



MMS Data Model Package Summary

AEMO Electricity Data Model v5.3 Oracle

6/03/2024

Contents

- 1 List of packages7
- 2 Description of the model AEMO Electricity Data Model v5.3 Oracle..... 12
- 3 Package: CONFIGURATION..... 14
 - 3.1 List of tables..... 14
 - 3.2 Diagram: Entities: Configuration 14
- 4 Package: ANCILLARY_SERVICES 15
 - 4.1 List of tables..... 15
 - 4.2 Diagram: Entities: Ancillary Services..... 16
- 5 Package: ASOFFER 17
 - 5.1 List of tables..... 17
 - 5.2 Diagram: Entities: Ancillary Service Contracts..... 18
- 6 Package: BIDS..... 19
 - 6.1 List of tables..... 19
 - 6.2 Diagram: Entities: Bids..... 21
- 7 Package: BILLING_CONFIG 22
 - 7.1 List of tables..... 22
 - 7.2 Diagram: Entities: Billing Config 23
- 8 Package: BILLING_RUN 24
 - 8.1 List of tables..... 24
 - 8.2 Diagram: Entities: Billing Run..... 34
- 9 Package: DEMAND_FORECASTS 35
 - 9.1 List of tables..... 35
 - 9.2 Diagram: Entities: Demand Forecasts 39
- 10 Package: DISPATCH..... 40
 - 10.1 List of tables..... 40
 - 10.2 Diagram: Entities: Dispatch..... 46
- 11 Package: FORCE_MAJEURE..... 47
 - 11.1 List of tables..... 47

- 11.2 Diagram: Entities: Force Majeure 49
- 12 Package: GD_INSTRUCT 50
 - 12.1 List of tables.....50
 - 12.2 Diagram: Entities: GD Instruct 51
- 13 Package: GENERIC_CONSTRAINT 52
 - 13.1 List of tables.....52
 - 13.2 Diagram: Entities: Generic Constraints56
- 14 Package: IRAUCTION..... 57
 - 14.1 List of tables.....57
 - 14.2 Diagram: Entities: IRAuction..... 64
- 15 Package: MARKET_CONFIG 65
 - 15.1 List of tables.....65
 - 15.2 Diagram: Entities: Market Standing Data68
- 16 Package: MARKET_NOTICE..... 69
 - 16.1 List of tables.....69
 - 16.2 Diagram: Entities: Market Notices.....70
- 17 Package: METER_DATA..... 71
 - 17.1 List of tables..... 71
 - 17.2 Diagram: Entities: Meter Data72
- 18 Package: MTPASA 73
 - 18.1 List of tables.....73
 - 18.2 Diagram: Entities: MT PASA75
- 19 Package: P5MIN..... 76
 - 19.1 List of tables.....76
 - 19.2 Diagram: Entities: P5MIN80
- 20 Package: PARTICIPANT_REGISTRATION 81
 - 20.1 List of tables..... 81
 - 20.2 Diagram: Entities: Participant Registration.....85
- 21 Package: PRE_DISPATCH..... 86
 - 21.1 List of tables.....87
 - 21.2 Diagram: Entities: Predispatch.....92

- 22 Package: RESERVE_DATA 93
 - 22.1 List of tables..... 93
 - 22.2 Diagram: Entities: Reserve Data..... 94

- 23 Package: SETTLEMENT_CONFIG 95
 - 23.1 List of tables..... 95
 - 23.2 Diagram: Entities: Settlement Config..... 98

- 24 Package: SETTLEMENT_DATA 99
 - 24.1 List of tables..... 99
 - 24.2 Diagram: Entities: Settlement Data..... 107

- 25 Package: STPASA_SOLUTION 108
 - 25.1 List of tables..... 108
 - 25.2 Diagram: Entities: ST PASA Solution 109

- 26 Package: TRADING_DATA 110
 - 26.1 List of tables..... 110
 - 26.2 Diagram: Entities: Trading Data..... 111

- 27 Package: HISTORICAL TABLES 112
 - 27.1 List of tables..... 112
 - 27.2 Diagram: Entities: Historical Tables 137

- 28 Package: PDPASA..... 138
 - 28.1 List of tables..... 138
 - 28.2 Diagram: Entities: PD PASA..... 139

- 29 Package: PRUDENTIALS..... 140
 - 29.1 List of tables..... 140
 - 29.2 Diagram: Entities:Prudentials..... 140

- 30 Package: MCC_DISPATCH..... 141
 - 30.1 List of tables..... 141
 - 30.2 Diagram: Entities: MCC_Dispatch..... 141

- 31 Package: NETWORK 142
 - 31.1 List of tables..... 142
 - 31.2 Diagram: Entities: NETWORK..... 145

- 32 Package: VOLTAGE_INSTRUCTIONS 146
 - 32.1 List of tables..... 146

- 32.2 Diagram: Entities: Voltage Instructions 146
- 33 Package: PD7DAY..... 147
 - 33.1 List of tables..... 147
 - 33.2 Diagram: Entities: PD7DAY 148

Disclaimer

This document is made available to you on the following basis:

- (a) Purpose - This document is provided by the Australian Energy Market Operator Limited (AEMO) to you for information purposes only. You are not permitted to commercialise it or any information contained in it.
- (b) No Reliance or warranty - This document may be subsequently amended. AEMO does not warrant or represent that the data or information in this document is accurate, reliable, complete or current or that it is suitable for particular purposes. You should verify and check the accuracy, completeness, reliability and suitability of this document for any use to which you intend to put it and seek independent expert advice before using it, or any information contained in it.
- (c) Limitation of liability - To the extent permitted by law, AEMO and its advisers, consultants and other contributors to this document (or their respective associated companies, businesses, partners, directors, officers or employees) shall not be liable for any errors, omissions, defects or misrepresentations in the information contained in this document, or for any loss or damage suffered by persons who use or rely on such information (including by reason of negligence, negligent misstatement or otherwise). If any law prohibits the exclusion of such liability, AEMO's liability is limited, at AEMO's option, to the re-supply of the information, provided that this limitation is permitted by law and is fair and reasonable.

© 2010 - All rights reserved.

1 List of packages

| Name | Comment |
|--------------------|--|
| CONFIGURATION | MMS Data Model Configuration Management and Control |
| ANCILLARY_SERVICES | Ancillary Service Contract Data |
| ASOFFER | Offer data for Ancillary Service Contracts |
| BIDS | Energy and Market Based FCAS Offers |
| BILLING_CONFIG | Configuration data for the Billing Process |
| BILLING_RUN | <p>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.</p> <p>Each billing run is uniquely identified by contract year, week no and bill run no.</p> |
| DEMAND_FORECASTS | Regional Demand Forecasts and Intermittent Generation forecasts. |
| DISPATCH | Results from a published Dispatch Run |
| FORCE_MAJEURE | Market Suspensions and administer pricing event data |
| GD_INSTRUCT | General Dispatch Instruction data |

| | |
|--------------------------|---|
| GENERIC_CONSTRAINT | Generic Constraint Standing Data and Invocations |
| IRAUCTION | Inter-regional Residue Auction data |
| MARKET_CONFIG | Standing data for the market |
| MARKET_NOTICE | Market Notice data |
| METER_DATA | Wholesale market aggregated Meter data |
| MTPASA | Results from a published Medium Term PASA Run and region-aggregate offered PASA Availability of scheduled generators |
| P5MIN | Results from a published Five-Minute Predispatch Run |
| PARTICIPANT_REGISTRATION | Participant registration data |
| PRE_DISPATCH | <p>Results from a published Predispatch Run</p> <p>Storage options</p> <p>There are 2 ways to define the Pre-dispatch table primary keys (PKs) to define which data is loaded to the database and which data is retained:</p> <p>Option 1 (default)</p> <p>Overwrite older records when they are succeeded by later versions for the same entity and period. This is the Data Model default and results in the consumption of</p> |

far less storage. Data Model updates issued by AEMO target this configuration so participants implementing option 2a or 2b must maintain their changes when AEMO releases a new Data Model version.

PredispatchLoad: DateTime, DUID

PredispatchInterconnectorRes: DateTime, InterconnectorID,

PredispatchPrice: DateTime, RegionID

PredispatchPriceSensitivities: DateTime, RegionID

PredispatchInterSensitivities: InterconnectorID, DateTime

PredispatchRegionsum: DateTime, RegionID

Option 2a

Retain only the Pricing records for tables relating to Price data and Physical records for tables relating to Physical data (e.g. targets). Approximately 50 times more storage volumes than option 1.

PredispatchLoad: PredispatchSeqNo, DateTime, DUID

PredispatchInterconnectorRes: PredispatchSeqNo, DateTime, InterconnectorID,

PredispatchPrice: PredispatchSeqNo, DateTime, RegionID

PredispatchPriceSensitivities: PredispatchSeqNo, DateTime, RegionID

PredispatchInterSensitivities: PredispatchSeqNo, DateTime, InterconnectorID

PredispatchRegionsum: PredispatchSeqNo, DateTime, RegionID

Option 2b

Retain both Physical and Pricing data for Intervention runs. If Intervention cases are stored in entirety, you must select the data carefully. The logic is the same as

for Dispatch, i.e. Intervention Pricing is always where Intervention = 0 and Physical data is where Intervention = PredispatchCaseSolution.Intervention for the same PredispatchSeqNo.

Doubles the storage of option 2a but ONLY for Intervened cases.

PredispatchLoad: PredispatchSeqNo, Intervention, DateTime, DUID

PredispatchInterconnectorRes: PredispatchSeqNo, Intervention, DateTime, InterconnectorID,

PredispatchPrice: PredispatchSeqNo, Intervention, DateTime, RegionID

PredispatchPriceSensitivities: PredispatchSeqNo, Intervention, DateTime, RegionID

PredispatchInterSensitivities: PredispatchSeqNo, Intervention, DateTime, InterconnectorID

PredispatchRegionsum: PredispatchSeqNo, Intervention, DateTime, RegionID

Notes:

The data in the PredispatchIS file is always ordered so the pdrLoader writes the relevant data first and discards the subsequent irrelevant data, or writes the subsequent data, depending on how the PKs are defined.

You may order the PKs in a different order, depending on your local requirements. Any decision to change the PK column composition or order must consider the functional and performance impacts to existing applications or queries.

The pdrLoader caches PK definitions for performance reasons so any change to the PKs requires a restart of the application.

The TRANSACTION_TYPE default in the PDR_REPORT_RECORDS management tables for PREDISPATCH* tables is UPDATE-INSERT. You can

| | |
|-------------------|---|
| | <p>modify this to INSERT for Option 2b, as the attempt to first perform an update becomes redundant. This can improve load performance.</p> |
| RESERVE_DATA | Energy and FCAS reserve requirements |
| SETTLEMENT_CONFIG | Configuration and input data for the Settlements Process |
| SETTLEMENT_DATA | <p>Results from a published Settlements 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.</p> |
| STPASA_SOLUTION | Results from a published Short Term PASA Run |
| TRADING_DATA | 30 minute Trading interval results |
| HISTORICAL TABLES | These tables are no longer used |
| PDPASA | <p>The PDPASA package provides a 30-minute solving process to the Market systems</p> <p>The current methodology for calculating reserves in the PreDispatch timeframe is determined in a post processing step using a heuristic calculation based the results and Interconnector limits from the PreDispatch run.</p> <p>The calculation is a reserve assessment based on the</p> |

| | |
|----------------------|--|
| | <p>PASA solver similar to existing ST and MT PASA business processes</p> <p>The process reflects all intra-regional and inter-regional network constraints as an input to the process</p> |
| PRUDENTIALS | Prudential Management |
| MCC_DISPATCH | Results from the Marginal Constraint Cost (MCC) re-run of the dispatch process. The MCC forms part of the part of the AER's "Electricity transmission network service providers Service target performance incentive Scheme" |
| NETWORK | Configuration data for the physical network |
| VOLTAGE_INSTRUCTIONS | Instructions for MVar Dispatch |
| PD7DAY | Results from a published Predispatch 7 Day Run |

2 Description of the model AEMO Electricity Data Model v5.3 Oracle

Background

The MMS Data Model is the definition of the interface to participants of data published by AEMO from the NEM system. A database conforming to the MMS Data Model can contain a local copy of all current participant-specific data recorded in the main NEM production database. The target databases have been called such names as the Participant Database, the Participant InfoServer and the Replica Database.

The MMS Data Model includes database tables, indexes and primary keys. The model is currently exposed as a physical model, so is different in presentation for each RDBMS. However, the same logical model underlies all the physical models published by AEMO.

The MMS Data Model is the target model for products transferring data from AEMO to each participant. Current product supplied by AEMO for data transfer is Participant Data Replication (PDR), with some support for the superseded Parser.

Compatibility of the transfer products with the MMS Data Model is the responsibility of those products and their configuration. AEMO's intention is to supply the data transfer products pre-configured to deliver data consistent with the MMS Data Model, noting differences where they occur (e.g. for historical reasons).

Entity Diagrams

The entity diagrams show the key columns. Relationships have now been included in many cases.

Note:

The National Electricity Market registration classification of Yarwun Power Station Unit 1 (dispatchable unit ID: YARWUN_1) is market non-scheduled generating unit. However, it is a condition of the registration of this unit that the Registered Participant complies with some of the obligations of a Scheduled Generator. This unit is dispatched as a scheduled generating unit with respect to its dispatch offers, targets and generation outputs. Accordingly, information about YARWUN_1 is reported as scheduled generating unit information.

3 Package: CONFIGURATION

Name CONFIGURATION
Comment MMS Data Model Configuration Management and Control

3.1 List of tables

| Name | Comment |
|----------------------|---|
| MMS_DATA_MODEL_AUDIT | MMS_DATA_MODEL_AUDIT shows the audit trail of scripts applied to this installation of MMS Data Model. Participants should ensure that if a database is cloned the content of this table is copied to the target database. |

3.2 Diagram: Entities: Configuration

MMS_DATA_MODEL_AUDIT
INSTALLATION_DATE
MMSDM_VERSION
INSTALL_TYPE

4 Package: ANCILLARY_SERVICES

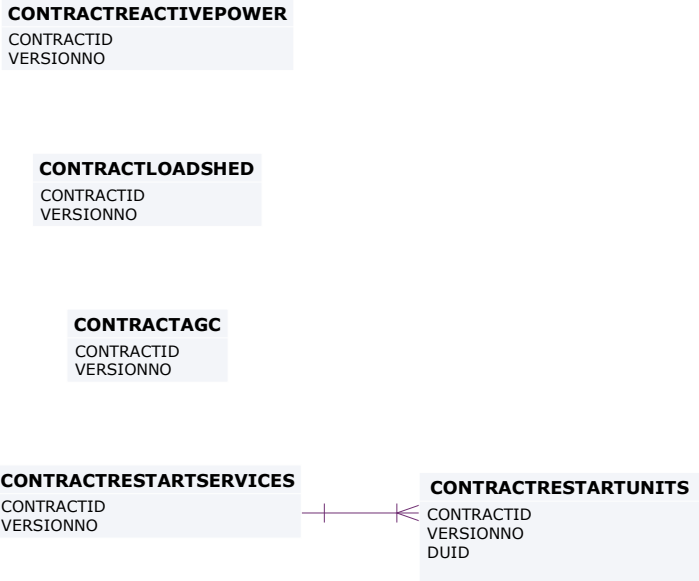
Name ANCILLARY_SERVICES
Comment Ancillary Service Contract Data

4.1 List of tables

| Name | Comment |
|-----------------------|--|
| CONTRACTAGC | CONTRACTAGC shows Automatic Generation Control (AGC) contract details for each dispatchable unit. There is a separate contract for each unit. |
| CONTRACTLOADSHED | CONTRACTLOADSHED shows Governor contract details used in the settlement and dispatch of this service. Note: services are dispatched as 6 and 60 raise Frequency Control Ancillary Services (FCAS). Mandatory requirements and breakpoint details are not used for load shed. |
| CONTRACTREACTIVEPOWER | CONTRACTREACTIVEPOWER shows Reactive Power contract details used in the settlement and dispatch of this service. |

| | |
|--------------------------------|--|
| <p>CONTRACTRESTARTSERVICES</p> | <p>CONTRACTRESTARTSERVICES shows Restart Services contract details used in the settlement and dispatch of this service.</p> |
| <p>CONTRACTRESTARTUNITS</p> | <p>CONTRACTRESTARTUNITS shows Restart units provided under a system restart contract. A service can have multiple units.</p> |

4.2 Diagram: Entities: Ancillary Services



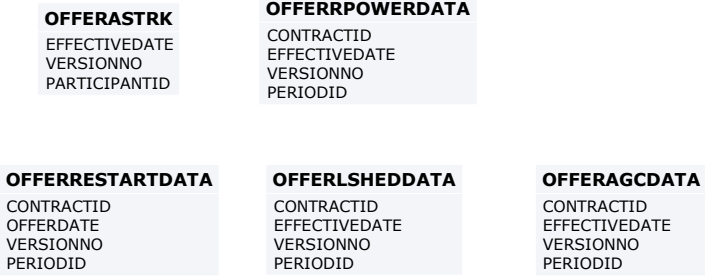
5 Package: ASOFFER

| | |
|----------------|--|
| <i>Name</i> | ASOFFER |
| <i>Comment</i> | Offer data for Ancillary Service Contracts |

5.1 List of tables

| Name | Comment |
|------------------|--|
| OFFERAGCDATA | OFFERAGCDATA shows availability reoffers of Automatic Generation Control. |
| OFFERASTRK | OFFERASTRK tracks successfully acknowledged ancillary service reoffers. |
| OFFERLSHEDDATA | OFFERLSHEDDATA shows reoffers of load shed including available load shed quantity. |
| OFFERRESTARTDATA | OFFERRESTARTDATA sets out reoffers of system restart availability. |
| OFFERRPOWERDATA | OFFERRPOWERDATA shows reoffers of reactive power capability and settlement measurements. |

5.2 Diagram: Entities: Ancillary Service Contracts



6 Package: BIDS

| | |
|----------------|-------------------------------------|
| <i>Name</i> | BIDS |
| <i>Comment</i> | Energy and Market Based FCAS Offers |

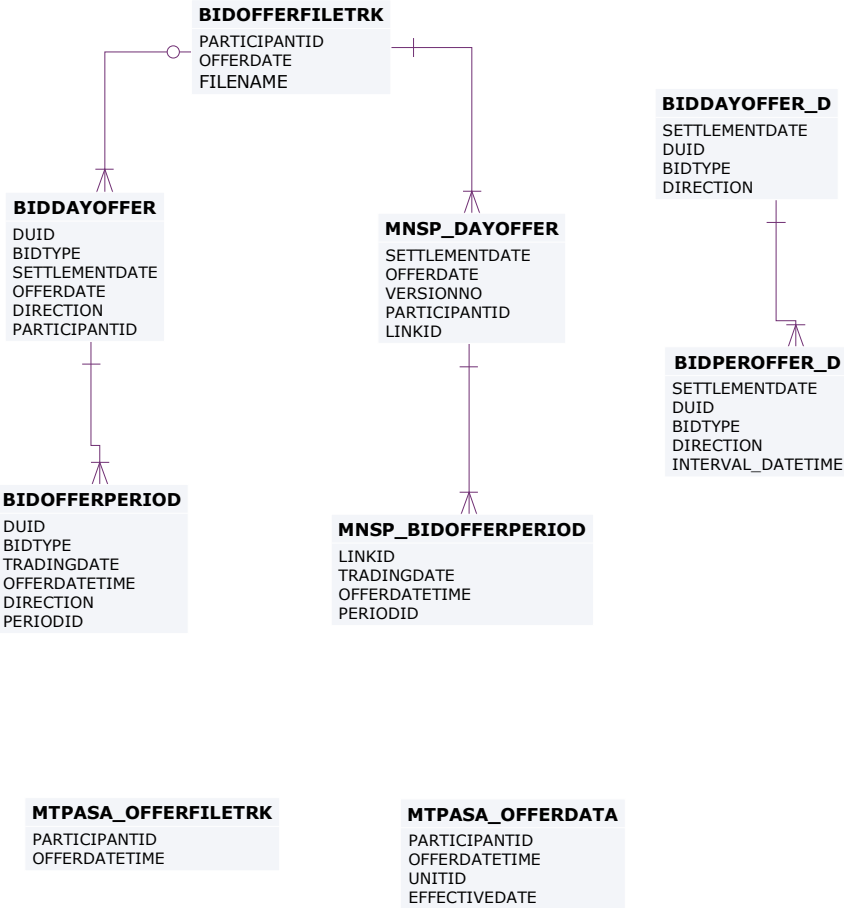
6.1 List of tables

| Name | Comment |
|-----------------|---|
| BIDDAYOFFER | BIDDAYOFFER shows the Energy and Ancillary Service bid data for each Market Day. BIDDAYOFFER is the parent table to BIDOFFERPERIOD. BIDDAYOFFER is a child table to BIDOFFERFILETRK |
| BIDDAYOFFER_D | BIDDAYOFFER_D shows the public summary of the energy and FCAS offers applicable in the Dispatch for the intervals identified. BIDDAYOFFER_D is the parent table to BIDPEROFFER_D. |
| BIDOFFERFILETRK | BIDOFFERFILETRK shows an audit trail of all files submitted containing ENERGY/FCAS/MNSP bid, including corrupt bids and rebids. |

| | |
|---------------------|---|
| BIDOFFERPERIOD | BIDOFFERPERIOD shows 5-minute period-based Energy and Ancillary Service bid data. BIDOFFERPERIOD is a child table of BIDDAYOFFER |
| BIDPEROFFER_D | BIDPEROFFER_D shows the public summary of the energy and FCAS offers applicable in the Dispatch for the intervals identified. BIDPEROFFER_D is the child to BIDDAYOFFER_D. |
| MNSP_BIDOFFERPERIOD | MNSP_BIDOFFERPERIOD shows availability for 5-minute periods for a specific Bid and LinkID for the given Trading Date and period. MNSP_BIDOFFERPERIOD is a child to MNSP_DAYOFFER and links to BIDOFFERFILETRK for 5MS Bids. |
| MNSP_DAYOFFER | MNSP_DAYOFFER updates as bids are processed. All bids are available as part of next day market data. MNSP_DAYOFFER is the parent table to MNSP_BIDOFFERPERIOD, and joins to |

| | |
|---------------------|---|
| | BIDOFFERFILETRK for 5MS Bids. |
| MTPASA_OFFERDATA | Participant submitted Offers for MTPASA process |
| MTPASA_OFFERFILETRK | Participant submitted Offers for MTPASA process |

6.2 Diagram: Entities: Bids



7 Package: BILLING_CONFIG

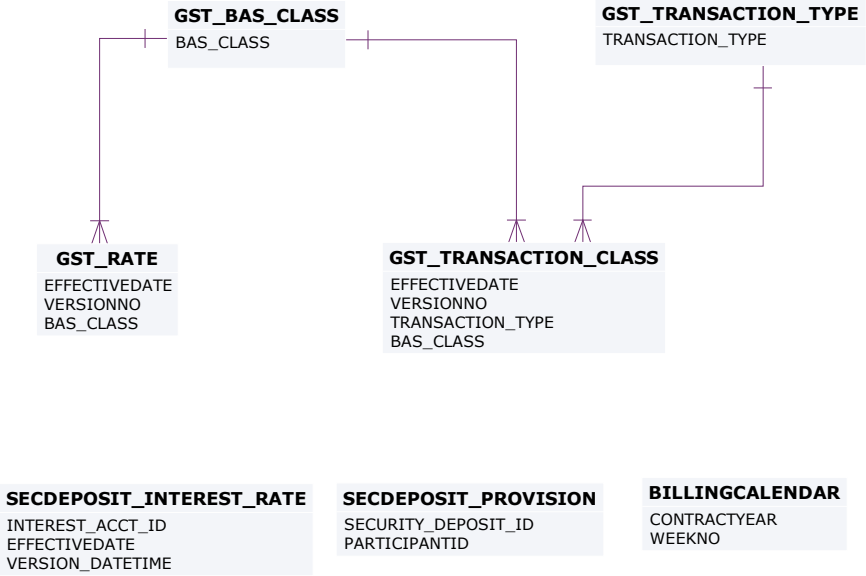
| | |
|----------------|--|
| <i>Name</i> | BILLING_CONFIG |
| <i>Comment</i> | Configuration data for the Billing Process |

7.1 List of tables

| Name | Comment |
|-----------------------|---|
| BILLINGCALENDAR | BILLINGCALENDAR sets out the billing calendar for the year, with week number 1 starting on 1 January. BILLINGCALENDAR advises preliminary and final statement posting date and corresponding settlement for each billing week. |
| GST_BAS_CLASS | GST_BAS_CLASS contains a static list of BAS (Business Activity Statement) classifications supported by the MMS. |
| GST_RATE | GST_RATE maintains the GST rates on a BAS (Business Activity Statement) class basis. |
| GST_TRANSACTION_CLASS | GST_TRANSACTION_CLASS maps NEM settlement transaction types with BAS (Business |

| | |
|--------------------------|---|
| | Activity Statement) classifications. |
| GST_TRANSACTION_TYPE | GST_TRANSACTION_TYP E shows a static list of transaction types supported by the MMS. |
| SECDEPOSIT_INTEREST_RATE | The security deposit interest rate on a daily basis. This is the public table published when the business enter and authorise a new daily interest rate |
| SECDEPOSIT_PROVISION | The security deposit provision entry details |

7.2 Diagram: Entities: Billing Config



8 Package: BILLING_RUN

Name BILLING_RUN

Comment 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.

Each billing run is uniquely identified by contract year, week no and bill run no.

8.1 List of tables

| Name | Comment |
|------------------------------|--|
| BILLING_APC_COMPENSATION | Billing result table for APC compensation payments. |
| BILLING_APC_RECOVERY | Billing result table for recovery of APC compensation payments |
| BILLING_CO2E_PUBLICATION | Carbon Dioxide Intensity Index publication table |
| BILLING_CO2E_PUBLICATION_TRK | Carbon Dioxide Intensity Index publication tracking table |
| BILLING_DAILY_ENERGY_SUMMARY | Billing result table containing daily summary data for customer and generator energy amounts |
| BILLING_DIR_FINAL_AMOUNT | The Billing Final Directions Payment Amount for Directed/Affected/Eligibl |

| | |
|----------------------------------|--|
| | e participants |
| BILLING_DIR_FINAL_RECOVERY | The Billing Final Directions Recovery Amount for the participants |
| BILLING_DIR_PROV_AMOUNT | The Billing Provisional Directions Payment Amount for Directed/Affected/Eligible participants |
| BILLING_DIR_PROV_RECOVERY | The Billing Provisional Directions Recovery Amount for the participants |
| BILLING_DIR_RECOVERY_DETAIL | The Billing Directions Recovery Details for the participants |
| BILLING_DIRECTION_RECON_OTHER | Billing reconciliation result table for both provisional and final directions |
| BILLING_DIRECTION_RECONCILIATION | Billing reconciliation result table for both provisional and final directions using the FPP methodology (prior to 1st July 2011) |
| BILLING_EFTSHORTFALL_AMOUNT | The billing shortfall run amounts |
| BILLING_EFTSHORTFALL_DETAIL | The Billing Shortfall Run Amount details |
| BILLING_ENERGY_GENSET_DETAIL | The Billing Energy Genset report contains |

| | |
|-----------------------------|---|
| | the Genset Energy detail summary for the Billing Week data |
| BILLING_ENERGY_TRAN_SAPS | The SAP Billing Transaction Details for the Participants |
| BILLING_ENERGY_TRANSACTIONS | The Billing Energy Transactions is the summary of the Settlement Energy Transactions that has the ACE and ASOE MWh and Dollar values that is used for the Statement |
| BILLING_GST_DETAIL | BILLING_GST_DETAIL shows the BAS class, GST_Exclusive and GST amount (if any) attributable to a participant for each transaction type. |
| BILLING_GST_SUMMARY | BILLING_GST_SUMMARY shows the GST_Exclusive and GST amount (if any) attributable to a participant for each BAS class. |
| BILLING_NMAS_TST_PAYMENTS | BILLING_NMAS_TEST_PAYMENTS publish the NSCAS/SRAS Testing Payments data for a posted billing week. |
| BILLING_NMAS_TST_RECOVERY | BILLING_NMAS_TEST_RECOVERY sets out the recovery of NMAS |

| | |
|--------------------------------|--|
| | testing payments |
| BILLING_NMAS_TST_RECVRY_RBF | BILLING_NMAS_TEST_RECVRY_RBF sets out the NSCAS/SRAS Testing Payment recovery data for the posted billing week. |
| BILLING_NMAS_TST_RECVRY_TRK | BILLING_NMAS_TEST_RECVRY_TRK tracks the energy data used to allocate the test payment recovery over the recovery period. |
| BILLING_SECDEP_INTEREST_PAY | The interest amount for security deposit calculated by billing, based on whether it is a fixed/floating rate |
| BILLING_SECDEP_INTEREST_RATE | The DAILY interest rates used by billing when calculating the interest amount |
| BILLING_SECDEPOSIT_APPLICATION | The security deposit application details |
| BILLING_SUBST_DEMAND | Demand Values Substituted in Billing Calculation |
| BILLING_SUBST_RUN_VERSION | Details of settlement runs used as input in the substitute demand calculation |
| BILLING_WDR | Billing WDR Transaction Weekly Summary |

| | |
|------------------------|--|
| BILLING_WDR_DETAIL | Billing WDR transaction detail summary |
| BILLINGAPCCOMPENSATION | BILLINGAPCCOMPENSATION shows Administered Price Cap (APC) compensation amounts for the billing period. Data is for each participant by region. |
| BILLINGAPCRECOVERY | BILLINGAPCRECOVERY shows the Administered Price Cap (APC) Recovery for the billing period. Data is for each participant by region. |
| BILLINGASPAYMENTS | BILLINGASPAYMENTS shows Ancillary Service payments for each billing period by each of the Ancillary Service types for each participant's connection points. |
| BILLINGASRECOVERY | BILLINGASRECOVERY shows participant charges for Ancillary Services for the billing period. This view shows the billing amounts for Ancillary Service Recovery. |
| BILLINGCPDATA | BILLINGCPDATA shows energy quantity and \$ value purchased per participant connection |

| | |
|-----------------------------|--|
| | point. |
| BILLINGDAYTRK | BILLINGDAYTRK is key for matching settlement versions with billing runs. BILLINGDAYTRK displays the billrunnos per billing week, and the settlement version numbers per settlement day comprising the billrunno. |
| BILLINGFEES | BILLINGFEES presents pool fees applied to the statement, per billing run. |
| BILLINGFINANCIALADJUSTMENTS | BILLINGFINANCIALADJUSTMENTS contains any manual adjustments included in the billing run. |
| BILLINGGENDATA | BILLINGGENDATA shows the total energy sold and purchased per participant transmission connection point for a billing period. |
| BILLINGINTERRESIDUES | BILLINGINTERRESIDUES shows interregion residues payable to NSP. |
| BILLINGINTRARESIDUES | BILLINGINTRARESIDUES shows intra-region settlement residue details for each Transmission Network |

| | |
|------------------------|--|
| | Service Provider participant by region. |
| BILLINGIRAUCSURPLUS | BILLINGIRAUCSURPLUS supports the Settlements Residue Auction, by showing the weekly billing Interconnector Residue (IR) payments as calculated for each bill run for Network Service Providers (NSPs) from the amount not auctioned. |
| BILLINGIRAUCSURPLUSSUM | BILLINGIRAUCSURPLUS SUM contains Auction fees and Settlements Residue Auction distribution that may arise from unpurchased auction units that accrue to Transmission Network Service Providers. |
| BILLINGIRFM | BILLINGIRFM shows billing amounts associated with Industrial Relations Forced Majeure events for each participant. |
| BILLINGIRNSPSURPLUS | BILLINGIRNSPSURPLUS supports the Settlements Residue Auction (SRA), by showing the weekly billing Interconnector Residue (IR) payments |

| | |
|---------------------------|---|
| | as calculated for each bill run for Transmission Network Service Providers (TNSP) from the amount paid by participants (i.e. derogated amounts). |
| BILLINGIRNSP SURPLUSSUM | BILLINGIRNSP SURPLUSSUM contains derogated payments made to TNSPs arising from the Settlements Residue Auction process. |
| BILLINGIRPARTS SURPLUS | BILLINGIRPARTS SURPLUS supports the Settlements Residue Auction, by showing the weekly billing SRA distribution to Auction participants by Contract Identifier. |
| BILLINGIRPARTS SURPLUSSUM | BILLINGIRPARTS SURPLUSSUM supports the Settlements Residue Auction, by showing the weekly billing SRA distribution and associated fees to Auction participants. |
| BILLINGPRIORADJUSTMENTS | BILLINGPRIORADJUSTMENTS sets out prior period adjustments and associated interest inserted in subsequent Final Statements arising from Revision Statement |

| | |
|-----------------------|---|
| | postings. |
| BILLINGREALLOC | BILLINGREALLOC shows reallocation contract values in each billing run, where participants have used reallocations. |
| BILLINGREALLOC_DETAIL | Billing Reallocation Data aggregated by REALLOCATIONID for each billing run over the billing week. |
| BILLINGREGIONEXPORTS | BILLINGREGIONEXPORTS sets out the region summary table of overall energy exported to and from each region for each billing run. |
| BILLINGREGIONFIGURES | BILLINGREGIONFIGURES sets out additional summary region details including ancillary service amounts for each billing run. |
| BILLINGREGIONIMPORTS | BILLINGREGIONIMPORTS sets out the region summary table of overall energy imported to and from each region for each billing run. |
| BILLINGRUNTRK | BILLINGRUNTRK identifies the Statement type (i.e. Status of PRELIM, FINAL, REVISE) and date of the BillRunNo posted, per |

| | |
|---------------------------|--|
| | WeekNo. This provides a further extension of tracking data from the BILLINGDAYTRK table. |
| BILLRESERVETRADERPAYMENT | Details of the RERT Usage and Availability Payments made to the participant. |
| BILLRESERVETRADERRECOVERY | Provides details of the RERT Recovery Amount for the Market Customers. |
| BILLWHITEHOLE | BILLWHITEHOLE shows white hole payments based on participant vs region demand. |

8.2 Diagram: Entities: Billing Run



9 Package: DEMAND_FORECASTS

Name DEMAND_FORECASTS
Comment Regional Demand Forecasts and Intermittent Generation forecasts.

9.1 List of tables

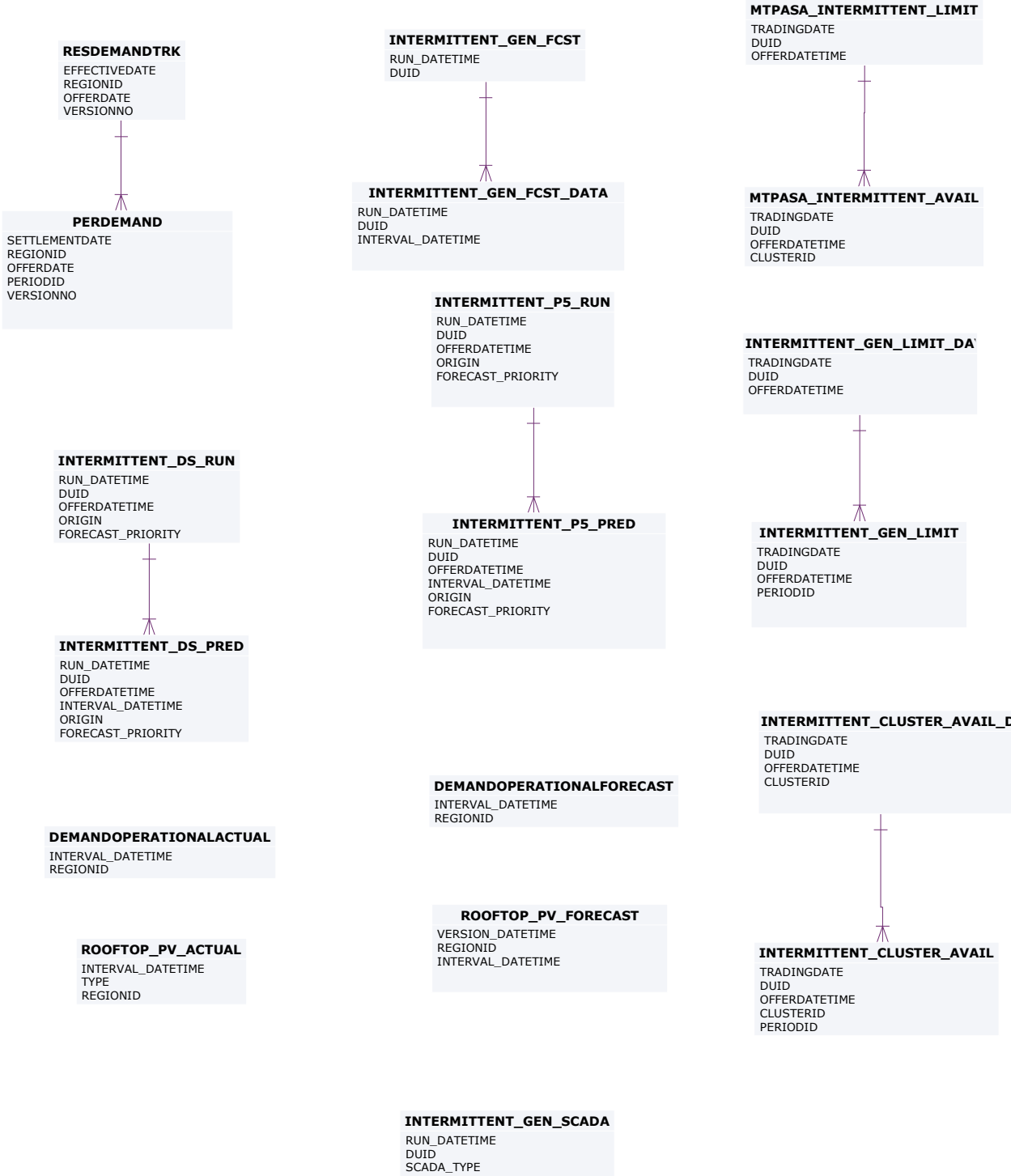
| Name | Comment |
|--------------------------------|---|
| DEMANDOPERATIONALACTUAL | Shows Actual Operational Demand for a particular date time interval. |
| DEMANDOPERATIONALFORECAST | Shows Forecast Operational Demand for a particular date time interval. |
| INTERMITTENT_CLUSTER_AVAIL | A submission of expected plant availability for an intermittent generating unit cluster, by Trading Day and Trading Interval. |
| INTERMITTENT_CLUSTER_AVAIL_DAY | Summary record for an availability submission for an intermittent generating unit cluster for a Trading Day. |
| INTERMITTENT_DS_PRED | Unconstrained Intermittent Generation Forecasts (UIGF) for Dispatch |

| | |
|----------------------------|---|
| INTERMITTENT_DS_RUN | Unconstrained Intermittent Generation Forecasts (UIGF) for Dispatch. |
| INTERMITTENT_GEN_FCST | Identifying record for a given forecast of an intermittent generation. This table is the version table for the INTERMITTENT_GEN_FCST_DATA table which stores the individual forecast values |
| INTERMITTENT_GEN_FCST_DATA | Stores the forecast generation (MW) for each interval within a given forecast of an intermittent generator. |
| INTERMITTENT_GEN_LIMIT | A submission of Upper MW Limit for an intermittent generating unit, by Trading Day and Trading Interval |
| INTERMITTENT_GEN_LIMIT_DAY | Summary record for an Upper MW Limit submission for an intermittent generating unit for a Trading Day |
| INTERMITTENT_GEN_SCADA | INTERMITTENT_GEN_SCADA provides the SCADA Availability for every intermittent generating unit, including Elements Available (wind turbines/solar inverters) |

| | |
|---------------------------|---|
| | and Local Limit |
| INTERMITTENT_P5_PRED | Unconstrained Intermittent Generation Forecasts (UIGF) for 5-Minute Pre-dispatch |
| INTERMITTENT_P5_RUN | Unconstrained Intermittent Generation Forecasts (UIGF) for 5-Minute Pre-dispatch |
| MTPASA_INTERMITTENT_AVAIL | A submission of expected plant availability for intermittent generators for use in MTPASA intermittent generation forecasts |
| MTPASA_INTERMITTENT_LIMIT | A submission of expected maximum availability for intermittent generators for use in MTPASA intermittent generation forecasts |
| PERDEMAND | PERDEMAND sets out the regional demands and MR schedule data for each half-hour period. PERDEMAND is a child table to RESDEMANDTRK. |
| RESDEMANDTRK | RESDEMANDTRK defines the existence and versioning information of a forecast for a specific |

| | |
|----------------------------|---|
| | <p>region and trading date. RESDEMANDTRK and PERDEMAND have a parent/child relationship, and are for defined forecast regional demands since market start. RESDEMANDTRK defines the existence and versioning information of a forecast for a specific region and trading date. PERDEMAND defines the numerical forecast values for each trading interval of a the trading day for that region. A complete trading day forecast for one region consists of one RESDEMANDTRK record and 48 PERDEMAND records.</p> |
| <p>ROOFTOP_PV_ACTUAL</p> | <p>Estimate of regional Rooftop Solar actual generation for each half-hour interval in a day</p> |
| <p>ROOFTOP_PV_FORECAST</p> | <p>Regional forecasts of Rooftop Solar generation across the half-hour intervals over 8 days</p> |

9.2 Diagram: Entities: Demand Forecasts



10 Package: DISPATCH

| | |
|----------------|---------------------------------------|
| <i>Name</i> | DISPATCH |
| <i>Comment</i> | Results from a published Dispatch Run |

10.1 List of tables

| Name | Comment |
|------------------------------|--|
| CONSTRAINTRELAXATION_OCD | <p>CONSTRAINTRELAXATION_OCD contains details of interconnector constraints and unit ancillary service constraints relaxed in the over-constrained dispatch (OCD) re-run for this interval (if there was one).</p> <p>Note: INTERVENTION is not included in CONSTRAINTRELAXATION_OCD, since the relaxation of the same constraint is the same amount in both intervened and non-intervened cases.</p> |
| DISPATCH_CONSTRAINT_FCAS_OCD | FCAS constraint solution from OCD re-run. |
| DISPATCH_FCAS_REQ | DISPATCH_FCAS_REQ shows Dispatch Constraint tracking for Regional FCAS recovery. |

| | |
|--------------------------|--|
| DISPATCH_INTERCONNECTION | Inter-regional flow information common to or aggregated for regulated (i.e. not MNSP) Interconnectors spanning the From-Region and To-Region - NB only the physical run is calculated' |
| DISPATCH_LOCAL_PRICE | Sets out local pricing offsets associated with each DUID connection point for each dispatch period. Note that from 2014 Mid year release only records with non-zero Local_Price_Adjustment values are issued |
| DISPATCH_MNSPBIDTRK | DISPATCH_MNSPBIDTRK shows the MNSP bid tracking, including the bid version used in each dispatch run for each MNSP Interconnector Link. The table identifies which bids from MNSP_DAYOFFER and MNSP_BIDOFFERPERIOD were applied. |
| DISPATCH_MR_SCHEDULE_TRK | DISPATCH_MR_SCHEDULE_TRK records the Mandatory Restrictions Acceptance Schedule applied to this dispatch interval for this region. DISPATCH_MR_SCHEDULE |

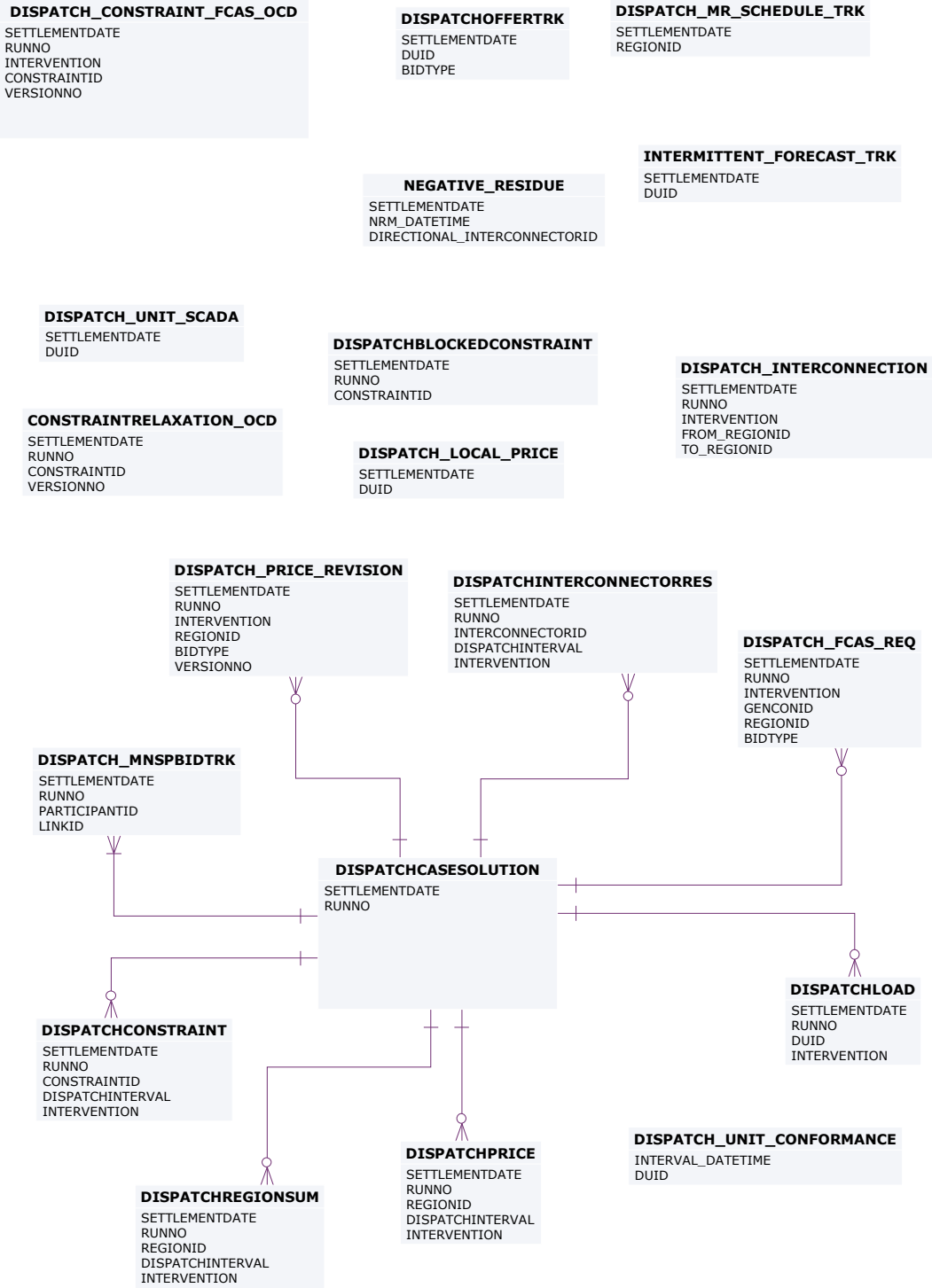
| | |
|---------------------------|---|
| | <p>LE_TRK is populated by the Dispatch process and records the MR Offer Stack applied in each dispatch interval. DISPATCH_MR_SCHEDU</p> <p>LE_TRK is used by Settlements to calculate payments according to the correct MR offer stack.</p> |
| DISPATCH_PRICE_REVISION | <p>An audit trail of price changes on the DISPATCHPRICE table (i.e. for 5 minute dispatch prices for energy and FCAS).</p> |
| DISPATCH_UNIT_CONFORMANCE | <p>DISPATCH_UNIT_CONFORMANCE details the conformance of a scheduled units operation with respect to a cleared target on dispatch interval basis.</p> <p>Data is confidential</p> |
| DISPATCH_UNIT_SCADA | <p>Dispatchable unit MW from SCADA at the start of the dispatch interval. The table includes all scheduled and semi-scheduled (and non-scheduled units where SCADA is available)</p> |
| DISPATCHBLOCKEDCONSTRAINT | <p>DISPATCH Blocked Constraints lists any constraints that were</p> |

| | |
|----------------------------------|---|
| | <p>blocked in a dispatch run. If no constraints are blocked, there will be no rows for that dispatch run.</p> |
| <p>DISPATCHCASESOLUTION</p> | <p>DISPATCHCASESOLUTION shows information relating to the complete dispatch run. The fields in DISPATCHCASESOLUTION provide an overview of the dispatch run results allowing immediate identification of conditions such as energy or FCAS deficiencies.</p> |
| <p>DISPATCHCONSTRAINT</p> | <p>DISPATCHCONSTRAINT sets out details of all binding and interregion constraints in each dispatch run. Note: invoked constraints can be established from GENCONSETINVOKE. Binding constraints show as marginal value > \$0. Interconnector constraints are listed so RHS (SCADA calculated limits) can be reported.</p> |
| <p>DISPATCHINTERCONNECTORRES</p> | <p>DISPATCHINTERCONNECTORRES sets out MW flow and losses on each interconnector for each dispatch period,</p> |

| | |
|-------------------------|---|
| | <p>including fields for the Frequency Controlled Ancillary Services export and import limits and extra reporting of the generic constraints set the energy import and export limits.</p> |
| <p>DISPATCHLOAD</p> | <p>DISPATCHLOAD set out the current SCADA MW and target MW for each dispatchable unit, including relevant Frequency Control Ancillary Services (FCAS) enabling targets for each five minutes and additional fields to handle the new Ancillary Services functionality. Fast Start Plant status is indicated by dispatch mode.</p> |
| <p>DISPATCHOFFERTRK</p> | <p>DISPATCHOFFERTRK is the energy and ancillary service bid tracking table for the Dispatch process. The table identifies which bids from BIDDAYOFFER and BIDOFFERPERIOD were applied for a given unit and bid type for each dispatch interval.</p> |
| <p>DISPATCHPRICE</p> | <p>DISPATCHPRICE records 5 minute dispatch prices for energy and FCAS, including whether an</p> |

| | |
|---------------------------|--|
| | <p>intervention has occurred, or price override (e.g. for Administered Price Cap). DISPATCHPRICE updates when price adjustments occur, in which case the new price is written to the RRP field, and the old price to the ROP field as an audit trail.</p> |
| DISPATCHREGIONSUM | <p>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.</p> |
| INTERMITTENT_FORECAST_TRK | <p>Uniquely tracks which Intermittent Generation forecast was used for the DUID in which Dispatch run</p> |
| NEGATIVE_RESIDUE | <p>Shows the inputs provided to the Negative Residue Constraints in the Dispatch horizon</p> |

10.2 Diagram: Entities: Dispatch



11 Package: FORCE_MAJEURE

Name FORCE_MAJEURE

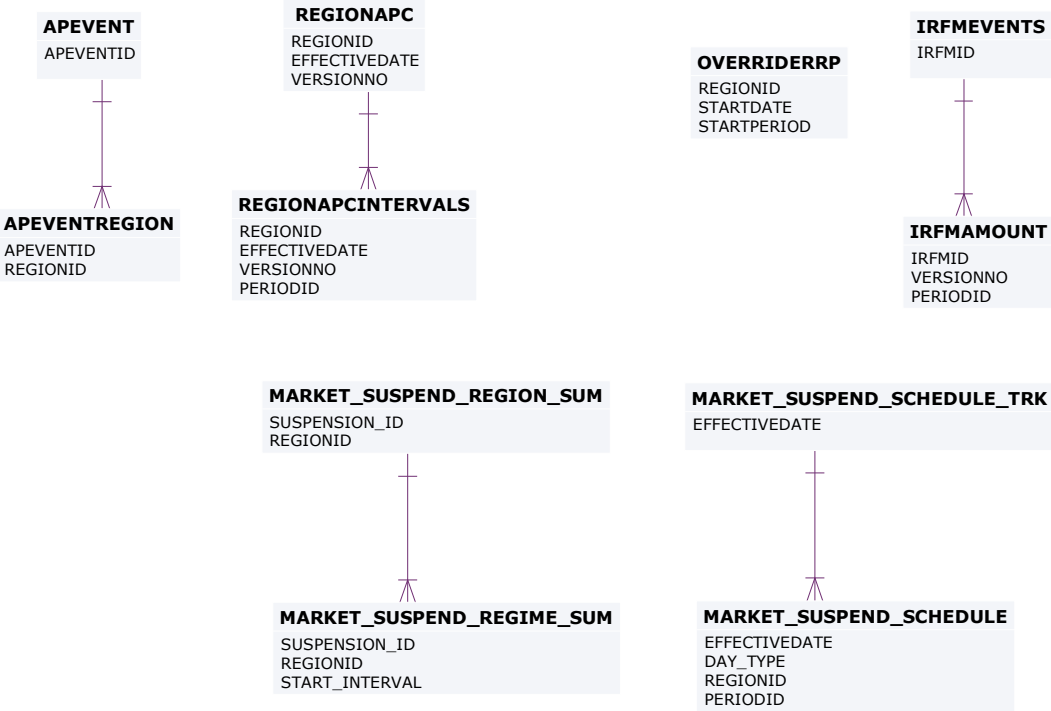
Comment Market Suspensions and administer pricing event data

11.1 List of tables

| Name | Comment |
|---------------------------|---|
| APEVENT | APEVENT is the driving data defining the existence and timeframes of an administered pricing event. |
| APEVENTREGION | APEVENTREGION is the Region detail for an administered pricing event defined through APEVENT. |
| IRFMAMOUNT | IRFMAMOUNT sets out settlement amounts associated with Industrial Relations Forced Majeure events. |
| IRFMEVENTS | IRFMEVENTS sets out specific Industrial Relations Forced Majeure events. |
| MARKET_SUSPEND_REGIME_SUM | Tracks the evolution of pricing regimes applied to the suspended region and from which |

| | |
|-----------------------------|---|
| | Dispatch Interval |
| MARKET_SUSPEND_REGION_SUM | Summary of Market Suspension timings |
| MARKET_SUSPEND_SCHEDULE | Trading prices that will apply in the event of a market suspension event updated weekly. |
| MARKET_SUSPEND_SCHEDULE_TRK | Parent table for pricing regimes used in suspensions |
| OVERRIDERRP | OVERRIDERRP shows details of override price periods. |
| REGIONAPC | REGIONAPC defines Administered Price profiles (Energy and FCAS) for a region. |
| REGIONAPCINTERVALS | REGIONAPCINTERVALS contains Administered Price profiles (Energy and FCAS) applicable to each interval for a region. |

11.2 Diagram: Entities: Force Majeure



12 Package: GD_INSTRUCT

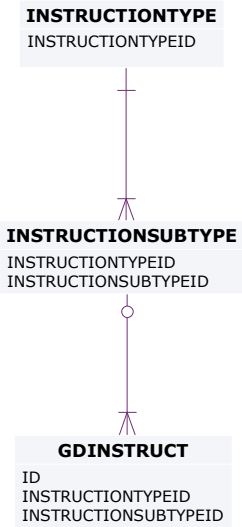
Name GD_INSTRUCT
Comment General Dispatch Instruction data

12.1 List of tables

| Name | Comment |
|--------------------|--|
| GDINSTRUCT | GDINSTRUCT shows all manually issued dispatch instructions for a dispatchable unit. Ancillary Service instructions are to enable and to disable (i.e. 2 separate instructions) a service. Non-conforming units are also instructed via this facility. However, this facility is not the same as the market notice. |
| INSTRUCTIONSUBTYPE | Each Dispatch instruction (GD instruct) has a type and subtype. INSTRUCTIONSUBTYPE, together with INSTRUCTIONTYPE, sets out valid instruction types. |
| INSTRUCTIONTYPE | Dispatch instruction (GD instruct) has types and subtypes. |

| | |
|--|--|
| | INSTRUCTIONTYPE, together with INSTRUCTIONSUBTYPE, sets out valid instruction types. |
|--|--|

12.2 Diagram: Entities: GD Instruct



13 Package: GENERIC_CONSTRAINT

Name GENERIC_CONSTRAINT
Comment Generic Constraint Standing Data and Invocations

13.1 List of tables

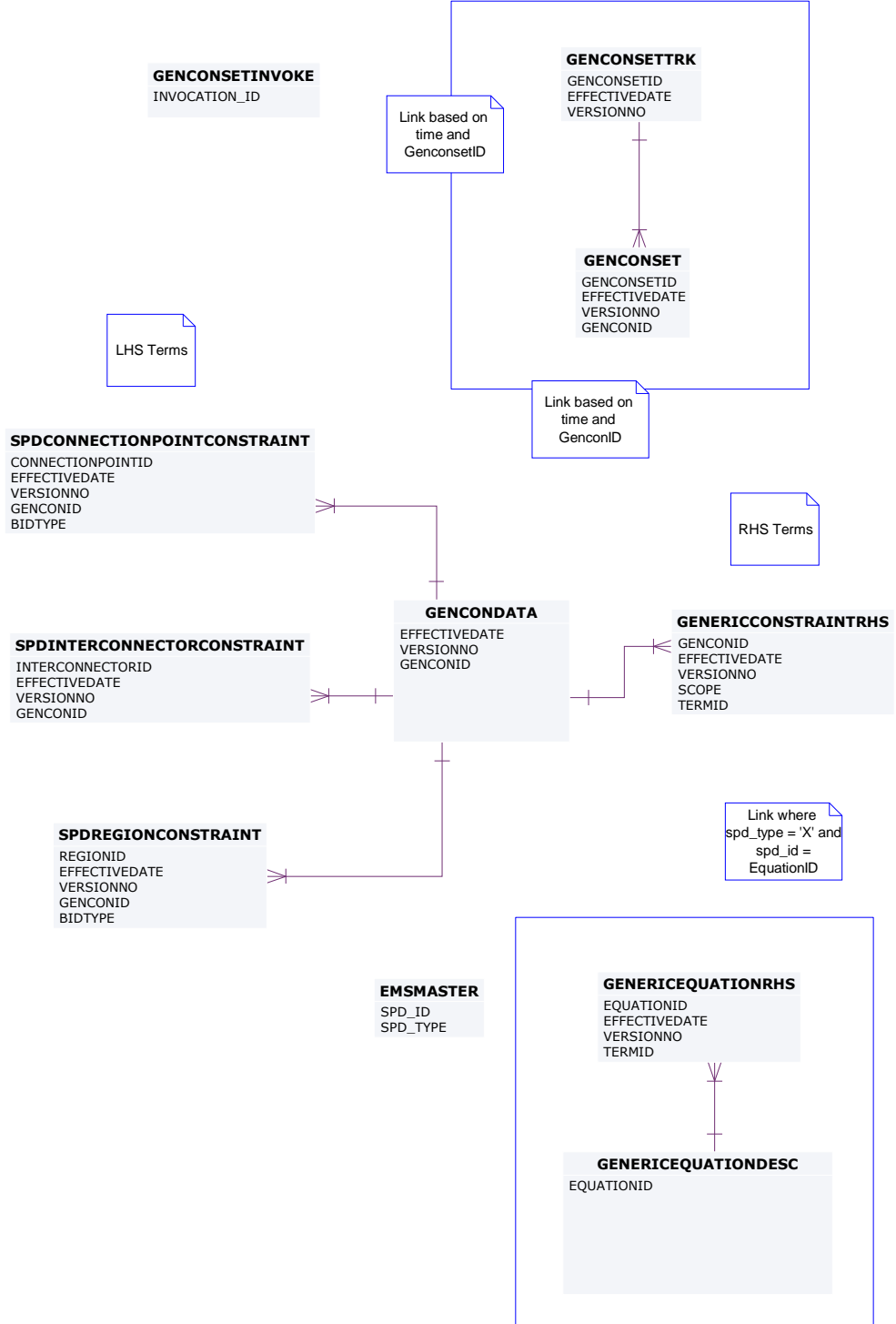
| Name | Comment |
|------------|--|
| EMSMASTER | EMSMASTER provides a description of the SCADA measurements that are associated with the SPD_ID points utilised in generic equation RHS terms |
| GENCONDATA | GENCONDATA sets out the generic constraints contained within a generic constraint set invoked in PASA, predispatch and dispatch. Fields enable selective application of invoked constraints in the Dispatch, Predispatch, ST PASA or MT PASA processes. |
| GENCONSET | GENCONSET sets out generic constraint sets that are invoked and revoked, and may contain many generic constraints |

| | |
|----------------------|--|
| | (GENCONDATA). |
| GENCONSETINVOKE | <p>GENCONSETINVOKE provides details of invoked and revoked generic constraints. GENCONSETINVOKE is the key table for determining what constraints are active in dispatch, predispach and PASA.</p> <p>GENCONSETINVOKE also indicates whether constraints are for interconnector limits, ancillary services, etc.</p> |
| GENCONSETTRK | <p>GENCONSETTRK assists in determining the correct version of a generic constraint set that has been invoked in GENCONSETINVOKE.</p> |
| GENERICCONSTRAINTRHS | <p>GENERICCONSTRAINTRHS sets out details of generic constraint Right Hand Side (RHS) formulations for dispatch (DS), predispach (PD) and Short Term PASA (ST). GENERICCONSTRAINTRHS also includes general expressions (EQ) used in the dispatch, predispach and PASA time frames.</p> <p>GENERICCONSTRAINTR</p> |

| | |
|------------------------------|--|
| | HS replaces data previously available via the "Constraint Library" Excel spreadsheet. |
| GENERICEQUATIONDESC | GENERICEQUATIONDESC defines a generic equation identifier with a description. The formulation of the generic equation is detailed in GENERICEQUATIONRHS. |
| GENERICEQUATIONRHS | GENERICEQUATIONRHS stores the formulation of commonly used Generic Constraint Right Hand Side Equations referenced from Generic Constraint Right Hand Side definitions stored in GENERICCONSTRAINTRHS. The Generic Equation definitions are versioned and the latest effective version is applied to the dispatch process. |
| SPDCONNECTIONPOINTCONSTRAINT | SPDCONNECTIONPOINTCONSTRAINT sets out details of connections point constraints issued in dispatch, predispatch and STPASA. |
| SPDINTERCONNECTORCONSTRAINT | SPDINTERCONNECTORCONSTRAINT contains details on the |

| | |
|---------------------|--|
| | interconnector constraint factors used in dispatch, predispatch and STPASA. The details set a LHS value. |
| SPDREGIONCONSTRAINT | SPDREGIONCONSTRAINT contains details on region demand constraint factors used in dispatch. SPDREGIONCONSTRAINT sets a LHS value. |

13.2 Diagram: Entities: Generic Constraints



14 Package: IRAUCTION

| | |
|----------------|-------------------------------------|
| <i>Name</i> | IRAUCTION |
| <i>Comment</i> | Inter-regional Residue Auction data |

14.1 List of tables

| Name | Comment |
|------------------------|---|
| AUCTION | AUCTION holds auction details. AUCTION is new in March 2003 to support SRA Inter-Temporal Linking. |
| AUCTION_CALENDAR | AUCTION_CALENDAR holds the definitions of each auction quarter in a contract year. AUCTION_CALENDAR supports the Settlement Residue Auction. |
| AUCTION_IC_ALLOCATIONS | AUCTION_IC_ALLOCATIONS supports the Settlement Residue Auction by providing the basis for setting up contracts for individual tranches. AUCTION_IC_ALLOCATIONS shows the default definitions for the total number of units and proportion applicable to each directional interconnector for a |

| | |
|---------------------------------|---|
| | <p>specified auction quarter.</p> |
| <p>AUCTION_REVENUE_ESTIMATE</p> | <p>AUCTION_REVENUE_ESTIMATE supports the Settlement Residue Auction, by holding the evaluator’s estimates of revenue for each month of a given quarter.</p> <p>Since reserve prices are no longer applicable from the end of 2001, zero is used as a default to avoid rewriting the system.</p> |
| <p>AUCTION_REVENUE_TRACK</p> | <p>AUCTION_REVENUE_TRACK supports the Settlement Residue Auction, by holding the tracking information for each evaluator’s estimates for a given quarter. The status field is dynamic and is used for selection of estimates to be published.</p> |
| <p>AUCTION_RP_ESTIMATE</p> | <p>AUCTION_RP_ESTIMATE supports the Settlement Residue Auction, by holding the evaluator’s estimates of revenue prices for a given quarter.</p> <p>Since reserve prices are no longer applicable from the end of 2001,</p> |

| | |
|---------------------------|--|
| | zero is used as a default to avoid rewriting the system. |
| AUCTION_TRANCHE | AUCTION_TRANCHE supports the Settlement Residue Auction, by holding the default definitions for the percentage number of units allocated and dates applicable to each tranche for a specified auction quarter. This information provides the basis for setting up contracts for individual tranches. |
| RESIDUE_BID_TRK | RESIDUE_BID_TRK supports the Settlement Residue Auction, by detailing which bid was used for which SRA Contract run. |
| RESIDUE_CON_DATA | RESIDUE_CON_DATA supports the Settlement Residue Auction, by holding for each participant the confidential data from the auction. RESIDUE_CON_DATA joins to RESIDUE_PUBLIC_DATA and RESIDUE_TRK. |
| RESIDUE_CON_ESTIMATES_TRK | RESIDUE_CON_ESTIMATES_TRK supports the Settlement Residue |

| | |
|-------------------------|--|
| | Auction, by holding the tracking details of the estimates used to generate the reserve price for each contract. |
| RESIDUE_CON_FUNDS | RESIDUE_CON_FUNDS supports the Settlement Residue Auction, by holding the fund details for each contract. |
| RESIDUE_CONTRACTS | RESIDUE_CONTRACTS supports the Settlement Residue Auction, by holding the contract details for each period for which a residue contract will be offered. |
| RESIDUE_FUNDS_BID | RESIDUE_FUNDS_BID supports the Settlement Residue Auction, by showing the fund details for each SRA bid by each Participant. |
| RESIDUE_PRICE_BID | RESIDUE_PRICE_BID supports the Settlement Residue Auction, holding the unit and bid price details for each participant. |
| RESIDUE_PRICE_FUNDS_BID | RESIDUE_PRICE_FUNDS_BID shows the bids producing the auction outcome, without exposing participant-specific details. RESIDUE_PRICE_FUNDS_ |

| | |
|-------------------------|--|
| | BID is new in March 2003 to support SRA Inter-Temporal Linking. |
| RESIDUE_PUBLIC_DATA | RESIDUE_PUBLIC_DATA shows the public auction results. RESIDUE_PUBLIC_DATA supports the Settlement Residue Auction, by holding the public details of the auction for a given contract. RESIDUE_PUBLIC_DATA joins to RESIDUE_CON_DATA and RESIDUE. |
| RESIDUE_TRK | RESIDUE_TRK supports the Settlement Residue Auction, by showing the tracking records for different residue auction runs. RESIDUE_TRK joins to RESIDUE_PUBLIC_DATA and RESIDUE_CON_DATA. |
| RESIDUECONTRACTPAYMENTS | RESIDUECONTRACTPAYMENTS shows Settlement Residue Auction payment Participant notifications. |
| RESIDUEFILETRK | RESIDUEFILETRK records all Settlement Residue Auction offers submitted by participants. |

| | |
|-----------------------------|--|
| SRA_CASH_SECURITY | Records the Cash Security details provided by an SRA Auction Participant as collateral to cover their Trading Position in the SRA market |
| SRA_FINANCIAL_AUC_MARDETAIL | This table stores details of the margins returned to the participants. |
| SRA_FINANCIAL_AUC_MARGIN | Records the amount of Cash Security required to be held by an Auction Participant after settlement |
| SRA_FINANCIAL_AUC_RECEIPTS | Records details of the Cancelled Units and their value for the Auction Participant |
| SRA_FINANCIAL_AUCPAY_DETAIL | Records details of the SRA financial auction payment |
| SRA_FINANCIAL_AUCPAY_SUM | Records a summary of the Auction payment amount |
| SRA_FINANCIAL_RUNTRK | Records details of the settlement process for the cancellation and purchase of SRA Auction Units |
| SRA_OFFER_PRODUCT | Holds the Product details for each Offer File submitted by each SRA Auction Participant. |

| | |
|------------------------------|--|
| SRA_OFFER_PROFILE | Holds the data of an SRA Auction Participant Offer Submission. |
| SRA_PRUDENTIAL_CASH_SECURITY | Records the Cash Security details provided by an SRA Auction Participant as collateral to cover their Trading Position in the SRA market |
| SRA_PRUDENTIAL_COMP_POSITION | The prudential position of each company at the date and time of a specific prudential run |
| SRA_PRUDENTIAL_EXPOSURE | Records details of the Prudential Exposure of an SRA Auction Participant |
| SRA_PRUDENTIAL_RUN | Records the prudential run details for each prudential date |
| VALUATIONID | VALUATIONID shows the identifiers and descriptions of the valuers submitting estimates of upcoming settlement residues. VALUATIONID supports the Settlement Residue Auction. |

14.2 Diagram: Entities: IRAuction



15 Package: MARKET_CONFIG

| | |
|----------------|------------------------------|
| <i>Name</i> | MARKET_CONFIG |
| <i>Comment</i> | Standing data for the market |

15.1 List of tables

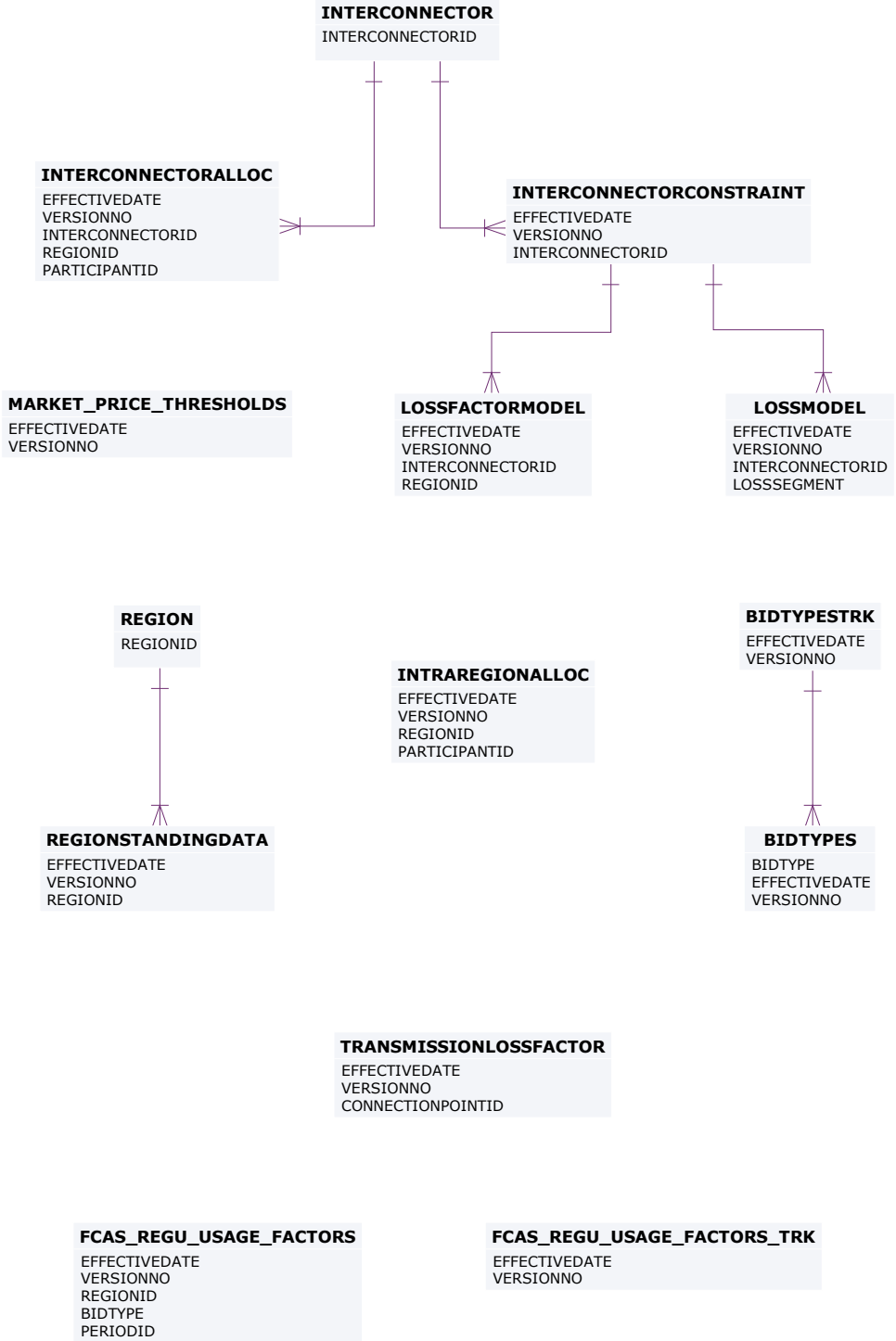
| Name | Comment |
|-------------------------|--|
| BIDTYPES | <p>BIDTYPES, together with the associated tracking data in BIDTYPESTRK, define a set of ancillary services with bidding parameters from a given date.</p> <p>BIDTYPES is static data describing each type of bid quantity, the number of applicable bands, how many days ahead a price lock down becomes effective and the validation rule that applies.</p> |
| BIDTYPESTRK | <p>BIDTYPESTRK, together with the associated data in BIDTYPES, define a set of ancillary services with bidding parameters from a given date.</p> |
| FCAS_REGU_USAGE_FACTORS | <p>Stores the proportion of enabled regulation FCAS dispatch that is typically consumed for</p> |

| | |
|-----------------------------|--|
| | frequency regulation. Used to calculate the projected state of charge for energy storage systems. |
| FCAS_REGU_USAGE_FACTORS_TRK | Stores the proportion of enabled regulation FCAS dispatch that is typically consumed for frequency regulation. Used to calculate the projected state of charge for energy storage systems. |
| INTERCONNECTOR | INTERCONNECTOR sets out valid identifiers for each interconnector. |
| INTERCONNECTORALLOC | INTERCONNECTORALLOC shows allocations of interconnector residues to Network Service Providers. |
| INTERCONNECTORCONSTRAINT | INTERCONNECTORCONSTRAINT sets out Interconnector limit data used as defaults in dispatch, predispatch and STPASA and used by SPD in calculating flows. INTERCONNECTORCONSTRAINT includes an additional field to restrict an interconnector from support transfer of |

| | |
|-------------------------|--|
| | FCAS. |
| INTRAREGIONALLOC | INTRAREGIONALLOC shows allocations of intra-regional residues to participants. |
| LOSSFACTORMODEL | LOSSFACTORMODEL sets out the demand coefficients for each interconnector, used by LP Solver modelling of interconnector flows. |
| LOSSMODEL | LOSSMODEL sets out segment breakpoints in loss model for each interconnector, used by LP Solver modelling of interconnector flows. |
| MARKET_PRICE_THRESHOLDS | MARKET_PRICE_THRESHOLDS sets out the market cap , floor and administered price thresholds applying to the electricity market |
| REGION | REGION sets out valid region IDs. |
| REGIONSTANDINGDATA | REGIONSTANDINGDATA sets out standing region data including the region reference node. |
| TRANSMISSIONLOSSFACTOR | TRANSMISSIONLOSSFACTOR shows the Transmission Loss factors applied at each |

connection point.

15.2 Diagram: Entities: Market Standing Data



16 Package: MARKET_NOTICE

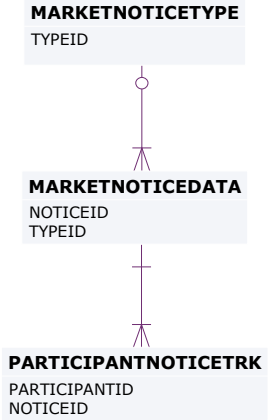
Name MARKET_NOTICE

Comment Market Notice data

16.1 List of tables

| Name | Comment |
|----------------------|---|
| MARKETNOTICEDATA | MARKETNOTICEDATA shows market notices data provided to all participants (market) and specific participants (participant). |
| MARKETNOTICETYPE | MARKETNOTICETYPE sets out the different types of market notices (e.g. market systems). |
| PARTICIPANTNOTICETRK | PARTICIPANTNOTICETR K provides the cross-reference between participant market notices and participants. |

16.2 Diagram: Entities: Market Notices



17 Package: METER_DATA

Name METER_DATA
Comment Wholesale market aggregated Meter data

17.1 List of tables

| Name | Comment |
|----------------------------|---|
| METERDATA_AGGREGATE_READS | Publishes aggregated metering data associated with a wholesale connection point for a given CASE_ID |
| METERDATA_INDIVIDUAL_READS | Publishes metering data associated with individual metering points for a given CASE_ID |
| METERDATA_INTERCONNECTOR | Publishes metering data associated with wholesale interconnectors for a given CASE_ID |
| METERDATA_SAPS | The SAPS Meter data for MSRP and Retailer used in the Settlement Calculation |
| METERDATA_WDR_READS | Metering Data WDR Readings |

17.2 Diagram: Entities: Meter Data

Note: Include MDA = MeteringDataAgent in any join

METERDATA_INDIVIDUAL_READS

CASE_ID
SETTLEMENTDATE
METER_ID
METER_ID_SUFFIX
PERIODID

METERDATA_INTERCONNECTOR

CASE_ID
SETTLEMENTDATE
INTERCONNECTORID
PERIODID

METERDATA_AGGREGATE_READS

CASE_ID
SETTLEMENTDATE
CONNECTIONPOINTID
METER_TYPE
FRMP
LR
PERIODID

METERDATA_WDR_READS

MARKET_ID
CASE_ID
SETTLEMENTDATE
METER_ID
PERIODID

METERDATA_SAPS

CASE_ID
SETTLEMENTDATE
CONNECTIONPOINT_ID
METER_TYPE
FRMP
LR
PERIODID

18 Package: MTPASA

| | |
|----------------|--|
| <i>Name</i> | MTPASA |
| <i>Comment</i> | Results from a published Medium Term PASA Run and region-aggregate offered PASA Availability of scheduled generators |

18.1 List of tables

| Name | Comment |
|-----------------------------|--|
| MTPASA_CASERESULT | MTPASA solution header table |
| MTPASA_CONSTRAINTRESULT | Constraint results for Binding or Violating Constraints |
| MTPASA_CONSTRAINTSUMMARY | Constraint Summary results over aggregation periods |
| MTPASA_DUIDAVAILABILITY | Offered PASA Availability of the scheduled generator DUID for each day over the Medium Term PASA period. The data in this table is input data to the MT PASA process it is not part of the MTPASA solution. The availability does not reflect any energy limitations in the MT PASA offers |
| MTPASA_INTERCONNECTORRESULT | Interconnector results for interval of max demand per day |

| | |
|---------------------------|---|
| MTPASA_LOLRESULT | Results for Loss of Load Probability (LOLP) run per day |
| MTPASA_REGIONAVAIL_TRK | The tracking table to assist in versioning of the region-aggregate offered PASA Availability data published to the MTPASA_REGIONAVAILABILITY table. |
| MTPASA_REGIONAVAILABILITY | Stores the Region-aggregate offered PASA Availability of scheduled generators for each day over the Medium Term PASA period. The data in this table is an aggregate of input data to the MT PASA process it is not part of the MTPASA solution. The aggregate availability does not reflect any energy limitations in the MT PASA offers. |
| MTPASA_REGIONITERATION | Region results for Unserved Energy (USE) |
| MTPASA_REGIONRESULT | Region results for interval of max demand per day. |
| MTPASA_REGIONSUMMARY | Region Results summary over aggregation periods. |

18.2 Diagram: Entities: MT PASA



19 Package: P5MIN

Name P5MIN
Comment Results from a published Five-Minute Predispatch Run

19.1 List of tables

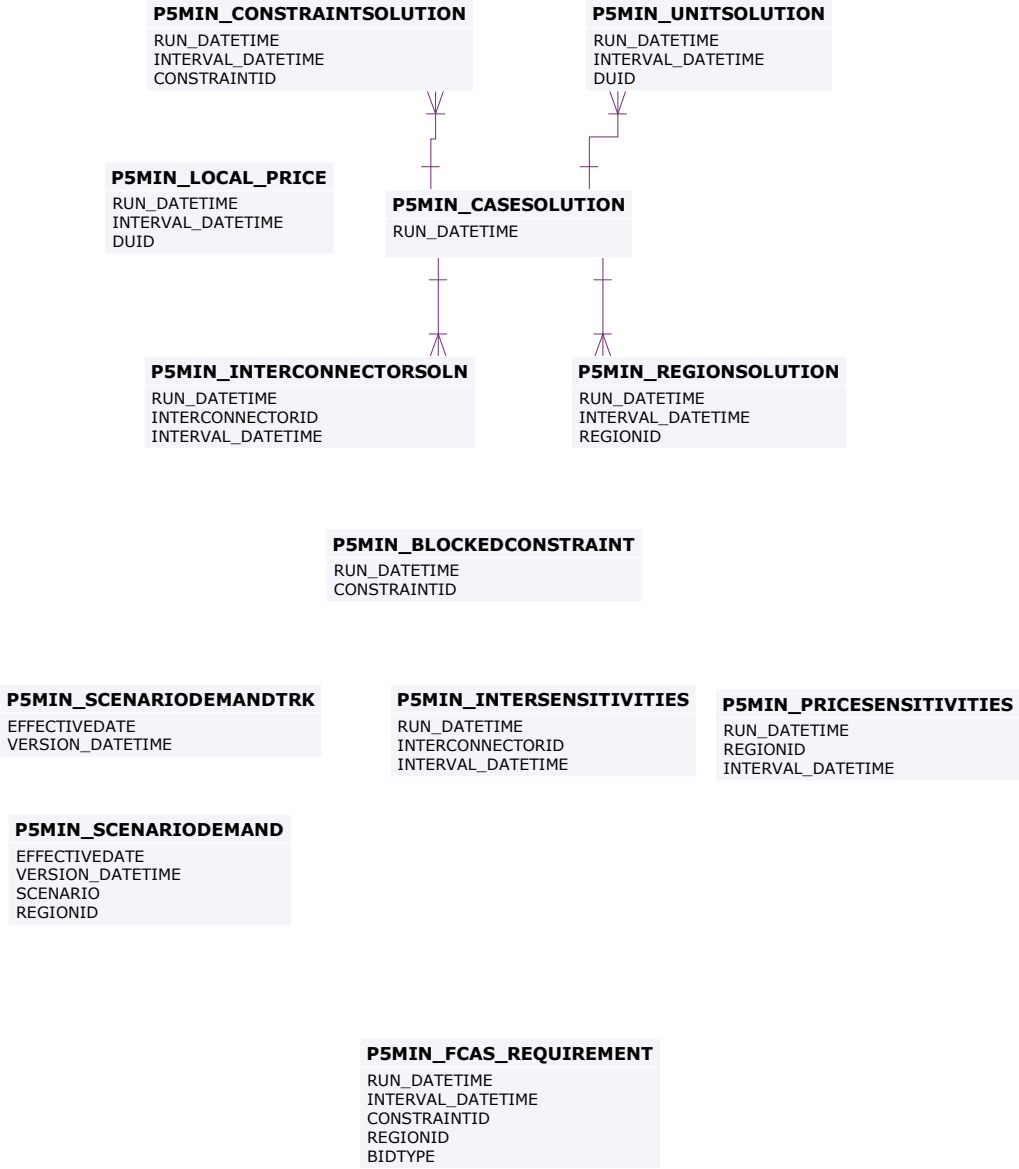
| Name | Comment |
|-------------------------|--|
| P5MIN_BLOCKEDCONSTRAINT | P5MIN Blocked Constraints lists any constraints that were blocked in a P5MIN run. If no constraints are blocked, there will be no rows for that 5 minute predispatch run. |
| P5MIN_CASESOLUTION | The five-minute predispatch (P5Min) is a 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_CASESOLUTION shows one record containing results pertaining to the entire solution. |

| | |
|---------------------------------|--|
| <p>P5MIN_CONSTRAINTSOLUTION</p> | <p>The Five-Minute Pre-Dispatch (P5Min) is a MMS system providing projected dispatch for 12 Dispatch cycles (one hour). The Five-Minute Pre-dispatch 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_CONSTRAINTSOLUTION shows binding and violated constraint results from the capacity evaluation, including the RHS value.</p> |
| <p>P5MIN_FCAS_REQUIREMENT</p> | <p>5-minute Predispatch constraint tracking for Regional FCAS recovery</p> |
| <p>P5MIN_INTERCONNECTORSOLN</p> | <p>The five-minute predispatch (P5Min) is a 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_INTERCONNECTORSOLN sets out the</p> |

| | |
|--------------------------|---|
| | results of the capacity evaluation for Interconnectors, including the calculated limits for the interval. |
| P5MIN_INTERSENSITIVITIES | Price Sensitivities for 5MinPD solution. New solution every 5 minutes. Current Scenarios defined in P5MIN_SCENARIODEMANDTRK/P5MIN_SCENARIODEMAND |
| P5MIN_LOCAL_PRICE | Sets out local pricing offsets associated with each DUID connection point for each dispatch period |
| P5MIN_PRICESENSITIVITIES | Price Sensitivities for 5MinPD solution. New solution every 5 minutes. Current Scenarios defined in P5MIN_SCENARIODEMANDTRK/P5MIN_SCENARIODEMAND |
| P5MIN_REGIONSOLUTION | The five-minute predispach (P5Min) is a MMS system providing projected dispatch for 12 Dispatch cycles (one hour). The 5-minute Predispach cycle runs every 5-minutes to produce a dispatch and pricing schedule to a 5-minute resolution |

| | |
|--------------------------------|--|
| | <p>covering the next hour, a total of twelve periods.</p> <p>P5MIN_REGIONSOLUTION shows the results of the regional capacity, maximum surplus reserve and maximum spare capacity evaluations for each period of the study.</p> |
| <p>P5MIN_SCENARIODEMAND</p> | <p>The P5Min scenario MW offsets</p> |
| <p>P5MIN_SCENARIODEMANDTRK</p> | <p>Tracks the 5Min scenario offset updates across time</p> |
| <p>P5MIN_UNITSOLUTION</p> | <p>The five-minute predispach (P5Min) is a MMS system providing projected dispatch for 12 Dispatch cycles (one hour). The 5-minute Predispach 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.</p> <p>P5MIN_UNITSOLUTION shows the Unit results from the capacity evaluations for each period of the study.</p> |

19.2 Diagram: Entities: P5MIN



20 Package: PARTICIPANT_REGISTRATION

Name PARTICIPANT_REGISTRATION

Comment Participant registration data

20.1 List of tables

| Name | Comment |
|--------------------------|--|
| ADG_DETAIL | Table for tracking evolving Aggregate Dispatch Group attributes |
| AGGREGATE_DISPATCH_GROUP | Entity allowing for compliance monitoring over grouped DUIDs |
| BIDDUIDDETAILS | BIDDUIDDETAILS and the associated tracking object BIDDUIDDETAILSTRK define the registration data for each ancillary service a dispatchable unit is registered to provide. The registration data is required to validate a dispatchable unit bid submitted for that ancillary service. |
| BIDDUIDDETAILSTRK | BIDDUIDDETAILSTRK shows the tracking for the associated object BIDDUIDDETAILS. Together, |

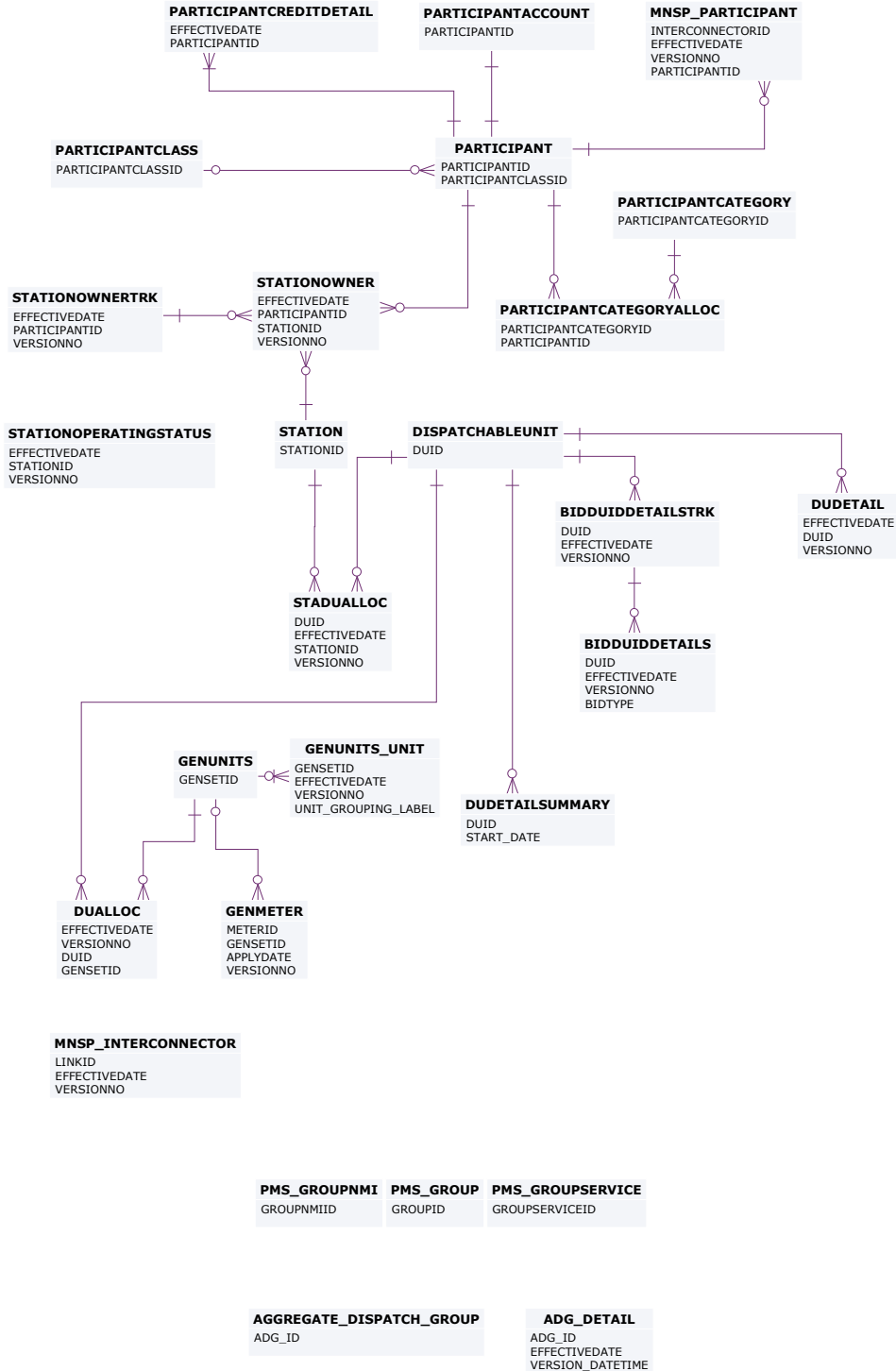
| | |
|------------------|---|
| | <p>BIDDUIDDETAILSTRK and BIDDUIDDETAILS define the registration data for each ancillary service a dispatchable unit is registered to provide. The registration data is required to validate a dispatchable unit bid submitted for that ancillary service.</p> |
| DISPATCHABLEUNIT | <p>DISPATCHABLEUNIT sets out the unit name and type of each dispatchable unit in the market.</p> |
| DUALLOC | <p>DUALLOC cross references dispatch unit identifier to genset ID for each participant.</p> |
| DUDETAIL | <p>DUDETAIL sets out a records specific details for each unit including start type and whether normally on or off load. Much of this data is information only and is not used in dispatch or settlements.</p> |
| DUDETAILSUMMARY | <p>DUDETAILSUMMARY sets out a single summary unit table so reducing the need for participants to use the various dispatchable unit detail and owner tables to establish</p> |

| | |
|--------------------------|---|
| | generating unit specific details. |
| GENMETER | GENMETER shows details of generator meter sets. |
| GENUNITS | GENUNITS shows Genset details for each physical unit with the relevant station. |
| GENUNITS_UNIT | Physical units within a Gen Unit Set |
| MNSP_INTERCONNECTOR | MNSP_INTERCONNECT OR sets out attributes of each interconnector. |
| MNSP_PARTICIPANT | MNSP_PARTICIPANT registers MNSP ownership. |
| PARTICIPANT | PARTICIPANT sets out Participant ID, name and class for all participants. |
| PARTICIPANTACCOUNT | PARTICIPANTACCOUNT shows financial details on participants. |
| PARTICIPANTCATEGORY | PARTICIPANTCATEGORY sets out valid participant categories. |
| PARTICIPANTCATEGORYALLOC | PARTICIPANTCATEGORY ALLOC sets out the assignment of participants to particular categories. |
| PARTICIPANTCLASS | PARTICIPANTCLASS sets |

| | |
|-------------------------|--|
| | out valid participant classifications. |
| PARTICIPANTCREDITDETAIL | |
| PMS_GROUP | Entity table for group |
| PMS_GROUPNMI | Describe the NMIs that a group uses to provide its service |
| PMS_GROUPSERVICE | Describe the services a group provides and its relation to a market |
| STADUALLOC | STADUALLOC sets out details on the allocation of dispatchable units to particular sites or stations. |
| STATION | STATION sets out valid station identifiers. |
| STATIONOPERATINGSTATUS | STATIONOPERATINGSTATUS sets out the operating status of each station. |
| STATIONOWNER | STATIONOWNER sets out the owner details of each station. |
| STATIONOWNERTRK | STATIONOWNERTRK shows the tracking for the associated object STATIONOWNER. Together, STATIONOWNERTRK and STATIONOWNER sets out the owner |

details of each station.

20.2 Diagram: Entities: Participant Registration



21 Package: PRE_DISPATCH

| | |
|----------------|--|
| <i>Name</i> | PRE_DISPATCH |
| <i>Comment</i> | Results from a published Predispatch Run |

Storage options

There are 2 ways to define the Pre-dispatch table primary keys (PKs) to define which data is loaded to the database and which data is retained:

Option 1 (default)

Overwrite older records when they are succeeded by later versions for the same entity and period. This is the Data Model default and results in the consumption of far less storage. Data Model updates issued by AEMO target this configuration so participants implementing option 2a or 2b must maintain their changes when AEMO releases a new Data Model version.

PredispatchLoad: DateTime, DUID

PredispatchInterconnectorRes: DateTime, InterconnectorID,

PredispatchPrice: DateTime, RegionID

PredispatchPriceSensitivities: DateTime, RegionID

PredispatchInterSensitivities: InterconnectorID, DateTime

PredispatchRegionsum: DateTime, RegionID

Option 2a

Retain only the Pricing records for tables relating to Price data and Physical records for tables relating to Physical data (e.g. targets). Approximately 50 times more storage volumes than option 1.

PredispatchLoad: PredispatchSeqNo, DateTime, DUID

PredispatchInterconnectorRes: PredispatchSeqNo, DateTime, InterconnectorID,

PredispatchPrice: PredispatchSeqNo, DateTime, RegionID

PredispatchPriceSensitivities: PredispatchSeqNo, DateTime, RegionID

PredispatchInterSensitivities: PredispatchSeqNo, DateTime, InterconnectorID

PredispatchRegionsum: PredispatchSeqNo, DateTime, RegionID

Option 2b

Retain both Physical and Pricing data for Intervention runs. If Intervention

cases are stored in entirety, you must select the data carefully. The logic is the same as for Dispatch, i.e. Intervention Pricing is always where Intervention = 0 and Physical data is where Intervention = PredispatchCaseSolution.Intervention for the same PredispatchSeqNo.

Doubles the storage of option 2a but ONLY for Intervened cases.

PredispatchLoad: PredispatchSeqNo, Intervention, DateTime, DUID

PredispatchInterconnectorRes: PredispatchSeqNo, Intervention, DateTime, InterconnectorID,

PredispatchPrice: PredispatchSeqNo, Intervention, DateTime, RegionID

PredispatchPriceSensitivities: PredispatchSeqNo, Intervention, DateTime, RegionID

PredispatchInterSensitivities: PredispatchSeqNo, Intervention, DateTime, InterconnectorID

PredispatchRegionsum: PredispatchSeqNo, Intervention, DateTime, RegionID

Notes:

The data in the PredispatchIS file is always ordered so the pdrLoader writes the relevant data first and discards the subsequent irrelevant data, or writes the subsequent data, depending on how the PKs are defined.

You may order the PKs in a different order, depending on your local requirements. Any decision to change the PK column composition or order must consider the functional and performance impacts to existing applications or queries.

The pdrLoader caches PK definitions for performance reasons so any change to the PKs requires a restart of the application.

The TRANSACTION_TYPE default in the PDR_REPORT_RECORDS management tables for PREDISPATCH* tables is UPDATE-INSERT. You can modify this to INSERT for Option 2b, as the attempt to first perform an update becomes redundant. This can improve load performance.

21.1 List of tables

| Name | Comment |
|----------------------|---|
| PREDISPATCH_FCAS_REQ | PREDISPATCH_FCAS_RE Q shows Predispatch |

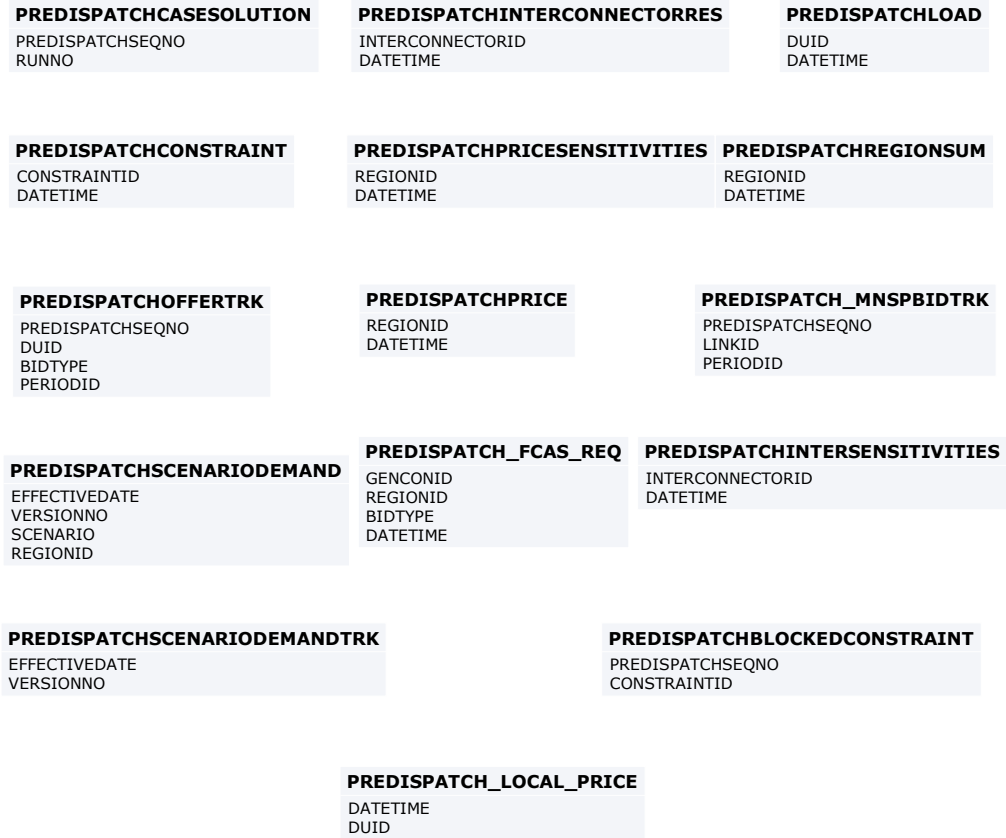
| | |
|------------------------------|--|
| | Constraint tracking for Regional FCAS Requirements. |
| PREDISPATCH_LOCAL_PRICE | Sets out local pricing offsets associated with each DUID connection point for each dispatch period |
| PREDISPATCH_MNSPBIDTRK | PREDISPATCH_MNSPBI DTRK shows the MNSP bid tracking, including the bid version used in each predispatch run for each MNSP Interconnector Link. PREDISPATCH_MNSPBI DTRK shows the audit trail of the bid used for each predispatch run. |
| PREDISPATCHBLOCKEDCONSTRAINT | PREDISPATCH Blocked Constraints lists any constraints that were blocked in a Predispatch run. If no constraints are blocked, there will be no rows for that predispatch run. |
| PREDISPATCHCASESOLUTION | PREDISPATCHCASESOLUTION provides information relating to the complete predispatch run. The fields provide an overview of the dispatch run results allowing immediate identification of conditions such as |

| | |
|------------------------------|--|
| | energy or FCAS deficiencies. |
| PREDISPATCHCONSTRAINT | <p>PREDISPATCHCONSTRAINT sets out constraints that are binding in each predispach run and interconnector constraints (whether binding or not). Only binding and interconnector constraints are reported. Binding contracts have marginal value greater than \$0. Interconnector constraints are listed so RHS values can be reported for ST PASA.</p> <p>Constraint solutions only report fixed loading /MR constraints on the next day.</p> |
| PREDISPATCHINTERCONNECTORRES | <p>PREDISPATCHINTERCONNECTORRES records Interconnector flows and losses for the periods calculated in each predispach run. Only binding and interconnector constraints are reported.</p> <p>Some fields are for the Frequency Controlled Ancillary Services export and import limits and extra reporting of the generic constraint setting the energy</p> |

| | |
|-------------------------------|--|
| | import and export limits. |
| PREDISPATCHINTERSENSITIVITIES | PREDISPATCHINTERSENSITIVITIES sets out the sensitivity flows for each interconnector by period. |
| PREDISPATCHLOAD | PREDISPATCHLOAD shows pre-dispatch targets for each dispatchable unit, including additional fields to handle the Ancillary Services functionality. No record is written where a unit is not dispatched. PREDISPATCHLOAD shows all the results for each period. |
| PREDISPATCHOFFERTRK | PREDISPATCHOFFERTRK is for the ancillary service bid tracking of pre-dispatch processing. PREDISPATCHOFFERTRK identifies which bids from BIDDAYOFFER and BIDOFFERPERIOD were applied for a given unit and ancillary service for each pre-dispatch run. |
| PREDISPATCHPRICE | PREDISPATCHPRICE records pre-dispatch prices for each region by period for each pre-dispatch run, including fields to handle the Ancillary |

| | |
|-------------------------------|--|
| | Services functionality. |
| PREDISPATCHPRICESENSITIVITIES | PREDISPATCHPRICESENSITIVITIES sets out the sensitivity prices for each region by period. |
| PREDISPATCHREGIONSUM | PREDISPATCHREGIONSUM sets out the overall regional Pre-Dispatch results for base case details (excluding price). |
| PREDISPATCHSCENARIODEMAND | PREDISPATCHSCENARIODEMAND defines the demand offsets that are applied for each of the predispatch sensitivity scenarios. |
| PREDISPATCHSCENARIODEMANDTRK | Tracks the predispatch scenario offset updates across time |

21.2 Diagram: Entities: Predispatch



22 Package: RESERVE_DATA

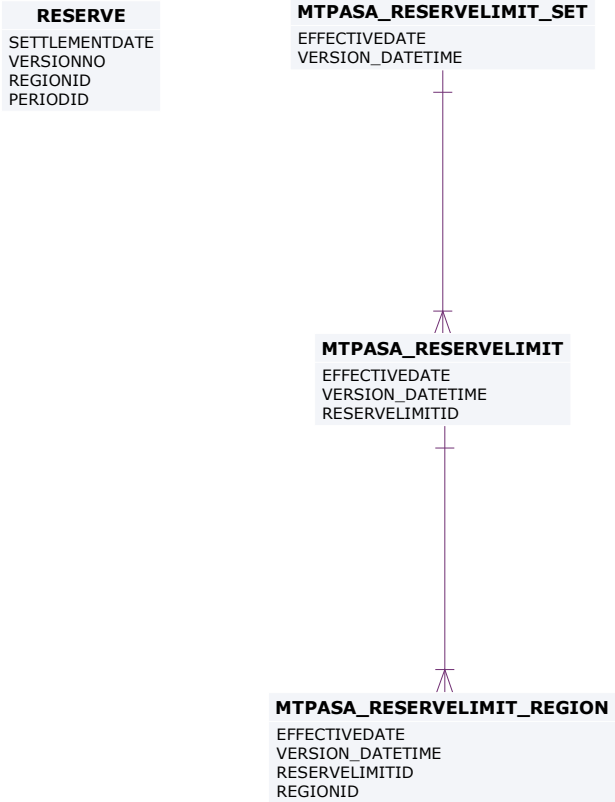
| | |
|----------------|--------------------------------------|
| <i>Name</i> | RESERVE_DATA |
| <i>Comment</i> | Energy and FCAS reserve requirements |

22.1 List of tables

| Name | Comment |
|----------------------------|---|
| MTPASA_RESERVELIMIT | MT PASA input table defining a MT PASA Reserve Requirement within a single set. An MT PASA Reserve Requirement can span more than one region. |
| MTPASA_RESERVELIMIT_REGION | MT PASA input table to define the regions that are part of a single MT PASA Reserve Requirement |
| MTPASA_RESERVELIMIT_SET | MT PASA input table defining a set of MT PASA Reserve Requirements. Note only one set can be active on a given date. |
| RESERVE | RESERVE sets out specific reserve requirements for dispatch, predispatch and STPASA, for each half-hour interval by region. Updates show as |

| | |
|--|--------------------------|
| | new versions for a date. |
|--|--------------------------|

22.2 Diagram: Entities: Reserve Data



23 Package: SETTLEMENT_CONFIG

| | |
|----------------|--|
| <i>Name</i> | SETTLEMENT_CONFIG |
| <i>Comment</i> | Configuration and input data for the Settlements Process |

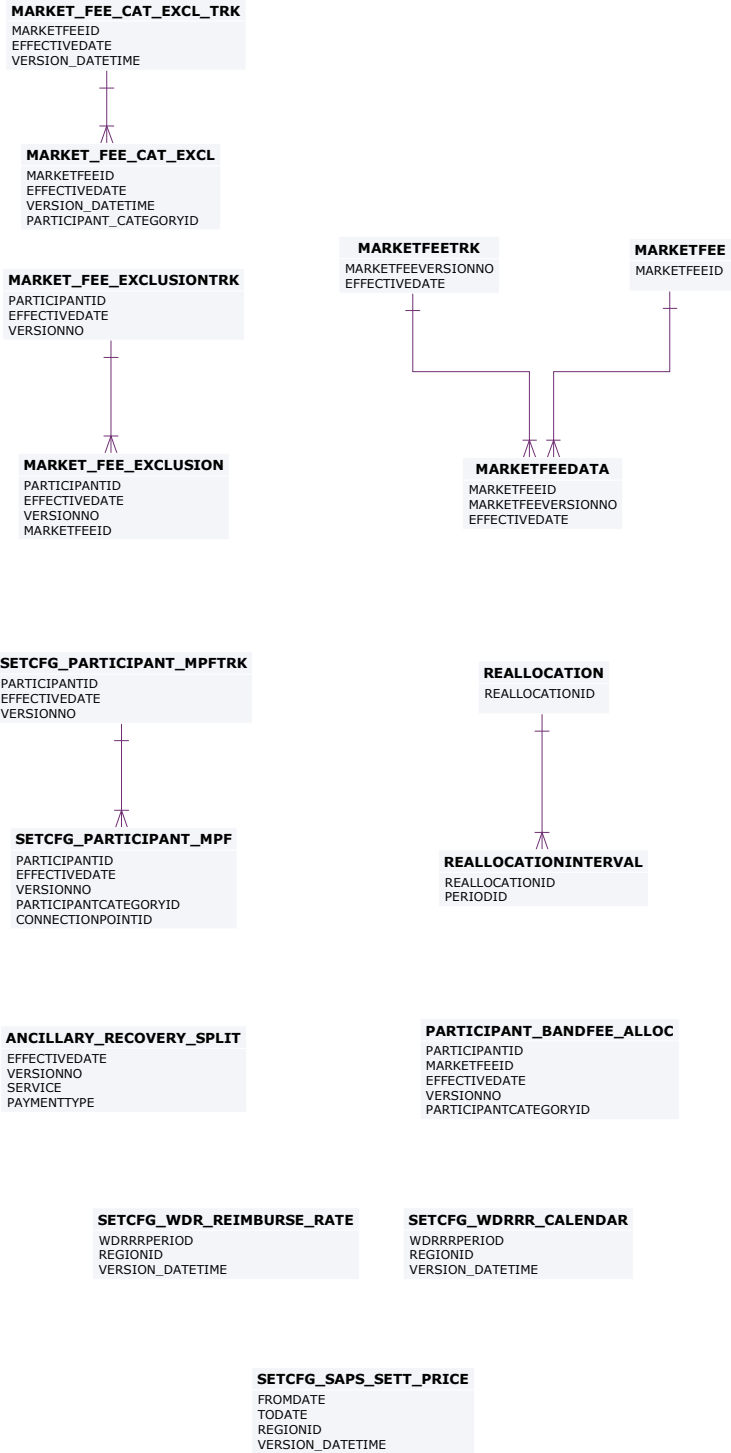
23.1 List of tables

| Name | Comment |
|--------------------------|--|
| ANCILLARY_RECOVERY_SPLIT | ANCILLARY_RECOVERY_SPLIT holds the actual customer portion for each service and payment type. A single EFFECTIVEDATE/VERSIO NNO combination applies to all services (i.e. the latest EFFECTIVEDATE/VERSIO NNO is not retrieved for a single service, but applies to a data set). |
| MARKET_FEE_CAT_EXCL | Market fee exclusions for participant categories. |
| MARKET_FEE_CAT_EXCL_TRK | Tracking table for market fee exclusions for participant categories. |
| MARKET_FEE_EXCLUSION | MARKET_FEE_EXCLUSIO N shows the list of market fees from which a participant is excluded from funding after a |

| | |
|---------------------------|--|
| | particular settlement date. |
| MARKET_FEE_EXCLUSIONTRK | MARKET_FEE_EXCLUSIO NTRK shows authorisation details of participant market fee exclusion data sets. |
| MARKETFEE | MARKETFEE sets out fee type and period for each market fee. |
| MARKETFEEDATA | MARKETFEEDATA sets out actual fee rates, as adjusted from time to time. |
| MARKETFEETRK | MARKETFEETRK sets out versions of each market fee used and its effective date. |
| PARTICIPANT_BANDFEE_ALLOC | PARTICIPANT_BANDFEE _ALLOC shows the market fee for each Participant/Participant Category over time. |
| REALLOCATION | The REALLOCATION table shows the financial transactions agreed between two participants that are settled through the AEMO pool settlements process. |
| REALLOCATIONINTERVAL | 30-minute or (5-minute for 5MS) data comprising a single |

| | |
|---------------------------|--|
| | reallocation transaction. |
| SETCFG_PARTICIPANT_MPF | SETCFG_PARTICIPANT_MPF shows the Market Participation Factors (MPF) for each participant for each connection point. The MPF values are used to determine recovery amounts for regulation FCAS. |
| SETCFG_PARTICIPANT_MPFTRK | SETCFG_PARTICIPANT_MPFTRK is the tracking table for Market Participation Factors (MPF) data stored in the SETCFG_PARTICIPANT_MPF table for each participant. |
| SETCFG_SAPS_SETT_PRICE | The Settlement Price for SAPS Energy in each Region |
| SETCFG_WDR_REIMBURSE_RATE | Settlements WDR transactions |
| SETCFG_WDRRR_CALENDAR | Wholesale Demand Response Reimbursement Rate Calendar |

23.2 Diagram: Entities: Settlement Config



24 Package: SETTLEMENT_DATA

Name SETTLEMENT_DATA

Comment Results from a published Settlements 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.

24.1 List of tables

| Name | Comment |
|-----------------------|--|
| DAYTRACK | DAYTRACK identifies the actual settlement run processed for each settlement day. Settlement run is in the column EXPOSTRUNNO. Generally the number of the settlement run used in the latest statement is the maximum number. |
| SET_APC_COMPENSATION | APC Compensation payment amounts in the Settlements timeframe |
| SET_APC_RECOVERY | APC Compensation recovery amounts in the Settlements timeframe |
| SET_ANCILLARY_SUMMARY | SET_ANCILLARY_SUMMARY summarises payments for all Ancillary Services to participants on the basis of regions and trading intervals. |

| | |
|----------------------------------|---|
| <p>SET_ENERGY_GENSET_DETAIL</p> | <p>The Settlement Energy Genset report contains the Energy Transactions data for each generation meter point.. This report is produced only for Settlement Date post the IESS rule effective date.</p> |
| <p>SET_ENERGY_REGION_SUMMARY</p> | <p>The Settlement Energy Region Summary report contains the Energy Transactions Summary for all the NEM regions. This report is produced only for Settlement Date post the IESS rule effective date.</p> |
| <p>SET_ENERGY_TRAN_SAPS</p> | <p>The table shows the Transaction Details for the SAPS Connection Points. The table contains both the MSRPs and Retailers data</p> |
| <p>SET_ENERGY_TRANSACTIONS</p> | <p>The Settlement Energy Transactions report contains the Energy Transactions data for all the Participants based on their ACE and ASOE at each customer and generator Connection Point ID. This table is populated The Settlement Energy Transactions report</p> |

| | |
|-------------------------|--|
| | contains the Energy Transactions data for all the Participants based on their ACE and ASOE at each customer and generator Connection Point ID. This table is populated only if Settlement Date is post the IESS rule effective date. |
| SET_FCAS_PAYMENT | SET_FCAS_PAYMENT sets out the enabling payment details for frequency controlled Ancillary Services. |
| SET_FCAS_RECOVERY | SET_FCAS_RECOVERY shows reimbursements for the Frequency Control Ancillary Services (FCAS) to be recovered from participants. Beware of potential confusion with the table SETFCASRECOVERY, which reports reimbursements for Frequency Control Ancillary Services Compensation (now unused). |
| SET_FCAS_REGULATION_TRK | SET_FCAS_REGULATION_TRK shows FCAS Regulation Service Constraint tracking for Regional FCAS |

| | |
|-----------------------|--|
| | Regulation recovery |
| SET_NMAS_RECOVERY | SET_NMAS_RECOVERY sets out the NSCAS recovery data for payments other than testing. |
| SET_NMAS_RECOVERY_RBF | SET_NMAS_RECOVERY_RBF publishes the RBF for NSCAS non testing payments on a half hourly basis. |
| SET_RECOVERY_ENERGY | Settlements substitution recovery energy used |
| SET_RUN_PARAMETER | SET_RUN_PARAMETER shows the input parameters and value associated with each settlement run (e.g. Residual System Load Causer Pays Factor). |
| SET_SUBST_RUN_VERSION | Settlements substitution demand run version numbers |
| SET_SUBSTITUTE_DEMAND | Settlements substitution demand for Zero Demand figures |
| SET_WDR_RECON_DETAIL | Settlements WDR reconciliation details |
| SET_WDR_TRANSACT | Settlements WDR transactions summary |
| SETCPDATA | SETCPDATA shows meter settlement data for each connection |

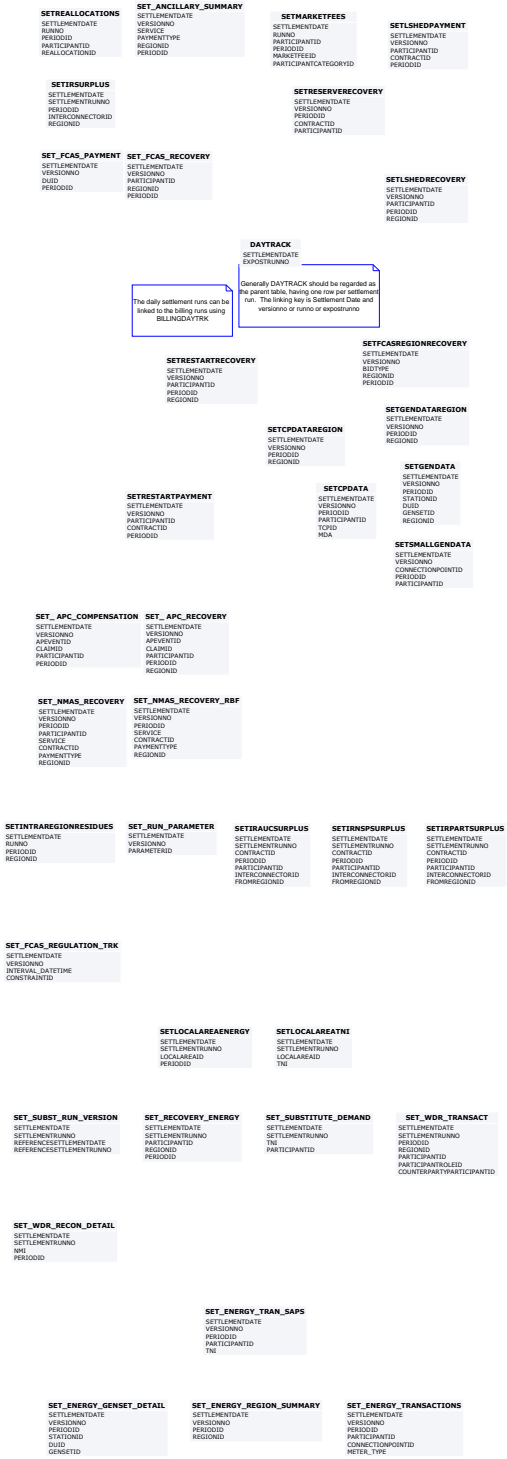
| | |
|------------------------|---|
| | <p>point. This is the key view for retailers to verify energy charges. A regional summary view is also provided. As the view has values for each connection point by period, for each meter data file, it is a very large view.</p> |
| SETCPDATAREGION | <p>SETCPDATAREGION sets out summary meter settlement data for each region.</p> |
| SETFCASREGIONRECOVERY | <p>The FCAS Recovery amount from each NEM Region and the Energy MWh used for the FCAS Recovery calculation from Participants</p> |
| SETGENDATA | <p>SETGENDATA shows meter settlement data for each generation meter point. A regional summary is also provided.</p> |
| SETGENDATAREGION | <p>SETGENDATAREGION sets out summary settlement data for generation within the specified region.</p> |
| SETINTRAREGIONRESIDUES | <p>The Settlement Intra Region Residues Result.</p> |
| SETIRAUCSURPLUS | <p>This view supports the Settlements Residue</p> |

| | |
|--------------------|--|
| | Auction, by holding the NSP participant allocations of IRSurplus arising as a result of the unsold units for a quarter. |
| SETIRNSPSURPLUS | This view supports the Settlements Residue Auction, by showing the TNSP participant allocations of Interconnector Residue (IR) Surplus (i.e. derogated amounts) arising as a result of the sold units for a quarter. |
| SETIRPARTSURPLUS | This view supports the Settlements Residue Auction, holding the participant allocations of IRSurplus. |
| SETIRSURPLUS | SETIRSURPLUS records the interregional residue calculation for each interconnector and each side of the interconnector. |
| SETLOCALAREAENERGY | SETLOCALAREAENERGY shows the UFE, AGE and associated values for each local area and trading interval in a settlement run. |
| SETLOCALAREATNI | SETLOCALAREATNI shows the list of TNIs constituent to a local |

| | |
|--------------------|--|
| | area in a settlement run. |
| SETLSHEDPAYMENT | SETLSHEDPAYMENT shows specific payment details for load shed services by period. |
| SETLSHEDRECOVERY | SETLSHEDRECOVERY shows reimbursements for Load shed Ancillary Services to be recovered from participants. (Data no longer created for Settlement Days from 01/07/2012) |
| SETMARKETFEEES | SETMARKETFEEES shows payments for market fees for each settlement date. |
| SETREALLOCATIONS | SETREALLOCATIONS shows the trading interval value of reallocations processed, for those participants whose reallocation submissions have been accepted by AEMO. |
| SETRESERVERECOVERY | SETRESERVERECOVERY shows reserve recovery details. |
| SETRESTARTPAYMENT | SETRESTARTPAYMENT shows specific payment details for System Restart services by period. |
| SETRESTARTRECOVERY | SETRESTARTRECOVERY |

| | |
|--------------------------|---|
| | <p>shows reimbursements for system restart Ancillary Services to be recovered from participants. (Data no longer created for Settlement Days from 01/07/2012)</p> |
| <p>SETRPOWERPAYMENT</p> | <p>SETRPOWERPAYMENT shows specific payment details for Reactive power services by period.</p> |
| <p>SETRPOWERRECOVERY</p> | <p>SETRPOWERRECOVERY shows reimbursements for Reactive Power Ancillary Services to be recovered from participants. (Data no longer created for Settlement Days from 01/07/2012)</p> |
| <p>SETSMALLGENDATA</p> | <p>Publishes metering data and associated settlement values for with a registered Small Generator Aggregator participants connection points.</p> |

24.2 Diagram: Entities: Settlement Data



25 Package: STPASA_SOLUTION

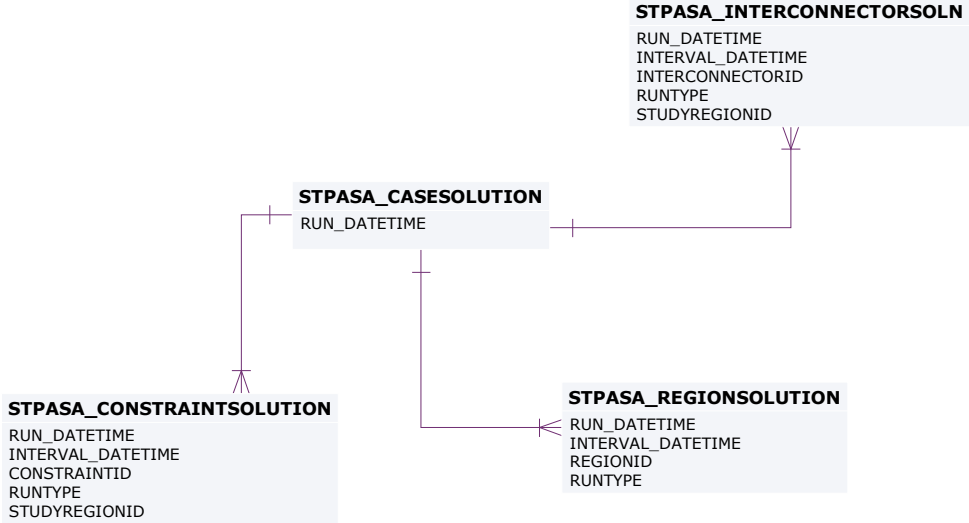
Name STPASA_SOLUTION
Comment Results from a published Short Term PASA Run

25.1 List of tables

| Name | Comment |
|---------------------------|---|
| STPASA_CASESOLUTION | STPASA_CASESOLUTION holds one record containing results pertaining to each entire solution |
| STPASA_CONSTRAINTSOLUTION | STPASA_CONSTRAINTSOLUTION shows binding and violated constraint results from the capacity evaluation, including the RHS value. |
| STPASA_INTERCONNECTORSOLN | STPASA_INTERCONNECTORSOLN shows the results of the capacity evaluation for Interconnectors, including the calculated limits for the interval. |
| STPASA_REGIONSOLUTION | STPASA_REGIONSOLUTION shows the results of the regional capacity, maximum surplus reserve and maximum spare capacity evaluations for each |

| | |
|--|----------------------|
| | period of the study. |
|--|----------------------|

25.2 Diagram: Entities: ST PASA Solution



26 Package: TRADING_DATA

Name TRADING_DATA
Comment 30 minute Trading interval results

26.1 List of tables

| Name | Comment |
|---------------------|--|
| AVERAGEPRICE30 | Reflects the 30-minute average price (the pre-5MS trading price). |
| TRADINGINTERCONNECT | <p>TRADINGINTERCONNECT shows the Interconnector flows for the 5 minutes Trading Interval.</p> <p>Prior to 5 Minute Settlements, this was the average of the six 5 minute dispatch intervals within the 30 minute period.</p> |
| TRADINGPRICE | TRADINGPRICE sets out 5 minutes spot market price, including fields to handle the Ancillary Services functionality. If prices are adjusted, the final price is recorded in the regional reference price (RRP) field with price before adjustment recorded in the regional original price (ROP) |

| | |
|--|--|
| | <p>field.</p> <p>Prior to 5 Minute Settlements, this was half-hourly spot market values, which was calculated as the average of the six 5 minute dispatch intervals within the 30 minute period.</p> |
|--|--|

26.2 Diagram: Entities: Trading Data

TRADINGINTERCONNECT
SETTLEMENTDATE
RUNNO
INTERCONNECTORID
PERIODID

TRADINGPRICE
SETTLEMENTDATE
RUNNO
REGIONID
PERIODID

AVERAGEPRICE30
PERIODDATE
REGIONID

27 Package: HISTORICAL TABLES

| | |
|----------------|---------------------------------|
| <i>Name</i> | HISTORICAL TABLES |
| <i>Comment</i> | These tables are no longer used |

27.1 List of tables

| Name | Comment |
|-------------------------------|---|
| APCCOMP | APCCOMP is to set out Administered Price Cap (APC) compensation periods for a participant. |
| APCCOMPAMOUNT | APCCOMPAMOUNT shows the Administered Price Cap (APC) compensation amount. |
| APCCOMPAMOUNTTRK | APCCOMPAMOUNTTRK sets out the relevant Administered Price Cap (APC) period for compensation purposes. Use the APCCOMPAMOUNTTRK table in conjunction with APCAMOUNT. |
| BIDPEROFFER | BIDPEROFFER shows period-based Energy and Ancillary Service bid data. BIDPEROFFER is a child table of BIDDAYOFFER. |
| BILLADJUSTMENTS | |
| BILLING_CSP_DEROGATION_AMOUNT | CSP derogation |

| | |
|-----------------------------|---|
| | amounts with respect to participant allocated payment |
| BILLING_MR_PAYMENT | BILLING_MR_PAYMENT shows aggregate payments on a dispatchable unit/MR Event basis for accepted MR capacity |
| BILLING_MR_RECOVERY | BILLING_MR_RECOVERY shows aggregate recovery charges on a dispatchable unit / MR Event basis for spot market income from dispatch of MR capacity. |
| BILLING_MR_SHORTFALL | BILLING_MR_SHORTFALL shows aggregate MR shortfall payments (or recovery charges) to each participant in the region for the MR event. |
| BILLING_MR_SUMMARY | BILLING_MR_SUMMARY shows aggregate payment/recovery and shortfall figures for an MR Event. |
| BILLING_RES_TRADER_PAYMENT | Billing result table for reserve trader contract payments |
| BILLING_RES_TRADER_RECOVERY | Billing result table for reserve trader contract recovery |
| BILLINGCPSUM | BILLINGCPSUM shows |

| | |
|------------------------------|---|
| | adjustments for a billing run by participant. |
| BILLINGCUSTEXCESSGEN | BILLINGCUSTEXCESSGEN shows excess generation payments for each participant cutover. |
| BILLINGEXCESSGEN | BILLINGEXCESSGEN shows the excess generation cost by period for each participant. |
| BILLINGINTERVENTION | BILLINGINTERVENTION shows billing intervention recovery details. |
| BILLINGINTERVENTIONREGION | BILLINGINTERVENTIONREGION shows recovery charges for region intervention. |
| BILLINGRESERVERECOVERY | BILLINGRESERVERECOVERY shows Market Reserve recovery details for each participant in a bill run. |
| BILLINGRESERVEREGIONRECOVERY | BILLINGRESERVEREGIONRECOVERY shows Billing Region Reserve region recovery details for each participant (by region). |
| BILLINGRESERVETRADER | BILLINGRESERVETRADER shows Billing Market Reserve TRADER |

| | |
|--------------------------------|--|
| | payment details to Generators. |
| BILLINGRESERVETRADERREGION | BILLINGRESERVETRADE RREGION shows Billing Region Reserve Trader payment details. |
| BILLINGSMELTERREDUCTION | BILLINGSMELTERREDUC TION shows the smelter reduction payment (only applies to participants with Victorian customer connection points). |
| BILLINTERVENTIONRECOVERY | BILLINTERVENTIONREC OVERY shows billing market intervention recovery details for each participant. |
| BILLINTERVENTIONREGIONRECOVERY | BILLINTERVENTIONREGI ONRECOVERY shows billing region intervention recovery details for each participant by region. |
| BILLSMELTERRATE | BILLSMELTERRATE is standing data, setting out the rates used in smelter reduction calculations. |
| CONNECTIONPOINT | CONNECTIONPOINT shows all valid connection points and their type. Transmission loss factors are available for all connection points in |

| | |
|-----------------------------|---|
| | TRANSMISSIONLOSSFACTOR. |
| CONNECTIONPOINTDETAILS | <p>CONNECTIONPOINTDETAILS is obsolete, since it was never populated by Participants accessing AEMO's Oracle Interface.</p> <p>CONNECTIONPOINTDETAILS was designed to show relevant details for each connection point including the responsible party, loss factor and relevant MDAs.</p> |
| CONNECTIONPOINTOPERATINGSTA | CONNECTIONPOINTOPERATINGSTA shows whether a connection point is active or not. |
| CONTRACTGOVERNOR | <p>CONTRACTGOVERNOR became unused when Ancillary Services Review was implemented in 2001. For more details, see Change Notice 126.</p> <p>CONTRACTGOVERNOR shows Governor contract details used in the settlement and dispatch of this service. Note services are dispatched as 6 and 60 raise and lower Frequency Control Ancillary Services</p> |

| | |
|--------------------------|--|
| | (FCAS). Lower and raise 6 and 60 second fields are used in dispatch of services. Deadband and Droop details are used in settlements. |
| CONTRACTRESERVEFLAG | CONTRACTRESERVEFLAG has never been or will be used. It was to show a period by period flag for regional or market recovery of reserve trading contract amounts. |
| CONTRACTRESERVETHRESHOLD | CONTRACTRESERVETHRESHOLD shows reserve contract threshold details for enabling, usage and availability thresholds and rates for reserve trader contracts. |
| CONTRACTRESERVETRADER | CONTRACTRESERVETRADER shows reserve trader contract details. Version numbers do not apply as contracts exist for specified purposes. |
| CONTRACTUNITLOADING | CONTRACTUNITLOADING became unused when Ancillary Services Review was implemented in 2001. For more details, see Change Notice 126. CONTRACTUNITLOADING shows Unit Loading |

| | |
|-----------------------|--|
| | contract details used in the settlement and dispatch of this service. |
| CONTRACTUNITUNLOADING | CONTRACTUNITUNLOADING shows Ancillary Service contract data for rapid generator unit unloading. |
| DAYOFFER | DAYOFFER sets out the participants' daily components of participant bid containing details applying for the whole day (such as prices, daily energy constraint and fast start profiles). To retrieve full bid details, read in conjunction with PEROFFER. |
| DAYOFFER_D | DAYOFFER_D sets out the participants' daily components of participant bid containing just the latest details (such as prices, daily energy constraint and fast start profiles). To retrieve latest bid details, read in conjunction with PEROFFER_D. |
| DEFAULTDAYOFFER | DEFAULTDAYOFFER shows day-based details of participants' default |

| | |
|-----------------|---|
| | bids unit for the same day. |
| DEFAULTOFFERTRK | DEFAULTOFFERTRK shows the file names of default offers submitted for each unit. |
| DEFAULTPEROFFER | DEFAULTPEROFFER shows half hourly period-based data in the default bid for each Dispatchable Unit, such as period availability, rate of change and band quantities. |
| DELTAMW | DELTAMW sets out the Frequency Control Ancillary Services (FCAS) requirement to be provided locally within each region and each half-hour period in a market day. Two fields specify Frequency Controlled Ancillary Services requirements to be provided locally for the new regulation ancillary services. |
| DISPATCHBIDTRK | DISPATCHBIDTRK shows the bid tracking, including the bid version used in each dispatch run for each unit. DISPATCHBIDTRK is the audit trail of the bid actually used in each |

| | |
|--------------------------|--|
| | dispatch. |
| DISPATCHCASE_OCD | DISPATCHCASE_OCD shows the key data to indicate when an over-constrained dispatch (OCD) re-run actually occurred. One record per over-constrained dispatch interval. |
| DISPATCHCASESOLUTION_BNC | DISPATCHCASESOLUTION_BNC was discontinued on 30 September 2009. Prior: DISPATCHCASESOLUTION_BNC is the key data to indicate when a binding intra-regional network constraints (BNC) re-run actually occurred. |
| DISPATCHLOAD_BNC | DISPATCHLOAD_BNC was discontinued on 30 September 2009. Prior: DISPATCHLOAD_BNC gives binding intra-regional network constraints (BNC) re-run dispatch results for all scheduled generating units. DISPATCHLOAD_BNC has a similar structure to DISPATCHLOAD but does not repeat input type data (e.g. InitialMW, AGCStatus) since these values are available from |

| | |
|--------------------|---|
| | DISPATCHLOAD. |
| DISPATCHTRK | DISPATCHTRK is no longer used. DISPATCHTRK was the cross-reference between each dispatch run and SPD case run. DISPATCHTRK may be available on the InfoServer but not replicated to participant databases as it contains data duplicated in other tables. |
| FORCEMAJEURE | FORCEMAJEURE used to set out the start and end dates / periods of any force majeure event. FORCEMAJEURE is not used. |
| FORCEMAJEUREREGION | FORCEMAJEUREREGION used to set out regions impacted by a force majeure event. This table is not used. |
| GENUNITMTRINPERIOD | GENUNITMTRINPERIOD shows meter reading by period for each generator meter. GENUNITMTRINPERIOD covers generated power flowing into the system. It is used to calculate settlement values. |
| INTCONTRACT | INTCONTRACT shows intervention contract |

| | |
|----------------------|--|
| | <p>details. These are specific to each intervention.</p> |
| INTCONTRACTAMOUNT | <p>INTCONTRACTAMOUNT shows intervention contract amounts.</p> |
| INTCONTRACTAMOUNTTRK | <p>INTCONTRACTAMOUNT TRK shows the latest valid version of each intervention contract.</p> |
| INTERCONNMWFLOW | <p>INTERCONNMWFLOW shows Metered Interconnector flow data. INTERCONNMWFLOW shows the meter data provided by Meter Data Providers to MSATS. Despite the name, this view shows metered energy (MWh) and not power flow (MW).</p> |
| MARKETSUSPENSION | <p>MARKETSUSPENSION is obsolete from 2017 End of Year DM4.27 Release. MARKETSUSPENSION sets out a start and end periods of any market suspension and the reason.</p> |
| MARKETSUSREGION | <p>MARKETSUSREGION is obsolete from 2017 End of Year DM4.27 Release. MARKETSUSREGION sets out a regions</p> |

| | |
|--------------------|---|
| | affected by a market suspension. |
| MAS_CP_CHANGE | MAS_CP_CHANGE records pending changes to the current MAS configuration. |
| MAS_CP_MASTER | MAS_CP_MASTER shows the current MAS configuration. |
| METERDATA | METERDATA sets out a meter data for each customer connection point. METERDATA covers market load. Use the field METERRUNNO to match the meter data version for each settlement run. |
| METERDATA_GEN_DUID | Recorded actual generation of non-scheduled units where SCADA data is available. |
| METERDATA_TRK | Tracking table for the publication of wholesale settlement data associated with BILLING run |
| METERDATATRK | METERDATATRK records meter data files submitted for each connection point on a daily basis. The same data is provided in METERDATA period by period (i.e. 48 records), |

| | |
|-------------------|--|
| | <p>whereas METERDATATRK shows one record per day for each file submitted for a connection point.</p> |
| MNSP_FILETRK | <p>MNSP_FILETRK shows all MNSPOFFERS transmitted to the MMS system.</p> |
| MNSP_OFFERTRK | <p>MNSP_OFFERTRK records all valid MNSPOFFERS loaded into the MMS system. The authorised date reflects the date and time of the load. MNSP_OFFERTRK is key for tracking MNSP bid submission.</p> |
| MNSP_PEROFFER | <p>MNSP_PEROFFER shows period by period availability and other period data pertaining to a specific bid and LinkID for the given Settlement Date.</p> <p>MNSP_PEROFFER is a child to MNSP_DAYOFFER and links to MNSP_OFFERTRK.</p> |
| MR_DAYOFFER_STACK | <p>MR_DAYOFFER_STACK defines the Stack order for each version of the Acceptance Schedule, including all units</p> |

| | |
|-------------------|--|
| | <p>submitting MR offers for that event.</p> <p>MR_DAYOFFER_STACK is the child to MR_EVENT_SCHEDULE, and parent to MR_PEROFFER_STACK.</p> |
| MR_EVENT | <p>MR_EVENT defines an MR Event for a given region on a specific trading date.</p> |
| MR_EVENT_SCHEDULE | <p>MR_EVENT_SCHEDULE defines the Stack version of the Acceptance Schedule and is the parent table to MR_DayOffer_Stack and MR_PerOffer_Stack.</p> |
| MR_PEROFFER_STACK | <p>MR_PEROFFER_STACK defines the accepted capacity on a period basis for the Acceptance Schedule, is a child table to MR_DayOffer_Stack and only includes records or units with <code>accepted_capacity > 0</code> for the specific period.</p> |
| MTPASA_CASE_SET | <p>MTPASA_CASE_SET is obsolete from 2005 End of Year Release. The RUNTYPE added to the primary key of the detail tables for MTPASA allows for the different types of runs for each</p> |

| | |
|----------------------------------|--|
| | <p>case.</p> <p>MTPASA_CASE_SET allows a MT PASA scenario to be linked across runs.</p> |
| <p>MTPASA_CASESOLUTION</p> | <p>MTPASA_CASESOLUTION is obsolete from 2017 End of Year DM4.27 Release.</p> <p>MTPASA_CASESOLUTION holds one record for each entire solution.</p> <p>Change Notice 379 announced the replacement of the MT PASA data model so all MTPASAxXX tables become obsolete, replaced by MTPASA_XXx tables.</p> |
| <p>MTPASA_CONSTRAINTSOLUTION</p> | <p>MTPASA_CONSTRAINTSOLUTION is obsolete from 2017 End of Year DM4.27 Release.</p> <p>The MTPASA_CONSTRAINTSOLUTION table holds the binding and violated constraint results from the capacity evaluation, including the RHS value.</p> <p>Change Notice 379 announced the replacement of the MT PASA data model so all MTPASAxXX tables become obsolete,</p> |

| | |
|--------------------------------------|--|
| | <p>replaced by MTPASA_xxx tables.</p> |
| <p>MTPASA_INTERCONNECTORSOLUTION</p> | <p>MTPASA_INTERCONNECTORSOLUTION is obsolete from 2017 End of Year DM4.27 Release.</p> <p>The MTPASA_INTERCONNECTORSOLUTION table shows the results of the capacity evaluation for Interconnectors, including the calculated limits for the Idcblock within the day.</p> <p>Change Notice 379 announced the replacement of the MTPASA data model so all MTPASAxxx tables become obsolete, replaced by MTPASA_xxx tables (see Change Notices 400, 400a and 400b).</p> |
| <p>MTPASA_REGIONSOLUTION</p> | <p>MTPASA_CASESOLUTION is obsolete from 2017 End of Year DM4.27 Release.</p> <p>The MTPASA_REGIONSOLUTION table shows the results of the regional capacity, maximum surplus reserve and maximum spare capacity evaluations for</p> |

| | |
|--------------------------------|--|
| | each day and ldcblock of the study. |
| MTPASA_RESERVELIMITSOLUTION | MTPASA_RESERVELIMIT SOLUTION is obsolete from 2017 End of Year DM4.27 Release. MT PASA Solution table reporting whether a MT PASA Reserve requirement is binding for each day and LDC block of the run. |
| MTPASACONSTRAINTSOLUTION_D | MTPASACONSTRAINTSOLUTION_D sets out MT PASA constraint solution results, where constraints are binding. |
| MTPASAINTERCONNECTORSOLUTION_D | MTPASAINTERCONNECTORSOLUTION_D shows interconnector results for MT PASA, shown region by region. |
| MTPASAREGIONSOLUTION_D | MTPASAREGIONSOLUTION_D shows region results for MT PASA, showing predicted demand and any capacity limits. |
| OARTRACK | OARTRACK shows an audit trail of bids for a particular settlement day. Corrupt bids do not update OARTRACK, but are just in OFFERFILETRK. |

| | |
|----------------------------|--|
| OFFERFILETRK | OFFERFILETRK shows an audit trail of all bid files submitted containing energy bids, including corrupt bids/rebids. |
| OFFERGOVDATA | OFFERGOVDATA sets out reoffers of governor (6 and 60 second FCAS) availability. |
| OFFERULODINGDATA | OFFERULODINGDATA shows reoffers of rapid unit loading capability. |
| OFFERUNLOADINGDATA | OFFERUNLOADINGDATA shows reoffers of rapid unit unloading capability. |
| PASACASESOLUTION | PASACASESOLUTION sets out ST PASA case listing providing details of each ST PASA case run. |
| PASACONSTRAINTSOLUTION | PASACONSTRAINTSOLUTION records the latest binding ST PASA constraint details for each period. For each solution, the latest recalculation for each period overwrites the previous entry. |
| PASAINTERCONNECTORSOLUTION | PASAINTERCONNECTORSOLUTION records ST PASA interconnector solutions for the latest |

| | |
|--------------------|--|
| | period. |
| PASAREGIONSOLUTION | <p>PASAREGIONSOLUTION shows the Regional solution for ST PASA showing reserves for each half-hour period. This table (PASAREGIONSOLUTION_D) shows the latest calculated result for each period.</p> |
| PEROFFER | <p>PEROFFER contains the half-hourly period details of daily bids and rebids, to be used in conjunction with DAYOFFER. These views provide period varying details such as rate of change up (ROCUP), rate of change down (ROCDOWN) and band quantities (BANDAVAIL from 1 to 10).</p> <p>PEROFFER is a child table of DAYOFFER.</p> |
| PEROFFER_D | <p>PEROFFER_D contains the half-hourly period details of daily bids and rebids, to be used in conjunction with DAYOFFER_D. These views provide period varying details such as rate of change up (ROCUP), rate of change down (ROCDOWN) and</p> |

| | |
|--------------------------|---|
| | <p>band quantities (BANDAVAIL from 1 to 10).</p> <p>PEROFFER_D is a child table of DAYOFFER_D.</p> |
| PREDISPATCHBIDTRK | <p>PREDISPATCHBIDTRK contains an audit trail of bids used in each predispatch run. Where predispatch is over 2 days, two bids are listed.</p> |
| REALLOCATIONDETAILS | <p>REALLOCATIONDETAILS sets out specific reallocation agreements.</p> |
| REALLOCATIONINTERVALS | <p>REALLOCATIONINTERVALS identifies the the reallocation agreement and provides the corresponding reallocation profiles submitted by the participant and accepted by AEMO</p> |
| REALLOCATIONS | <p>REALLOCATIONS shows reallocation agreement identifiers with corresponding start and end dates of submitted reallocations as accepted by AEMO.</p> |
| REGIONFCASRELAXATION_OCD | <p>REGIONFCASRELAXATION_OCD contains details of regional FCAS requirements relaxed in the over-constrained dispatch (OCD) re-run (if</p> |

| | |
|--------------------------------|---|
| | <p>there was one).</p> <p>Note: INTERVENTION is not included in REGIONFCASRELAXATION_OCD since the relaxation of the FCAS requirement is the same amount in both intervened and non-intervened cases.</p> |
| SET_CSP_DEROGATION_AMOUNT | A settlement table for the publication of Snowy CSP derogation amounts. |
| SET_CSP_SUPPORTDATA_CONSTRAINT | A settlements table for the publication of support data for the Snowy CSP derogation amounts. This table publishes the constraint-level information for each five minute interval in the settlement run |
| SET_CSP_SUPPORTDATA_ENERGYDIFF | A settlements table for the publication of support data for the Snowy CSP derogation amounts. This table publishes energy differential information for each half-hour interval in the settlement run |
| SET_CSP_SUPPORTDATA_SUBPRICE | A settlements table for the publication of |

| | |
|--------------------|--|
| | support data for the Snowy CSP derogation amounts. This table publishes substitution price information for each five minute interval in the settlement run |
| SET_MR_PAYMENT | SET_MR_PAYMENT shows trading interval payments on a dispatchable unit basis for accepted MR capacity. |
| SET_MR_RECOVERY | SET_MR_RECOVERY shows the trading interval recovery charges on a dispatchable unit basis for spot market income from dispatch of MR capacity. |
| SETAGCPAYMENT | SETAGCPAYMENT sets out specific payment details for Automatic Generation Control (AGC) services by period. |
| SETAGCRECOVERY | SETAGCRECOVERY shows reimbursements for Automatic Generation Control (AGC) Ancillary Services to be recovered from participants. |
| SETAPCCOMPENSATION | SETAPCCOMPENSATION shows Administered |

| | |
|-----------------|---|
| | Price Cap (APC) compensation payments for each period. |
| SETAPCRECOVERY | SETAPCRECOVERY shows reimbursements for Administered Price Cap (APC) to be recovered from participants. |
| SETFCASCOMP | SETFCASCOMP shows the compensation details for Frequency Controlled Ancillary Services (FCAS). These compensation values are calculated by a separate "what if" run of the LP Solver and entered as an unconstrained MW value into settlements. |
| SETFCASRECOVERY | SETFCASRECOVERY shows reimbursements for the Frequency Control Ancillary Services compensation. |
| SETGOVPAYMENT | SETGOVPAYMENT shows specific payment details for Governor services by period. |
| SETGOVRECOVERY | SETGOVRECOVERY shows reimbursements for the Governor Ancillary Services to be recovered from participants. |

| | |
|-------------------------|--|
| SETINTERVENTION | SETINTERVENTION shows intervention settlement payment details by unit. |
| SETINTERVENTIONRECOVERY | SETINTERVENTIONRECOVERY shows intervention recovery details by participant. |
| SETIRFMRECOVERY | SETIRFMRECOVERY sets out reimbursements for Industrial Relations Force Majeure to be recovered from participants. |
| SETLULOADPAYMENT | SETLULOADPAYMENT shows specific payment details for rapid unit load services by period. |
| SETLULOADRECOVERY | SETLULOADRECOVERY shows reimbursements for rapid-unit-load Ancillary Services to be recovered from participants. |
| SETLUNLOADPAYMENT | SETLUNLOADPAYMENT shows specific payment details for rapid unit unload service. |
| SETLUNLOADRECOVERY | SETLUNLOADRECOVERY shows reimbursements for rapid unit unloading Ancillary Services to be recovered from participants. |

| | |
|-----------------------|--|
| SETRESERVETRADER | SETRESERVETRADER shows reserve trader details. |
| SETVICBOUNDARYENERGY | SETVICBOUNDARYENERGY is as requested by Participants for the settlement of Victorian Vesting contracts. |
| SETVICENERGYFIGURES | SETVICENERGYFIGURES is used in settlement of Victorian Vesting contracts. |
| SETVICENERGYFLOW | SETVICENERGYFLOW is used in settlement of Victorian Vesting contracts. |
| STPASA_SYSTEMSOLUTION | <p>STPASA_SYSTEMSOLUTION is obsolete from 2005 End of Year Release. For solution information, see Region solution tables.</p> <p>STPASA_SYSTEMSOLUTION showed the results of the system capacity evaluations for each interval of the study.</p> |
| STPASA_UNITSOLUTION | STPASA_UNITSOLUTION shows the unit results from the capacity evaluations for each period of the study. |
| TRADINGLOAD | TRADINGLOAD shows half-hourly average |

| | |
|------------------|---|
| | dispatch levels, including fields to handle the Ancillary Services functionality. |
| TRADINGREGIONSUM | TRADINGREGIONSUM sets out the half-hourly average regional demand and frequency control services. TRADINGREGIONSUM includes fields for the Raise Regulation and Lower Regulation Ancillary Services plus improvements to demand calculations. |

27.2 Diagram: Entities: Historical Tables

These are not shown as the tables are no longer used

28 Package: PDPASA

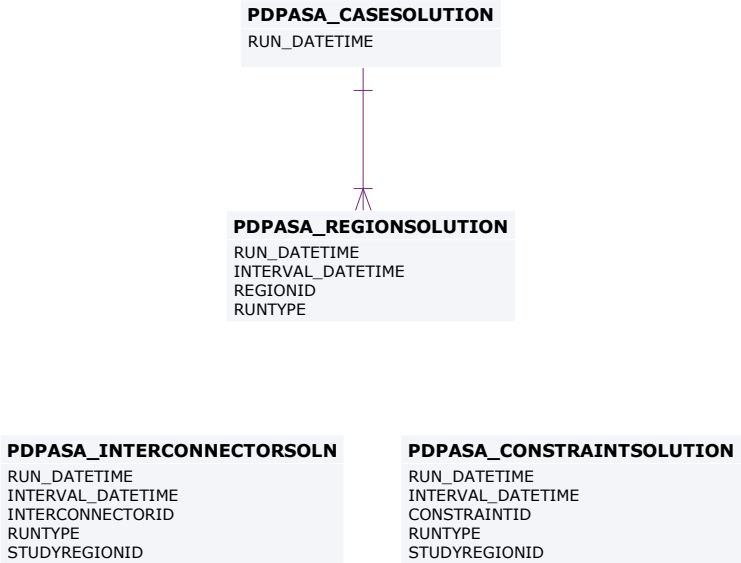
| | |
|----------------|--|
| <i>Name</i> | PDPASA |
| <i>Comment</i> | <p>The PDPASA package provides a 30-minute solving process to the Market systems</p> <p>The current methodology for calculating reserves in the PreDispatch timeframe is determined in a post processing step using a heuristic calculation based the results and Interconnector limits from the PreDispatch run.</p> <p>The calculation is a reserve assessment based on the PASA solver similar to existing ST and MT PASA business processes</p> <p>The process reflects all intra-regional and inter-regional network constraints as an input to the process</p> |

28.1 List of tables

| Name | Comment |
|---------------------------|--|
| PDPASA_CASESOLUTION | The top-level table identifying a PDPASA case, reporting options applied in the case and summary results |
| PDPASA_CONSTRAINTSOLUTION | PDPASA_CONSTRAINTSOLUTION shows binding and violated constraint results from the capacity evaluation, including the RHS value. |
| PDPASA_INTERCONNECTORSOLN | PDPASA_INTERCONNECTORSOLN shows the results of the capacity evaluation for Interconnectors, |

| | |
|-----------------------|---|
| | including the calculated limits for the interval. |
| PDPASA_REGIONSOLUTION | The PDPASA region solution data |

28.2 Diagram: Entities: PD PASA



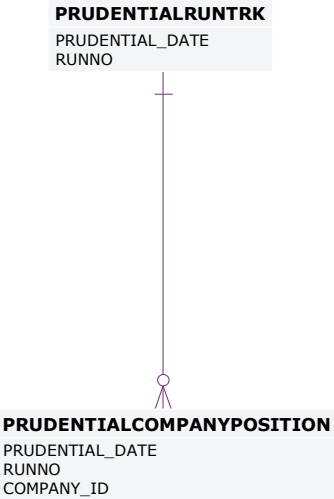
29 Package: PRUDENTIALS

Name PRUDENTIALS
Comment Prudential Management

29.1 List of tables

| Name | Comment |
|---------------------------|---|
| PRUDENTIALCOMPANYPOSITION | The prudential position of each company as at the datetime of a specific prudential run |
| PRUDENTIALRUNTRK | Records the prudential run accepted by Settlements staff for each prudential date |

29.2 Diagram: Entities:Prudentials



30 Package: MCC_DISPATCH

| | |
|----------------|--|
| <i>Name</i> | MCC_DISPATCH |
| <i>Comment</i> | Results from the Marginal Constraint Cost (MCC) re-run of the dispatch process. The MCC forms part of the part of the AER"s "Electricity transmission network service providers Service target performance incentive Scheme" |

30.1 List of tables

| Name | Comment |
|------------------------|---|
| MCC_CASESOLUTION | Top level table for each MCC dispatch rerun process. Note there will be one record for each dispatch interval |
| MCC_CONSTRAINTSOLUTION | Constraint solution data from the MCC dispatch rerun process. Note only constraints with a non-zero marginal value are published. |

30.2 Diagram: Entities: MCC_Dispatch

MCC_CASESOLUTION
RUN_DATETIME

MCC_CONSTRAINTSOLUTION
RUN_DATETIME
CONSTRAINTID

31 Package: NETWORK

Name NETWORK
Comment Configuration data for the physical network

31.1 List of tables

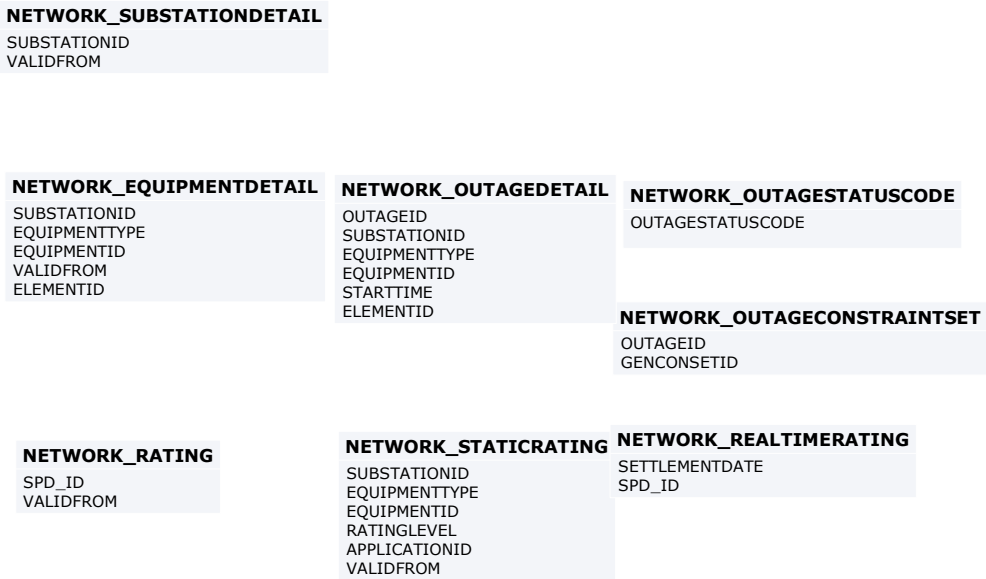
| Name | Comment |
|-----------------------------|--|
| NETWORK_EQUIPMENTDETAIL | NETWORK_EQUIPMENT DETAIL Provides details on equipment that may have outages or ratings. A single piece of equipment may have multiple records if its details change. A line will typically have at least two valid records at a time, once for each end of the line. |
| NETWORK_OUTAGECONSTRAINTSET | NETWORK_OUTAGECO NSTRRAINTSET lists the Constraint Set or Sets that are expected to be invoked for the outage once it is confirmed to proceed. |
| NETWORK_OUTAGEDetail | Lists asset owners planned outages for transmission equipment. This also includes details for transmission equipment that will not have an outage, but associated secondary |

| | |
|---------------------------------|--|
| | <p>equipment has an outage and a related constraint set may be invoked. This scenario is indicated by the ISSECONDARY field in the table</p> |
| <p>NETWORK_OUTAGESTATUSCODE</p> | <p>NETWORK_OUTAGESTATUSCODE describes the different outage status codes</p> |
| <p>NETWORK_RATING</p> | <p>NETWORK_RATING defines a list of the equipment ratings that may be used as inputs to market constraints.</p> <p>If the rating is flagged as dynamic then in real-time the rating will be dynamically determined and the static value will be used as a fallback value should the dynamic value fail.</p> <p>Note:</p> <p>In some rare cases equipment has ratings provided from more than one TNSP. This is identified by a different SPD Id. The value used in the NEM is normally the more restrictive of the two values.</p> |
| <p>NETWORK_REALTIMERATING</p> | <p>The NETWORK_REALTIMERATING</p> |

| | |
|-----------------------------|---|
| | <p>TING table shows the equipment rating values in MVA used as inputs to constraints in the dispatch solution. This includes values for both static and dynamic ratings. The NETWORK_RATING table can be used to determine the physical equipment the rating is for based on the SPD_ID value.</p> |
| <p>NETWORK_STATICRATING</p> | <p>NETWORK_STATICRATING lists the static rating values that will apply for a Rating Application ID.</p> <p>This data does not provide information for when the rating actually applies in the NEM. This is dependent on the Rating Application definition.</p> <p>For information on the Rating Applications please refer to the information published on the AEMO website under the topic "Transmission Equipment Ratings". The Rating Applications are referred to as Alternate Value Application Ratings.</p> <p>Ratings that normally</p> |

| | |
|--------------------------|---|
| | use dynamic values will also have static rating values defined. These are used as a fallback if the dynamic rating fails. |
| NETWORK_SUBSTATIONDETAIL | NETWORK_SUBSTATIONDETAIL sets out the attributes of substations across time |

31.2 Diagram: Entities: NETWORK



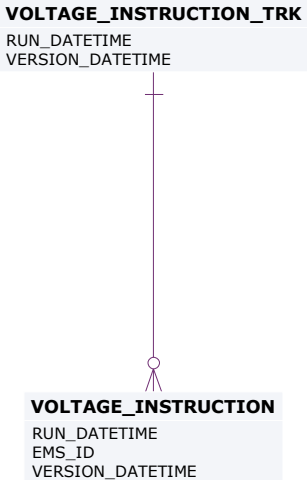
32 Package: VOLTAGE_INSTRUCTIONS

Name VOLTAGE_INSTRUCTIONS
Comment Instructions for MVAR Dispatch

32.1 List of tables

| Name | Comment |
|-------------------------|--|
| VOLTAGE_INSTRUCTION | Child record for Voltage Instructions (MVAR Dispatch) |
| VOLTAGE_INSTRUCTION_TRK | Parent record for Voltage Instructions (MVAR Dispatch). 'SIGNAL' records will have no children; 'INSTRUCTION' records will have children |

32.2 Diagram: Entities: Voltage Instructions



33 Package: PD7DAY

| | |
|----------------|--|
| <i>Name</i> | PD7DAY |
| <i>Comment</i> | Results from a published Predispatch 7 Day Run |

33.1 List of tables

| Name | Comment |
|-------------------------------|---|
| PD7DAY_CASESOLUTION | PD7DAY case solution table |
| PD7DAY_CONSTRAINTSOLUTION | PD7DAY constraint solution |
| PD7DAY_INTERCONNECTORSOLUTION | PD7DAY interconnector solution |
| PD7DAY_MARKET_SUMMARY | PD7DAY market summary showing calculated gas fuel forecasts |
| PD7DAY_PRICESOLUTION | PD7DAY price solution |

33.2 Diagram: Entities: PD7DAY

PD7DAY_INTERCONNECTORSOLUTION

| | | |
|-------------------|--------------|------|
| RUN_DATETIME | DATE | <pk> |
| INTERVENTION | NUMBER(2,0) | <pk> |
| INTERVAL_DATETIME | DATE | <pk> |
| INTERCONNECTORID | VARCHAR2(20) | <pk> |

PD7DAY_CASESOLUTION

| | | |
|--------------|------|------|
| RUN_DATETIME | DATE | <pk> |
|--------------|------|------|

PD7DAY_MARKET_SUMMARY

| | | |
|-------------------|------|------|
| RUN_DATETIME | DATE | <pk> |
| INTERVAL_DATETIME | DATE | <pk> |

PD7DAY_CONSTRAINTSOLUTION

| | | |
|-------------------|--------------|------|
| RUN_DATETIME | DATE | <pk> |
| INTERVENTION | NUMBER(2,0) | <pk> |
| INTERVAL_DATETIME | DATE | <pk> |
| CONSTRAINTID | VARCHAR2(20) | <pk> |

PD7DAY_PRICESOLUTION

| | | |
|-------------------|--------------|------|
| RUN_DATETIME | DATE | <pk> |
| INTERVENTION | NUMBER(2,0) | <pk> |
| INTERVAL_DATETIME | DATE | <pk> |
| REGIONID | VARCHAR2(20) | <pk> |