903_20190315104523.csv	Valid	🔗 View Bids
15/03/2019 10:25:27	WEB_A201903_20190315102527.csv	Valid	🔗 View Bids
15/03/2019 09:08:21	WEB_A201903_20190315090821.csv	Valid	🔗 View Bids
14/03/2019 14:50:21	WEB_A201903_20190314145021.csv	Valid	🔗 View Bids

Showing 1 to 5 of 5 rows   ← →

5.16 Enter bid

The change is improvements to the interface only.

SRA Enter Bid

Auction ID   View By
A201906   Flat   Import Bid

Bid ID / Price ⇕   Directional Interconnector

New Bid ID 1   ✕

Bid Price   [   ]

First Bid Product

Tranche   C2019Q3T12   ▾

Directional Interconnector   NSW1-QLD1 / NSW1   ▾

Units   [   ]

                                          Cancel   Add

                            Cancel Bid   + New Bid   ⊗ Clear   Submit Bid

5.17 View public bids

The change is improvements to the interface only.

SRA View Public Bids

Auction   View By
A201906 Open ▾   Flat ▾

Bid ID / Price ⇕   Tranche   Directional Interconnector   Units   Clearing Price

Showing 1 to 0 of 0 rows   ← →

5.18 View prudential details

SRA Auction Participants can use this interface to view their prudential details:

1. Click **SRA,** and then **View Prudential Details**.

2. The **SRA Prudential Details** interface displays the following details specific to the logged in Participant ID:

   a. **Trading Margin:** The Available margin for offers requiring margin to proceed. Equal to the Trading Limit minus the Prudential Exposure.

   b. **Trading Limit:** Total Cash Security held by AEMO for the Participant ID, not including any already returned amount.

   c. **Prudential Exposure:** The amount of an SRA Auction Participant's actual or contingent liability, calculated according to the Auction Rules.

   d. **Grid:** Detailed information about the Cash Security: ID, date provided, initial amount received, and amount returned to the Participant ID.

   e. **Subgrid:** Details of previously returned Cash Security: year, quarter, return date, returned amount, and interest paid to the Participant ID.

6. NEM Reports

6.1 Prudential requirements

Prudential reports are provided daily, any time the Trading Position is updated. To reconcile their Prudential Requirements, SRA Auction Participants have access to the following information:

- Inputs to the Prudential Exposure calculation. For details, see SRA reports below.

- Details of Cash Security deposits.

- Details of Offers from a completed Auction, see SROFFER report on page 31.

6.2 NEM report access

Participants can access NEM reports:

- Using FTP to the Participant File Server.

- Using Data Interchange: for details, see Electricity Data Model 4.29 on page 32.

- From http://nemweb.com.au/ > Settlement Residues and Settlements.

> **For more details about the margin calculation, see Settlements Residue Auction Rules.**

6.3 SRA reports

The NEM reports related to SRA include the following information:

> **For more details about file names and their content, see File interface changes on page 66.**

- All Units purchased.

- All Cancelled Units.

- How many Units owned in each Unit Category for each Relevant Quarter

- Components of the margin calculation:

  - Average Allocation Price (AAP), Average Cancellation Price (ACP), Cancellation Volume (CV) (for each Unit Type)

  - Trading Position in each Unit Type (Relevant Quarter and Directional Interconnector)

  - Average Trading Position (ATP) (aggregated total calculated in accordance with the Auction Rules)

- The total Cash Security provided (Trading Limit).

6.4 SROFFER report

A new public NEM report, SROFFER with Offer details from a completed Auction is available:

> **This is a non-Data Model report, you cannot subscribe to it in the Markets Portal, Data Subscription interface.**

1. From the Participant File Server:

    <#PARTICIPANTID>\IMPORT\REPORTS\IRSR_OFFERS.

2. NEMWeb. http://nemweb.com.au/ > Settlement Residues

- Introduction
- BIDS
- DATA MODEL
- DEMAND
- DISPATCH
- GAS SUPPLY HUB
- NEMDE
- NETWORK
- OTHER
- PASA
- PRE-DISPATCH
- PRICES
- SETTLEMENT RESIDUES
    - PreDispatch Inter-Regional Settlements Residue
    - Dispatch Inter-Regional Settlements Residue
    - Trading Inter-Regional Settlements Residue
    - Dispatch Negative Residue
    - Settlement Residue Auction - Offers
    - Settlement Residue Auction - Reconciliation
- SETTLEMENTS
- TRADING

SETTLEMENT RESIDUE AUCTION - OFFERS

CSV Report SROFFER Public Offer report

Jump to:
Download
Definitions

Download CSV

Current

Report Definitions

Expand all   Collapse all   Download

RESIDUE_PRICE_OFFER-NULL-1

Report Type: RESIDUE_PRICE_OFFER   Report Version: 1

Name	Description	Format
TRANCHEID		VARCHAR2(30)
INTERCONNECTORID		VARCHAR2(10)
REGIONID		VARCHAR2(10)
OFFER_UNITS		NUMBER(5)
OFFER_PRICE		NUMBER(17,5)
AUCTIONID		VARCHAR2(30)

7. Electricity Data Model 4.29

This Release has an updated version of the Electricity Data Model 4.29. This section describes the affected packages, tables, files, reports, and interfaces.

7.1 Unconstrained Intermittent Generation Forecast

Following requests to publish the regional Unconstrained Intermittent Generation Forecast (UIGF) in separate wind and solar UIGFs, this Data Model version 4.29 is updated with the following fields representing the respective aggregate regional wind and solar UIGFs: SOLAR_UIGF and WIND_UIGF.

> **Participant systems incorrectly configured and not compliant with the Baseline Assumptions in the Data Interchange Framework and Glossary may suffer data loss.**

These fields are added to the Data model with the current Electricity Data Model release v4.29, however these new fields will be populated only with the next Reports release. AEMO will publish a notice when these fields are available.

The following Electricity Data Model tables change:

Package	Table	Change
DISPATCH	DISPATCHREGIONSUM	Modified table
P5MIN	P5MIN_REGIONSOLUTION	Modified table
PDPASA	PDPASA_REGIONSOLUTION	Modified table
PRE_DISPATCH	PREDISPATCHREGIONSUM	Modified table
STPASA_SOLUTION	STPASA_REGIONSOLUTION	Modified table

7.2 Data Model changes summary

Package	Table name	Change	Details
BILLING_RUN	BILLINGIRPARTSURPLUSSUM	New column	AUCTIONFEES_TOTALGROSS_ADJ
DISPATCH	DISPATCHREGIONSUM	New columns	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CLEAREDMW SS_WIND_CLEAREDMW SS_SOLAR_COMPLIANCEMW SS_WIND_COMPLIANCEMW
IRAUCTION	SRA_OFFER_PROFILE	New table	Records the data of an SRA Auction Participant's Offer Submission
	SRA_OFFER_PRODUCT	New table	Records the Product details for each Offer File by each SRA Auction Participant
	SRA_CASH_SECURITY	New table	Records the Cash Security details provided by an SRA Auction Participant as collateral to cover their Trading Position in the SRA market
	SRA_PRUDENTIAL_RUN	New table	Records the prudential run details for each prudential date
	SRA_PRUDENTIAL_COMP_POSITION	New table	The prudential position of each SRA Auction Participant at the date and time of a specific prudential run

Package	Table name	Change	Details
	SRA_PRUDENTIAL_CASH_SECURITY	New table	Records the Cash Security details provided by an SRA Auction Participant as collateral to cover their Trading Position in the SRA market
	SRA_PRUDENTIAL_EXPOSURE	New table	Records details of the Prudential Exposure of an SRA Auction Participant
	SRA_FINANCIAL_RUNTRK	New table	Records details of the settlement process for the cancellation and purchase of SRA Auction Units
	SRA_FINANCIAL_AUCPAY_SUM	New table	Records a summary of the Auction payment amount
	SRA_FINANCIAL_AUCPAY_DETAIL	New table	Records details of the SRA financial Auction payment
	SRA_FINANCIAL_AUC_MARGIN	New table	Records the amount of Cash Security required to be held by an SRA Auction Participant after settlement
	SRA_FINANCIAL_AUC_MARDETAIL	New table	Records details of the amount of Cash Security required to be held by an SRA Auction Participant after settlement
	SRA_FINANCIAL_AUC_RECEIPTS	New table	Records details of Purchased and Cancelled Units and their value for the SRA Auction Participant.
	SRA_FINANCIAL_AUC_RECEIPTS	New table	Records details of the Cancelled Units and their value for the SRA Auction Participant
	RESIDUE_CON_DATA	New column: SECONDARY_UNITS_SOLD	Holds confidential information regarding Units Purchased and Cancelled for each SRA Auction Participant in the Auction.

Package	Table name	Change	Details
	AUCTION_IC_ALLOCATIONS	New column: AUCTIONFEE_SALES	Provides the basis for setting up contracts for individual Tranches, has the default definitions for the total number of Units and proportion applicable to each Directional Interconnector for a specified Auction Relevant Quarter, and information about the fees of a Unit
P5MIN	P5MIN_REGIONSOLUTION	New columns	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CLEAREDMW SS_WIND_CLEAREDMW SS_SOLAR_COMPLIANCEMW SS_WIND_COMPLIANCEMW
PDPASA	PDPASA_REGIONSOLUTION	New columns	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CAPACITY SS_WIND_CAPACITY SS_SOLAR_CLEARED SS_WIND_CLEARED
PRE_DISPATCH	PREDISPATCHREGIONSUM	New columns	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CLEAREDMW SS_WIND_CLEAREDMW SS_SOLAR_COMPLIANCEMW SS_WIND_COMPLIANCEMW

Package	Table name	Change	Details
STPASA_SOLUTION	STPASA_REGIONSOLUTION	New columns	SS_SOLAR_UIGF SS_WIND_UIGF SS_SOLAR_CAPACITY SS_WIND_CAPACITY SS_SOLAR_CLEARED SS_WIND_CLEARED

8. Package: BILLING_RUN

> **Results from a published Billing Run. The settlement data and billing run data are updated daily between 6am and 8am for AEMO's prudential processes. In a normal week, AEMO publishes one PRELIM, one FINAL, and two REVISION runs in addition to the daily runs.**

Changes for Secondary Trading in SRA.

8.1.1 Modified table: BILLINGIRPARTSURPLUSSUM

Comment	Supports the Settlements Residue Auction, by showing the weekly billing SRA distribution and associated fees to SRA Auction Participants.
Visibility	Private
Trigger	When billing is posted
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	BILLRUNNO, CONTRACTYEAR, FROMREGIONID, INTERCONNECTORID, PARTICIPANTID, QUARTER, RESIDUEYEAR, WEEKNO (no change)

New column

Field name	Data type	Description	PK
AUCTIONFEES_TOTALGROSS_ADJ	NUMBER(18,8)	The adjusted total Auction fees for the Directional Interconnector. Calculated as the amount of the total fees due from the SRA Auction Participant, pro-rated based on the total surplus for each Directional Interconnector the SRA Auction Participant contracted	No

9. Package: **DISPATCH**

Results from a published Dispatch Run

9.1.1 Modified table: DISPATCHREGIONSUM

Comment	DISPATCHREGIONSUM sets out the 5-minute solution for each dispatch run for each region, including the Frequency Control Ancillary Services (FCAS) services provided. Additional fields are for the Raise Regulation and Lower Regulation Ancillary Services plus improvements to demand calculations.
Visibility	Public
Trigger	Dispatch run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	SETTLEMENTDATE, RUNNO, REGIONID, DISPATCHINTERVAL, INTERVENTION

New columns

Field name	Data type	Description
SS_SOLAR_UIGF	Number(15,5)	Regional aggregated Unconstrained Intermittent Generation Forecast (UIGF) of semi-scheduled generation (MW) where the primary fuel source is solar

Field name	Data type	Description
SS_WIND_UIGF	Number(15,5)	Regional aggregated Unconstrained Intermittent Generation Forecast (UIGF) of semi-scheduled generation (MW) where the primary fuel source is wind
SS_SOLAR_CLEAREDMW	Number(15,5)	Regional aggregated semi-schedule generator cleared MW where the primary fuel source is solar
SS_WIND_CLEAREDMW	Number(15,5)	Regional aggregated semi-schedule generator cleared MW where the primary fuel source is wind
SS_SOLAR_COMPLIANCEMW	Number(15,5)	Regional aggregated semi-schedule generator cleared MW where the semi-dispatch cap is enforced, and the primary fuel source is solar
SS_WIND_COMPLIANCEMW	Number(15,5)	Regional aggregated semi-schedule generator cleared MW where the semi-dispatch cap is enforced, and the primary fuel source is wind

10. Package: IRAUCTION

| Inter-regional Residue Auction data. | Changes for Secondary Trading in SRA. |

10.1.1 New Table: SRA_OFFER_PROFILE

Comment	Holds the data of an SRA Auction Participant's Offer Submission
Visibility	Private
Trigger	On successful submission of an SRA Offer File
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	AUCTIONID, PARTICIPANTID, LOADDATE

New columns

Field Name	Data type	Comment
AUCTIONID	VARCHAR2(30)	Unique ID for each Auction date
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier
LOADDATE	DATE	The date and time the system loaded the SRA Offer File

Field Name	Data type	Comment
FILENAME	VARCHAR2(40)	SRA Offer File name
ACKFILENAME	VARCHAR2(40)	SRA acknowledgment file name
TRANSACTIONID	VARCHAR2(100)	Transaction ID used for tracking
LASTCHANGED	DATE	The date and time this record was last modified

10.1.2 New Table: SRA_OFFER_PRODUCT

Comment	Holds the Product details for each Offer File submitted by each SRA Auction Participant
Visibility	Private
Trigger	On successful submission of an SRA Offer File
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	AUCTIONID, PARTICIPANTID, LOADDATE, OPTIONID

New columns

Field Name	Data type	Comment
AUCTIONID	VARCHAR2(30)	Unique ID for each Auction date
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier
LOADDATE	DATE	The date and time the system loaded the SRA Offer File
OPTIONID	NUMBER(4,0)	Unique Product identifier (1 - 2000)
INTERCONNECTORID	VARCHAR2(10)	Unique Directional Interconnector identifier
FROMREGIONID	VARCHAR2(10)	The source Region identifier for the Directional Interconnector
OFFER_QUANTITY	NUMBER(5,0)	The Offer quantity for this Product
TRANCHEID	VARCHAR2(30)	Tranche identifier
OFFER_PRICE	NUMBER(18,8)	The Offer price for this Product
LASTCHANGED	DATE	The date and time this record was last modified

10.1.3 New Table: SRA_CASH_SECURITY

Comment	Records the Cash Security details provided by an SRA Auction Participant as collateral to cover their Trading Position in the SRA market
Visibility	Private
Trigger	On record authorisation

Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	CASH_SECURITY_ID

New columns

Field Name	Data type	Comment
CASH_SECURITY_ID	VARCHAR2(36)	Unique identifier for the Cash Security
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier for the SRA Auction Participant lodging the Cash Security
PROVISION_DATE	DATE	Date AEMO received the Cash Security deposit
CASH_AMOUNT	NUMBER(18,8)	Dollar amount of the Cash Security
INTEREST_ACCT_ID	VARCHAR2(20)	The interest account ID for calculating the interest payment
AUTHORISEDATE	DATE	Authorised date
FINALRETURNDATE	DATE	Date the entire Cash Security amount was returned to the SRA Auction Participant
CASH_SECURITY_RETURNED	NUMBER(18,8)	Returned Dollar amount of the Cash Security
DELETIONDATE	DATE	Cash Security deleted date. For valid records, DeletionDate is Null.
LASTCHANGED	DATE	The date and time this record was last modified

10.1.4 New Table: SRA_PRUDENTIAL_RUN

Comment	Records the prudential run details for each prudential date
Visibility	Public
Trigger	On successful completion of a prudential run.
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	PRUDENTIAL_DATE, PRUDENTIAL_RUNNO

New columns

Field Name	Data type	Comment
PRUDENTIAL_DATE	DATE	The prudential date of the run
PRUDENTIAL_RUNNO	NUMBER(8,0)	The prudential run number for the run

10.1.5 New Table: SRA_PRUDENTIAL_COMP_POSITION

Comment	The prudential position of each SRA Auction Participant at the date and time of a specific prudential run
Visibility	Private
Trigger	On successful completion of a prudential run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS

Primary key (in order)	PRUDENTIAL_DATE, PRUDENTIAL_RUNNO, PARTICIPANTID

New columns

Field Name	Data type	Comment
PRUDENTIAL_DATE	DATE	The prudential date of the run
PRUDENTIAL_RUNNO	NUMBER(8,0)	The run number for the prudential date
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier
TRADING_LIMIT	NUMBER(18,8)	The Trading Limit of the SRA Auction Participant at the time of the prudential run
PRUDENTIAL_EXPOSURE_AMOUNT	NUMBER(18,8)	Current Prudential Exposure of the SRA Auction Participant including Offers
TRADING_MARGIN	NUMBER(18,8)	The amount of Trading Margin available to the SRA Auction Participant to trade (including Offered Units and Cancelled Units). Equal to TRADING_LIMIT – PRUDENTIAL_EXPOSURE_AMOUNT

10.1.6 New Table: SRA_PRUDENTIAL_CASH_SECURITY

Comment	Records the Cash Security details provided by an SRA Auction Participant as collateral to cover their Trading Position in the SRA market
Visibility	Private
Trigger	On successful completion of a prudential run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS

Primary key (in order)	PRUDENTIAL_DATE, PRUDENTIAL_RUNNO, PARTICIPANTID, CASH_SECURITY_ID

New columns

Field Name	Data type	Comment
PRUDENTIAL_DATE	DATE	The prudential date of the run
PRUDENTIAL_RUNNO	NUMBER(8,0)	The run number for the prudential date
CASH_SECURITY_ID	VARCHAR2(36)	Unique identifier for the Cash Security
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier for the SRA Auction Participant lodging the Cash Security
CASH_SECURITY_AMOUNT	NUMBER(18,8)	Remaining Cash Security deposit available

10.1.7 New Table: SRA_PRUDENTIAL_EXPOSURE

Comment	Records details of the Prudential Exposure of an SRA Auction Participant
Visibility	Private
Trigger	On successful completion of prudential run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	PRUDENTIAL_DATE, PRUDENTIAL_RUNNO, PARTICIPANTID, SRA_YEAR, SRA_QUARTER, INTERCONNECTORID, FROMREGIONID

New columns

Field Name	Data type	Comment
PRUDENTIAL_DATE	DATE	The prudential date of the run
PRUDENTIAL_RUNNO	NUMBER(8,0)	The run number for the prudential date
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier
SRA_YEAR	NUMBER(4,0)	Year of the Tranche
SRA_QUARTER	NUMBER(3,0)	Relevant Quarter of the Tranche
INTERCONNECTORID	VARCHAR2(10)	The identifier for the Directional Interconnector
FROMREGIONID	VARCHAR2(10)	The source Region identifier for the Directional Interconnector
MAX_TRANCHE	NUMBER(2,0)	The most recent Tranche where Units were cancelled or offered (if the Offer is below the Average Purchase Price). Used in the calculation of the Average Purchase Price for the Trading Position of the Product.
AUCTIONID	VARCHAR2(30)	Unique identifier for the Auction having the Offer. Has a null value when no Offer is valid for the Relevant Quarter
OFFER_SUBMISSIONTIME	DATE	Timestamp of the Offer File submitted by the SRA Auction Participant. Has a null value when no Offer is valid for the Relevant Quarter
AVERAGE_PURCHASE_PRICE	NUMBER(18,8)	Calculated Average Purchase Price for the Product
AVERAGE_CANCELLATION_PRICE	NUMBER(18,8)	Calculated Average Cancellation Price for the Product

Field Name	Data type	Comment
CANCELLATION_VOLUME	NUMBER(18,8)	Calculated Cancelled Volume for the Product
TRADING_POSITION	NUMBER(18,8)	Calculated Trading Position for the Product

10.1.8 New Table: SRA_FINANCIAL_RUNTRK

Comment	Records details of the settlement process for the cancellation and purchase of SRA Auction Units
Visibility	Public
Trigger	On successful posting of an SRA financials run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	SRA_YEAR, SRA_QUARTER, SRA_RUNNO

New columns

Field Name	Data type	Comment
SRA_YEAR	NUMBER(4,0)	Year of the Tranche
SRA_QUARTER	NUMBER(3,0)	Relevant Quarter of the Tranche
SRA_RUNNO	NUMBER(3)	SRA run number

Field Name	Data type	Comment
RUNTYPE	VARCHAR2(20)	The type of SRA run
RUNDATE	DATE	The date and time the run triggered
POSTEDDATE	DATE	The date and time the run was posted
INTEREST_VERSIONNO	NUMBER(3)	Version number of the interest component used in the payments run
MAKEUP_VERSIONNO	NUMBER(3)	Version number of the make-up component used in the make-up run
LASTCHANGED	DATE	The date and time this record was last modified

10.1.9 New Table: SRA_FINANCIAL_AUCPAY_SUM

Comment	Records a summary of the Auction payment amount
Visibility	Private
Trigger	On successful posting of an SRA Financials run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	SRA_YEAR, SRA_QUARTER, SRA_RUNNO, PARTICIPANTID

New columns

Field Name	Data type	Comment
SRA_YEAR	NUMBER(4,0)	Year of the Tranche
SRA_QUARTER	NUMBER(3,0)	Relevant Quarter of the Tranche
SRA_RUNNO	NUMBER(3)	The SRA run number
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier
GROSS_PROCEEDS_AMOUNT	NUMBER(18,8)	The total Auction proceeds allocated to the TNSP
TOTAL_GROSS_PROCEEDS_AMOUNT	NUMBER(18,8)	The total Auction proceeds allocated to all TNSPs in the SRA Relevant Quarter
SHORTFALL_AMOUNT	NUMBER(18,8)	The shortfall amounts in the SRA Relevant Quarter for the TNSP
TOTAL_SHORTFALL_AMOUNT	NUMBER(18,8)	The total shortfall amounts for the SRA Relevant Quarter for all TNSPs
NET_PAYMENT_AMOUNT	NUMBER(18,8)	The net payment amount owed by AEMO to the TNSP
LASTCHANGED	DATE	The date and time this record was last modified

10.1.10 New Table: SRA_FINANCIAL_AUCPAY_DETAIL

Comment	Records details of the SRA financial auction payment
Visibility	Private
Trigger	On successful posting of an SRA Financials run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	SRA_YEAR, SRA_QUARTER, SRA_RUNNO, PARTICIPANTID, INTERCONNECTORID, FROMREGIONID, CONTRACTID

New columns

Field Name	Data type	Comment
SRA_YEAR	NUMBER(4,0)	Year of the Tranche
SRA_QUARTER	NUMBER(3,0)	Relevant Quarter of the Tranche
SRA_RUNNO	NUMBER(3)	The SRA run number
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier
INTERCONNECTORID	VARCHAR2(10)	The identifier for the Directional Interconnector
FROMREGIONID	VARCHAR2(10)	The source Region identifier for the Directional Interconnector

Field Name	Data type	Comment
CONTRACTID	VARCHAR2(10)	The SRA contract identifier
MAXIMUM_UNITS	NUMBER(18,8)	The Maximum Units Available for purchase in the Auction
UNITS_SOLD	NUMBER(18,8)	The total number of Allocated Units in the Auction, including Cancelled Units by an SRA Auction Participant
SHORTFALL_UNITS	NUMBER(18,8)	The total number of Units unpaid for in the Auction
RESERVE_PRICE	NUMBER(18,8)	The reserve price of the Auction
CLEARING_PRICE	NUMBER(18,8)	The Market Clearing Price of the Auction
PAYMENT_AMOUNT	NUMBER(18,8)	The payment amount owed by AEMO before shortfall
SHORTFALL_AMOUNT	NUMBER(18,8)	The shortfall amount
ALLOCATION	NUMBER(18,8)	The percentage of the auction proceeds allocated to the TNSP on the Directional Interconnector
NET_PAYMENT_AMOUNT	NUMBER(18,8)	The payment amount owed by AEMO, including shortfall
LASTCHANGED	DATE	The date and time this record was last modified

10.1.11 New Table: SRA_FINANCIAL_AUC_MARGIN

Comment	Records the amount of Cash Security required to be held by an SRA Auction Participant after settlement
Visibility	Private
Trigger	On successful posting of an SRA financials run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	SRA_YEAR, SRA_QUARTER, SRA_RUNNO, PARTICIPANT_ID

New columns

Field Name	Data type	Comment
SRA_YEAR	NUMBER(4,0)	Year of the Tranche
SRA_QUARTER	NUMBER(3,0)	Relevant Quarter of the Tranche
SRA_RUNNO	NUMBER(3)	The SRA run number
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier
TOTAL_CASH_SECURITY	NUMBER(18,8)	Total Cash Security held by the SRA Auction Participant

Field Name	Data type	Comment
REQUIRED_MARGIN	NUMBER(18,8)	The amount of Cash Security required to be held by the SRA Auction Participant after settlement
RETURNED_MARGIN	NUMBER(18,8)	The amount of Cash Security returned to the SRA Auction Participant
RETURNED_MARGIN_INTEREST	NUMBER(18,8)	The amount of interest applicable to the returned Cash Security amounts

10.1.12 New Table: SRA_FINANCIAL_AUC_MARDETAIL

Comment	Records details of the amount of Cash Security required by an SRA Auction Participant after settlement
Visibility	Private
Trigger	On successful posting of an SRA financials run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	SRA_YEAR, SRA_QUARTER, SRA_RUNNO, PARTICIPANT_ID, CASH_SECURITY_ID

New column

Field Name	Data type	Comment
SRA_YEAR	NUMBER(4,0)	Year of the Tranche
SRA_QUARTER	NUMBER(3,0)	Relevant Quarter of the Tranche

Field Name	Data type	Comment
SRA_RUNNO	NUMBER(3)	The SRA run number
PARTICIPANTID	VARCHAR2(10)	Unique participant identifier
CASH_SECURITY_ID	VARCHAR2(36)	Unique identifier for the Cash Security
RETURNED_AMOUNT	NUMBER(18,8)	The amount returned to the SRA Auction Participant from this Cash Security
RETURNED_INTEREST	NUMBER(18,8)	The amount of interest applicable to the returned amount

10.1.13   New Table: SRA_FINANCIAL_AUC_RECEIPTS

Comment	Records details of purchased and cancelled units and their value for the SRA Auction Participant.
Visibility	Private
Trigger	On successful posting of any SRA financials run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	SRA_YEAR, SRA_QUARTER, SRA_RUNNO, PARTICIPANTID, INTERCONNECTORID, FROMREGIONID, CONTRACTID

New columns

Field Name	Data type	Comment
SRA_YEAR	NUMBER(4,0)	Year of the Tranche
SRA_QUARTER	NUMBER(3,0)	Relevant Quarter of the Tranche
SRA_RUNNO	NUMBER(3)	SRA run number
PARTICIPANTID	VARCHAR2(10)	The participant identifier
INTERCONNECTORID	VARCHAR2(10)	The identifier for the Directional Interconnector
FROMREGIONID	VARCHAR2(10)	The source region identifier for the Directional Interconnector
CONTRACTID	VARCHAR2(10)	The SRA contract identifier
UNITS_PURCHASED	NUMBER(18,8)	The number of units purchased
CLEARING_PRICE	NUMBER(18,8)	The clearing price of the Auction
RECEIPT_AMOUNT	NUMBER(18,8)	The payment amount owed to AEMO

| Field Name	Data type	Comment
LASTCHANGED	DATE	The last changed date for the record
UNITS_SOLD	NUMBER(18,8)	The number of units cancelled by the SRA Auction Participant
PROCEEDS_AMOUNT	NUMBER(18,8)	Dollar value of Cancelled Units in the Auction owed to the SRA Auction Participant

10.1.14　Modified table: RESIDUE_CON_DATA

Comment	Holds confidential information regarding units purchased and cancelled for each SRA Auction Participant in the Auction.
Visibility	Private
Trigger	On Auction completion
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	CONTRACTID, VERSIONNO, PARTICIPANTID, INTERCONNECTORID, FROMREGIONID (No Change)

New column

Field name	Data type	Description	PK
SECONDARY_UNITS_SOLD	NUMBER(18,8)	The number of cancelled Units for the SRA Auction Participant	No

10.1.15 Modified table: AUCTION_IC_ALLOCATIONS

Comment	Provides the basis for setting up contracts for individual Tranches, has the default definitions for the total number of Units and proportion applicable to each Directional Interconnector for a specified Auction Relevant Quarter, and information about the cancellation fee of a Unit
Visibility	Public
Trigger	Usually quarterly after each Settlement Residue Auction
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	CONTRACTYEAR, QUARTER, VERSIONNO, INTERCONNECTORID, FROMREGIONID (no change)

New column

Field name	Data type	Description	PK
AUCTIONFEE_SALES	NUMBER(18,8)	Fees for Cancelled Units	No

11. **Package: P5MIN**

> **Results from a published Five-Minute Predispatch Run**

11.1.1 Modified table: P5MIN_REGIONSOLUTION

Comment	The five-minute predispatch (P5Min) is an MMS system providing projected dispatch for 12 Dispatch cycles (one hour). The 5-minute Predispatch cycle runs every 5-minutes to produce a dispatch and pricing schedule to a 5-minute resolution covering the next hour, a total of twelve periods. P5MIN_REGIONSOLUTION shows the results of the regional capacity, maximum surplus reserve and maximum spare capacity evaluations for each period of the study.
Visibility	Public
Trigger	Every 5 minutes
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	RUN_DATETIME, REGIONID, INTERVAL_DATETIME

New columns

Field name	Data type	Description
SS_SOLAR_UIGF	Number(15,5)	Regional aggregated Unconstrained Intermittent Generation Forecast (UIGF) of semi-scheduled generation (MW) where the primary fuel source is solar

Field name	Data type	Description
SS_WIND_UIGF	Number(15,5)	Regional aggregated Unconstrained Intermittent Generation Forecast (UIGF) of semi-scheduled generation (MW) where the primary fuel source is wind
SS_SOLAR_CLEAREDMW	Number(15,5)	Regional aggregated semi-schedule generator cleared MW where the primary fuel source is solar
SS_WIND_CLEAREDMW	Number(15,5)	Regional aggregated semi-schedule generator cleared MW where the primary fuel source is wind
SS_SOLAR_COMPLIANCEMW	Number(15,5)	Regional aggregated semi-schedule generator cleared MW where the semi-dispatch cap is enforced, and the primary fuel source is solar
SS_WIND_COMPLIANCEMW	Number(15,5)	Regional aggregated semi-schedule generator cleared MW where the semi-dispatch cap is enforced, and the primary fuel source is wind

12. Package: PDPASA

The PDPASA package provides a 30-minute solving process to the market systems.

The current methodology for calculating reserves in the pre-dispatch timeframe is determined in a post processing step using a heuristic calculation based the results and Interconnector limits from the pre-dispatch run.

The calculation is a reserve assessment based on the PASA solver similar to existing ST and MTPASA business processes.

The process reflects all intra-regional and inter-regional network constraints as an input to the process.

12.1.1 Modified table: PDPASA_REGIONSOLUTION

Comment	The PDPASA region solution data
Visibility	Public
Trigger	When PDASA runs (half-hourly)
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	RUN_DATETIME, RUNTYPE, INTERVAL_DATETIME, REGIONID

New column

Field name	Data type	Description
SS_SOLAR_UIGF	Number(12,2)	Regional aggregated Unconstrained Intermittent Generation Forecast of (UIGF) semi-scheduled generation (MW) where the primary fuel source is solar

Field name	Data type	Description
SS_WIND_UIGF	Number(12,2)	Regional aggregated Unconstrained Intermittent Generation Forecast of (UIGF) semi-scheduled generation (MW) where the primary fuel source is wind
SS_SOLAR_CAPACITY	Number(12,2)	Regional aggregated semi-scheduled UIGF availability where the primary fuel source is solar
SS_WIND_CAPACITY	Number(12,2)	Regional aggregated semi-scheduled UIGF availability where the primary fuel source is wind
SS_SOLAR_CLEARED	Number(12,2)	Regional aggregated semi-scheduled cleared MW where the primary fuel source is solar and StudyRegion = Region
SS_WIND_CLEARED	Number(12,2)	Regional aggregated semi-scheduled cleared MW where the primary fuel source is wind and StudyRegion = Region

13. Package: PRE_DISPATCH

> **Results from a published pre-dispatch run**

13.1.1 Modified table: PREDISPATCHREGIONSUM

Comment	PREDISPATCHREGIONSUM sets out the overall regional Pre-Dispatch results for base case details (excluding price).
Visibility	Public
Trigger	Pre-dispatch run
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	DATETIME, REGIONID

New columns

Field name	Data type	Description
SS_SOLAR_UIGF	Number(15,5)	Regional aggregated Unconstrained Intermittent Generation Forecast (UIGF) of semi-scheduled generation (MW) where the primary fuel source is solar
SS_WIND_UIGF	Number(15,5)	Regional aggregated Unconstrained Intermittent Generation Forecast (UIGF) of semi-scheduled generation (MW) where the primary fuel source is wind
SS_SOLAR_CLEAREDMW	Number(15,5)	Regional aggregated semi-schedule generator cleared MW where the primary fuel source is solar

Field name	Data type	Description
SS_WIND_CLEAREDMW	Number(15,5)	Regional aggregated Semi-Schedule generator cleared MW where the primary fuel source is wind
SS_SOLAR_COMPLIANCEMW	Number(15,5)	Regional aggregated Semi-Schedule generator cleared MW where the semi-dispatch cap is enforced, and the primary fuel source is solar
SS_WIND_COMPLIANCEMW	Number(15,5)	Regional aggregated Semi-Schedule generator cleared MW where the semi-dispatch cap is enforced, and the primary fuel source is wind

14. Package: STPASA_SOLUTION

Results from a published Short-Term PASA run

14.1.1 Modified table: STPASA_REGIONSOLUTION

Comment	STPASA_REGIONSOLUTION shows the results of the regional capacity, maximum surplus reserve and maximum spare capacity evaluations for each period of the study.
Visibility	Public
Trigger	When STPASA runs (half-hourly)
Participant file share location	<#INTRFACE>\<#PARTICIPANTID>\IMPORT\REPORTS\CSVREPORTS
Primary key (in order)	RUN_DATETIME, RUNTYPE, INTERVAL_DATETIME, REGIONID

New columns

Field name	Data type	Description	PK
SS_SOLAR_UIGF	Number(12,2)	Regional aggregated Unconstrained Intermittent Generation Forecast of Semi-scheduled generation (MW) where the primary fuel source is solar	No
SS_WIND_UIGF	Number(12,2)	Regional aggregated Unconstrained Intermittent Generation Forecast of Semi-scheduled generation (MW) where the primary fuel source is wind	No

Field name	Data type	Description	PK
SS_SOLAR_CAPACITY	Number(12,2)	Regional aggregated semi-scheduled UIGF availability where the primary fuel source is solar	No
SS_WIND_CAPACITY	Number(12,2)	Regional aggregated semi-scheduled UIGF availability where the primary fuel source is wind	No
SS_SOLAR_CLEARED	Number(12,2)	Regional aggregated semi-scheduled cleared MW where the primary fuel source is solar and StudyRegion = Region	No
SS_WIND_CLEARED	Number(12,2)	Regional aggregated semi-scheduled cleared MW where the primary fuel source is wind and StudyRegion = Region	No

14.2 File interface changes

Package ID	File ID	Description	Batcher file masks	Frequency	Change	Auto-subscription
BILLING_RUN	BILLING	Supports the Settlements Residue Auction by showing the weekly billing SRA distribution and associated fees to SRA Auction Participants	*_BILLING_*.CSV	An indicative maximum is 16 records inserted per billing run or 166 records inserted per week	Modified	No

Package ID	File ID	Description	Batcher file masks	Frequency	Change	Auto-subscription
DISPATCH	DISPATCHIS	DISPATCHREGIONSUM sets out the 5-minute solution for each dispatch run for each region, including the Frequency Control Ancillary Services (FCAS) services provided. Additional fields are for the Raise Regulation and Lower Regulation Ancillary Services plus improvements to demand calculations.	*_DISPATCHIS_*.CSV	After each dispatch run	Modified	No
IRAUCTION	SRA_SEC_OFFERS	Provides all data in an SRA Offer Submission	*_SRA_SEC_OFFERS*.CSV	On successful submission of an Offer File	New	Yes
	SRA_CASH_SECURITY	Provides all data in an SRA Cash Security deposit	*_SRA_CASHSECURITY *.CSV	On authorisation of Cash Security	New	Yes
	SRA_PRUDENTIAL_RUN	Provides all data in an SRA prudential run	*_SRA_PRUDENTIALRUN*.CSV	On successful completion of an SRA prudential run	New	Yes

Package ID	File ID	Description	Batcher file masks	Frequency	Change	Auto-subscription
	SRA_FINANCIALS_RUN	Provides all data in an SRA financials run	*_SRA_FINANCIALRUN*.CSV	On successful completion of an SRA prudential run	New	Yes
	AUCTION_IC_ALLOCATIONS	Provides the basis for setting up contracts for individual Tranches, has the default definitions for the total number of Units and proportion applicable to each Directional Interconnector for a specified Auction Relevant Quarter, and information about the cancellation fee of a Unit	*_IRAUCTION_CONFIG_*.CSV	Usually quarterly after each Settlement Residue Auction	Modified	No
P5MIN	P5MIN	Results from a published five-minute pre-dispatch run	*_P5MIN_*.CSV	Every 5 minutes	Modified	No
PDPASA	PDPASA	Provides a 30-minute solving process reflecting intra-regional and inter-regional network constraints as an input	*_PDPASA_*.CSV	When PDASA runs (half-hourly)	Modified	No
PRE_DISPATCH	PREDISPATCHIS	Results from a published pre-dispatch run	*_PREDISPATCHIS_*.CSV	After each pre-dispatch run	Modified	No

Package ID	File ID	Description	Batcher file masks	Frequency	Change	Auto-subscription
STPASA_SOLUTION	STPASA	Results from a published Short-Term PASA run	*_STPASA_*.CSV	After an STPASA run (half-hourly)	Modified	No

14.3 Participant interfaces changes

Package Name	MMS Data Model table	File ID	CSV report type	Change
BILLING_RUN	BILLINGIRPARTSURPLUSSUM	BILLING	BILLING,IRPARTSURPLUSSUM,7	Modified
DISPATCH	DISPATCHREGIONSUM	DISPATCHIS	DISPATCHIS,DISPATCHREGIONSUM,5	Modified
IRAUCTION	SRA_OFFER_PROFILE	SRA_SEC_OFFERS	IRAUCTION,SRA_OFFER_PROFILE,1	New
	SRA_OFFER_PRODUCT	SRA_SEC_OFFERS	IRAUCTION,SRA_OFFER_PRODUCT,1	New
	SRA_CASH_SECURITY	SRA_CASH_SECURITY	IRAUCTION,SRA_CASH_SECURITY,1	New
	SRA_PRUDENTIAL_RUN	SRA_PRUDENTIAL_RUN	IRAUCTION,SRA_PRUDENTIAL_RUN,1	New
	SRA_PRUDENTIAL_COMP_POSITION	SRA_PRUDENTIAL_RUN	IRAUCTION,SRA_PRUDENTIAL_COMPANY,1	New
	SRA_PRUDENTIAL_CASH_SECURITY	SRA_PRUDENTIAL_RUN	IRAUCTION,SRA_PRUDENTIAL_CASH_SECURITY,1	New
	SRA_PRUDENTIAL_EXPOSURE	SRA_PRUDENTIAL_RUN	IRAUCTION,SRA_PRUDENTIAL_EXPOSURE,1	New
	SRA_FINANCIAL_RUNTRK	SRA_FINANCIAL_RUN	IRAUCTION,SRA_FINANCIAL_RUNTRK,1	New

Package Name	MMS Data Model table	File ID	CSV report type	Change
	SRA_FINANCIAL_AUCPAY_SUM	SRA_FINANCIAL_RUN	IRAUCTION,SRA_FINANCIAL_AUC_PAY_SUM,1	New
	SRA_FINANCIAL_AUCPAY_DETAIL	SRA_FINANCIAL_RUN	IRAUCTION,SRA_FINANCIAL_AUCPAY_DETAIL,1	New
	SRA_FINANCIAL_AUC_RECEIPTS	SRA_FINANCIAL_RUN	IRAUCTION,SRA_FINANCIAL_RECEIPTS,1	New
	SRA_FINANCIAL_AUC_MARGIN	SRA_FINANCIAL_RUN	IRAUCTION,SRA_FINANCIAL_MARGIN,1	New
	SRA_FINANCIAL_AUC_MARDETAIL	SRA_FINANCIAL_RUN	IRAUCTION,SRA_FINANCIAL_MARDETAIL,1	New
	RESIDUE_CON_DATA	RESIDUE_CON_DATA	IRAUCTION,RESIDUE_CON_DATA,2	Modified
	AUCTION_IC_ALLOCATIONS	AUCTION_IC_ALLOCATIONS	IRAUCTION_CONFIG,AUCTION_IC_ALLOCATIONS,2	Modified
P5MIN	P5MIN_REGIONSOLUTION	P5MIN	P5MIN,P5MIN_REGIONSOLUTION,6	Modified
PDPASA	PDPASA_REGIONSOLUTION	PDPASA	PDPASA, PDPASA_REGIONSOLUTION,6	Modified
PRE_DISPATCH	PREDISPATCHREGIONSUM	PREDISPATCHIS	PREDISPATCHIS, PREDISPATCHREGIONSUM,5	Modified
STPASA_SOLUTION	STPASA_REGIONSOLUTION	STPASA	STPASA, STPASA_REGIONSOLUTION,6	Modified

14.4 Discontinued reports

Participants must ensure all dependencies on these legacy reports are removed prior to the deployment of this Release otherwise participant processes may be impacted. Please note: The new fields added in these reports will not be populated in the current release.

File ID	MMS Data Model table	Delivered in file	CSV report type	Replaced by
P5MIN	CASESOLUTION	*_P5MIN_ LEGACY*.CSV	P5MIN,CASESOLUTION,1	P5MIN,CASESOLUTION,2
	P5MIN_CONSTRAINTSOLUTIO N	*_P5MIN_LEGACY *.CSV	P5MIN,P5MIN_CONSTRAINTSOLUTION,5	P5MIN,P5MIN_CONSTRAINTSOLUTION,6
	P5MIN_INTERCONNECTORSO LN	*_P5MIN_LEGACY *.CSV	P5MIN,P5MIN_INTERCONNECTORSOLN,3	P5MIN,P5MIN_INTERCONNECTORSOLN,4
	P5MIN_REGIONSOLUTION	*_P5MIN_LEGACY *.CSV	P5MIN,P5MIN_REGIONSOLUTION,4	P5MIN,P5MIN_REGIONSOLUTION,5
	P5MIN_UNITSOLUTION	*_P5MIN_LEGACY *.CSV	P5MIN,P5MIN_UNITSOLUTION,2	P5MIN,P5MIN_UNITSOLUTION,3
PDPASA	PDPASA_REGIONSOLUTION	*_PDPASA_LEGACY *.CSV	PDPASA,PDPASA_REGIONSOLUTION,4	PDPASA,PDPASA_REGIONSOLUTION,5
PRE_DISPAT CH	PREDISPATCHINTERCONNECT ORRES	*_PREDISPATCH_LE GACY *.CSV	PREDISPATCH,PREDISPATCHINTERCONNEC TORRES,2	PREDISPATCH,PREDISPATCHINTERCONNEC TORRES,3

14.5 Non-functional changes

MMS Data Model table	Change detail
MMS Data Model Upgrade Report	
MMS Data Model Report	Updated for new Data Model version and AEMO branding
MMS Data Model Package Summary	
MMS Data Model Table to File to Report Relationships workbook	

15. **Implementation**

15.1 **Transition**

15.1.1 Data Interchange reports

Participants are required to upgrade their Data Model versions to 4.29 to receive the new SRA information. For details, see Electricity Data Model 4.29 on page 32.

15.2 **Implications**

To maintain systems in-line with AEMO's market systems, participants need to:

- Review and assess the impact on their market systems with respect to the changes implemented as part of this Release.

- Change their systems prior to the implementation of this Release.

- Schedule staff and resources to upgrade their market systems for the production implementation of this Release.

15.3 **Risks**

- No critical impacts to participants identified.

15.4 **Upgrade options**

From a wholesale energy market system's focus, participants need to:

1. Review and assess the impact on their market systems with respect to the changes implemented as part of this Release.

2. Plan to upgrade their Data Interchange installations to the latest versions to realise benefits from the new functionality, operate against newly supported platforms, and to maintain ongoing support from AEMO.

3. Schedule staff and resources to upgrade their market systems from the implementation of this Release. To maintain systems in-line with AEMO's market systems, AEMO recommends upgrading within six months of the implementation date.

4. Change their systems prior to the deployment of this Release to ensure they are up-to-date. AEMO recommends participants' wholesale market systems are compliant with the latest Data Interchange software versions, see **Data Interchange Framework and Glossary**.

5. If participants have a system dependency on the formats of the non-MMS Data Model reports they need to manage these dependencies using the detail provided in this technical specification. Participants need to review and assess the impact on their market systems with respect to the changes implemented as part of this Release.

> **AEMO encourages participants to make use of the four-week pre-production period, to assess and test any impact to their market systems and business processes. Participants using data replication products critical to their business are strongly advised to participate in the pre-production rollout and testing period.**

15.5 What happens if I do not upgrade?

If participants' systems are compliant with AEMO's supported configuration defined in the **Data Interchange Framework and Glossary**, this Release does not impact MMS Data Model systems immediately. Depending on participant's systems, not upgrading may result in the following issues:

- New data is not received to the new fields or tables because the data model elements are not created on the participant's database.

- Participants not subscribed to the latest versions of files, using the Data Subscriptions web application, will not receive the new data.

- Content in legacy files may change after deployment of this Release.

16. Rules Terms

You can find the following terms defined in the National Electricity Rules (NER) and the Settlements Residue Auction Rules.

Term
AEMO
AEMO Clearing Account
AEMO Markets Portal
AEMO Website
Allocated Units
APA
Auction
Auction Participant
Auction participation agreement
Auction Rules
Available Units
Average cancellation price
Average purchase price
Bid File
Cancelled Units
Cancelled volume
Cash Security
Clearing Account

Term
Confidential Information
Directional interconnector
Linked Bid
Market Clearing Price
Market Participants
Maximum Units
NEM
Notional Interconnector
Offer Database
Offer File
Offer Period
Offer Submission
Offered Units
Offers
Product
Prudential Approved Participant
Prudential Exposure
Prudential Requirements

Term
Region
Regional reference prices
Registered Participant
Relevant Quarter
Settlement residue auction
Settlement residue committee
Settlement residue distribution agreement
SRDA Units
Trading Limit
Trading Margin
Trading Position
Unit Category
Units

17. Glossary

For convenience throughout this document, we use the terms 'sales', 'sold', and other derivations. These terms mean 'cancelled', 'cancellation', 'cancel', and so on and refer to Units held by SRA Auction Participants whose ownership AEMO has cancelled.

Abbreviation/Terms	Explanation
AAP	Average Allocation Price
ACP	Average Cancellation Price
Active Offer	The last valid Offer File submitted and acknowledged, replacing all earlier submitted and acknowledged Offers. The Active Offer is highlighted in the **View Offers** interface and is the Offer processed when the Auction closes.
AEST	Australian Eastern Standard Time
ATP	Average trading position
Base64	Binary-to-text encoding
CV	Cancellation volume
EMMS	Electricity Market Management System; software, hardware, network and related processes to implement the wholesale energy market.
FTP	File transfer protocol
JSON	Java Standard Object Notation. An agreed format for text files and data exchange to receive Bids and Offers and provide responses.
MarketNet	AEMO's private network available to Registered Participants with a Participant ID.
Markets Portal	Web portal for access to AEMO's wholesale web-based applications.
Max Avail Units	Used where the Offered Units are in reference to the entire Quarter.
Min Avail Units	Used where the Offered Units are in reference to a Tranche of a Quarter.
MSATS Web Portal	Market Settlement and Transfer Solution web portal for retail electricity.
NER	National Electricity Rules
Participant Administrator	Your company's Participant Administrator (PA) who manages the company's Participant User access and security. The PA is setup during registration.

Abbreviation/Terms	Explanation
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. If uncollected, files are moved to the archive folder after a couple of days. If your Data Interchange environment is configured properly it automatically retrieves the missing files from the archive. Files are kept in the archive for approximately six months. AEMO's production and pre-production environments are independently operated, so each environment has its own IP address for its participant file server.
Participant ID	Registered participant identifier provided to your company by AEMO.
Participant User	An end user of AEMO's systems set up by their company's Participant Administrator.
Participant User ID	The password provided by your company's Participant Administrator.
Release	EMMS - Release Schedule and Technical Specification – SRA - October 2019
SRA	Settlement residue auction
SRC	Settlement residue committee
SRDA	Settlement residue distribution agreement
Tranche	A grouping of Units Offered for each Directional Interconnector or Relevant Quarter in an Auction.
Unit Type	Used to describe Unit Category and Relevant Quarter

18. **References**

Auction Participation Agreement (APA): An agreement between AEMO and SRA Auction Participants for participation in the Auction.

Concise Guide to Data Interchange: Assists participants to understand AEMO's Data Interchange software, describing how to set up a standard Data Interchange environment to replicate data between AEMO's wholesale energy market systems and participants' local DBMS conforming to the electricity or gas Data Models.

Data Interchange Framework and Glossary: Provides important information about upgrading your Data Interchange (DI) environment, explains DI terms, and DI related resources. Please read this guide in conjunction with this technical specification.

Guide to AEMO CSV Data Format Standard: Describes the csv data format standard used within flat files to and from AEMO's systems. Its primary function is to provide sufficient information to allow participants to understand the CSV data format used for exchanging data with AEMO.

Guide to Electricity Information Systems: Provides guidance for Registered Participants and interested parties about AEMO's participant electricity market systems.

Guide to Settlements Residue Auction web page: Contains SRA information and related documents.

Guide to the Settlements Residue Auction: Provides an overview of the Auction process.

Guide to User Rights Management: Assists participant administrators (PAs) to use the user rights management functions in the MSATS Web Portal.

National Electricity Rules, chapter 3.18: Settlements Residue Auctions.

NEM Security Deposit Arrangements: provides guidance on arrangements related to security deposits provided to AEMO under 3.3.8A and applied under 3.3.13A of the National Electricity Rules (NER). Describes the arrangements between AEMO and Market Participants with respect to Cash Security and other associated issues.

NEM Settlement Residue Auction User Interface Guide: A user interface guide providing instructions for using the Settlements Residue Auction (SRA) interface in the EMMS Markets Portal.

Settlements Residue Auction web page: Information about SRA, including Auction notices, reports, results, and Auction Participant Agreement (APA).

Settlements Residue Auction Rules: SRA Auction Rules developed by AEMO in accordance with clause 3.18.3 of the Rules. Includes the APA and detailed information about Auction calculations.

Settlement Residue Distribution Agreement (SRDA). Information about assigning SRDAs and SRDA Units. Participants agree to enter into an SRDA when they purchase SRDA Units in an Auction.

SRA Dates 2019 and 2020: Proposed dates for Settlement Residue Auctions.

SRA Secondary Trading Consultation: Information about the SRA Secondary Trading consultation.

SRA Secondary Trading Implementation Consultation: Consultation on amendments to the SRA Auction Rules to clarify definitions and clauses identified while developing the systems to implement secondary trading.

SRA Secondary Trading Project: Information about the SRA Secondary Trading implementation.

19. Index