

MMS DATA MODEL UPGRADE REPORT

MMS Data Model v4.27 Oracle

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1 Description of model MMS Data Model v4.27 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 Current product supplied by AEMO for data transfer is Participant Data Replication (PDR), with some support for the superseded Parser.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.

2 Notes

Each table description has a Note providing some information relevant to the table.

2.1 Visibility

Visibility refers to the nature of confidentiality of data in the table. Each table has one of the following entries, each described here.

Private: meaning the data is confidential to the Participant (e.g. BILLINGFEES).

Public: meaning all Participants have access to the data (e.g. DISPATCHPRICE).

Private, Public Next-Day: meaning the data is confidential until available for public release at beginning of next day (i.e. 4am) (e.g. BIDDAYOFFER).

Private & Public: meaning some items are private and some are public (e.g. MARKETNOTICES).

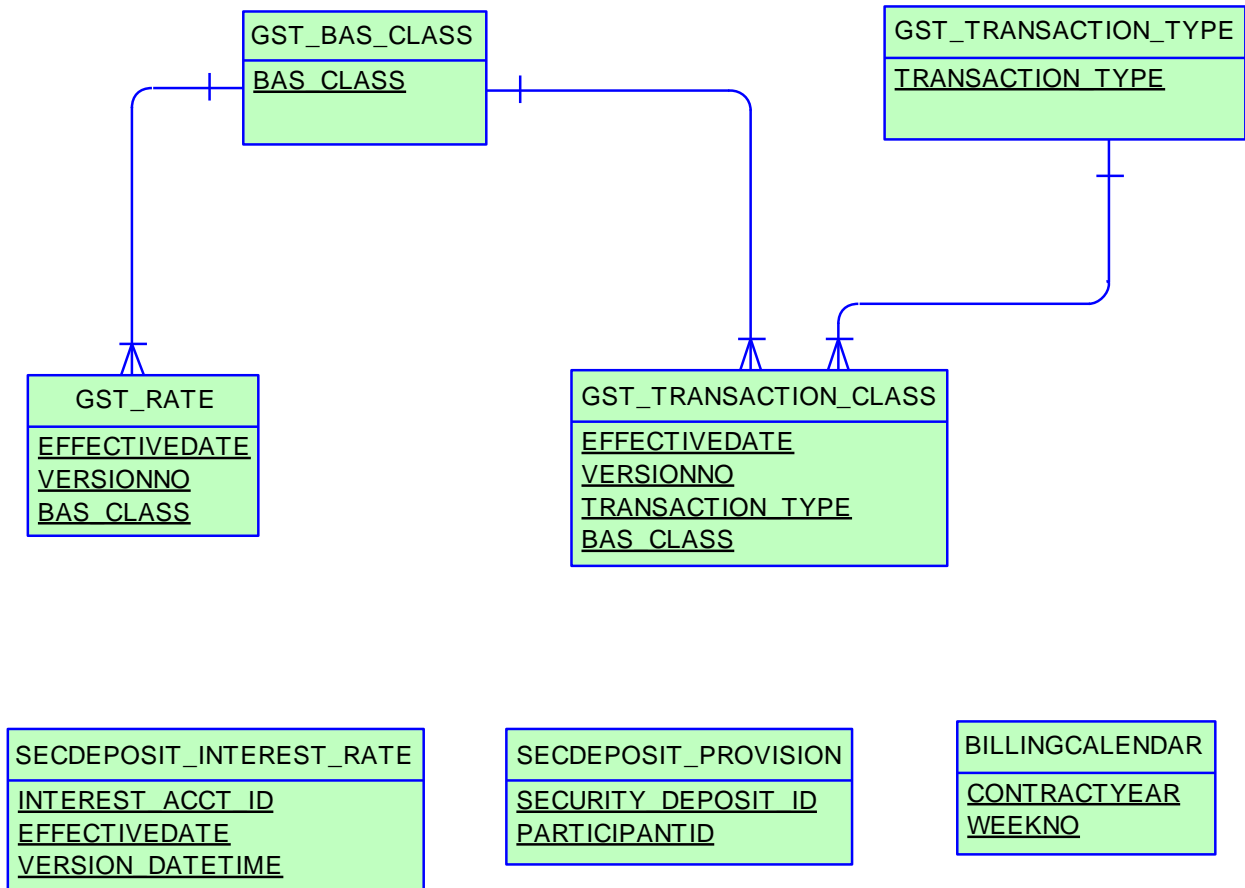
3 Package: BILLING_CONFIG

Name BILLING_CONFIG
Comment Configuration data for the Billing Process

3.1 List of tables

Name	Comment
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

3.2 Diagram: Entities: Billing Config



3.3 Table: SECDEPOSIT_INTEREST_RATE

Name SECDEPOSIT_INTEREST_RATE

Comment 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

3.3.1 Description

SECDEPOSIT_INTEREST_RATE data is public to all participants.

3.3.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

3.3.3 Primary Key Columns

Name
 EFFECTIVEDATE
 INTEREST_ACCT_ID
 VERSION_DATETIME

3.3.4 Content

Name	Data Type	Mandatory	Comment
INTEREST_ACCT_ID	VARCHAR2(20)	X	The interest account ID for calculating the interest payment
EFFECTIVEDATE	DATE	X	The effective date of the interest rate change
VERSION_DATETIME	DATE	X	Date Time this record was added
INTEREST_RATE	NUMBER(18,8)		The interest rate for the interest account ID as on the effective date.

3.4 Table: SECDEPOSIT_PROVISION

Name SECDEPOSIT_PROVISION
Comment The security deposit provision entry details

3.4.1 Notes

Name Comment Value
 Visibility Data in this table is: Private

3.4.2 Primary Key Columns

Name
 PARTICIPANTID
 SECURITY_DEPOSIT_ID

3.4.3 Content

Name	Data Type	Mandatory	Comment
SECURITY_DEPOSIT_ID	VARCHAR2(20)	X	The security deposit ID
PARTICIPANTID	VARCHAR2(20)	X	The Participant ID linked to the security deposit ID
TRANSACTION_DATE	DATE		The date the security deposit ID is entered and authorised by settlements
MATURITY_CONTRACT_YEAR	NUMBER(4,0)		The contract year of the billing week when the security deposit is maturing
MATURITY_WEEKNO	NUMBER(3,0)		The week no of the billing week when the security deposit is maturing
AMOUNT	NUMBER(18,8)		The security deposit amount
INTEREST_RATE	NUMBER(18,8)		The interest rate assigned to the security deposit ID. Null if INTEREST_CALC_TYPE <> FIXED
INTEREST_CALC_TYPE	VARCHAR2(20)		FIXED OR DAILY
INTEREST_ACCT_ID	VARCHAR2(20)		The Interest Account ID for calculating the Interest Payment. This is NULL if the INTEREST_CALC_TYPE = FIXED

4 Package: BILLING_RUN

<i>Name</i>	BILLING_RUN
<i>Comment</i>	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.

4.1 List of tables

Name	Comment
BILLING_EFTSHORTFALL_A MOUNT	The billing shortfall run amounts
BILLING_EFTSHORTFALL_D ETAIL	The Billing Shortfall Run Amount details
BILLING_SECDEP_INTERES T_PAY	The interest amount for security deposit calculated by billing, based on whether it is a fixed/floating rate
BILLING_SECDEP_INTERES T_RATE	The DAILY interest rates used by billing when calculating the interest amount
BILLING_SECDEPOSIT_APP PLICATION	The security deposit application details

4.3 Table: BILLING_EFTSHORTFALL_AMOUNT

<i>Name</i>	BILLING_EFTSHORTFALL_AMOUNT
<i>Comment</i>	The billing shortfall run amounts

4.3.1 Description

BILLING_EFTSHORTFALL_AMOUNT data is confidential, and is available only to the relevant participant.

4.3.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Private

4.3.3 Primary Key Columns

Name
 BILLRUNNO
 CONTRACTYEAR
 PARTICIPANTID
 WEEKNO

4.3.4 Content

Name	Data Type	Mandatory	Comment
CONTRACTYEAR	NUMBER(4,0)	X	The shortfall affected billing contract year
WEEKNO	NUMBER(3,0)	X	The shortfall affected billing week no
BILLRUNNO	NUMBER(3,0)	X	The shortfall affected billing week run no
PARTICIPANTID	VARCHAR2(20)	X	The participant affected by the shortfall calculation
SHORTFALL_AMOUNT	NUMBER(18,8)		The Participant shortfall amount
SHORTFALL	NUMBER(18,8)		The market shortfall amount
SHORTFALL_COMPANY_ID	VARCHAR2(20)		The Company ID associated with the Participant ID used in the shortfall calculation
COMPANY_SHORTFALL_AMOUNT	NUMBER(18,8)		The shortfall amount for the Company ID associated with the Participant ID used in the shortfall calculation
PARTICIPANT_NET_ENERGY	NUMBER(18,8)		The participant NET energy used in shortfall calculation
COMPANY_NET_ENERGY	NUMBER(18,8)		The NET energy for the Company ID associated with the Participant ID used in the shortfall calculation

4.4 Table: BILLING_EFTSHORTFALL_DETAIL

Name BILLING_EFTSHORTFALL_DETAIL
Comment The Billing Shortfall Run Amount details

4.4.1 Description

BILLING_EFTSHORTFALL_DETAIL data is confidential, and is available only to the relevant participant.

4.4.2 Notes

Name *Comment* *Value*
 Visibility Data in this table is: Private & Public

4.4.3 Primary Key Columns

Name
 BILLRUNNO
 CONTRACTYEAR
 PARTICIPANTID
 TRANSACTION_TYPE
 WEEKNO

4.4.4 Content

Name	Data Type	Mandatory	Comment
CONTRACTYEAR	NUMBER(4,0)	X	The shortfall affected billing contract year
WEEKNO	NUMBER(3,0)	X	The shortfall affected billing week no
BILLRUNNO	NUMBER(3,0)	X	The shortfall affected billing week run no
PARTICIPANTID	VARCHAR2(20)	X	The participant affected by the shortfall calculation
TRANSACTION_TYPE	VARCHAR2(40)	X	The transaction type details associated with the shortfall calculation
AMOUNT	NUMBER(18,8)		The amount for each transaction type

4.5 Table: BILLING_SECDEP_INTEREST_PAY

<i>Name</i>	BILLING_SECDEP_INTEREST_PAY
<i>Comment</i>	The interest amount for security deposit calculated by billing, based on whether it is a fixed/floating rate

4.5.1 Description

BILLING_SECDEP_INTEREST_PAY data is confidential, and is available only to the relevant participant.

4.5.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Private

4.5.3 Primary Key Columns

Name
 BILLRUNNO
 CONTRACTYEAR
 PARTICIPANTID
 SECURITY_DEPOSIT_ID
 WEEKNO

4.5.4 Content

Name	Data Type	Mandatory	Comment
CONTRACTYEAR	NUMBER(4,0)	X	The billing contract year the SDA application is processed and interest calculated
WEEKNO	NUMBER(3,0)	X	The billing week no. the SDA application is processed and interest calculated
BILLRUNNO	NUMBER(3,0)	X	The billing run no. the SDA application is processed and interest calculated
SECURITY_DEPOSIT_ID	VARCHAR2(20)	X	The security deposit ID for which billing has calculated the Interest amount
PARTICIPANTID	VARCHAR2(20)	X	The participant ID of the security deposit for whom the interest is paid
INTEREST_AMOUNT	NUMBER(18,8)		The security deposit interest amount calculated by billing
INTEREST_CALC_TYPE	VARCHAR2(20)		FIXED or DAILY
INTEREST_ACCT_ID	VARCHAR2(20)		The interest account ID used by billing for calculating the interest. NULL if INTEREST_CALC_TYPE = FIXED
INTEREST_RATE	NUMBER(18,8)		The STATIC Interest Rate used by Billing for calculating the interest. This is NULL if INTEREST_CALC_TYPE <> FIXED

4.6 Table: BILLING_SECDEP_INTEREST_RATE

Name BILLING_SECDEP_INTEREST_RATE
Comment The DAILY interest rates used by billing when calculating the interest amount

4.6.1 Notes

Name Comment Value
 Visibility Data in this table is: Public

4.6.2 Primary Key Columns

Name
 BILLRUNNO
 CONTRACTYEAR
 EFFECTIVEDATE
 INTEREST_ACCT_ID
 WEEKNO

4.6.3 Content

Name	Data Type	Mandatory	Comment
CONTRACTYEAR	NUMBER(4,0)	X	The billing contract year the SDA application is processed and interest calculated
WEEKNO	NUMBER(3,0)	X	The billing week no. the SDA application is processed and interest calculated
BILLRUNNO	NUMBER(3,0)	X	The billing run no. the SDA application is processed and interest calculated
INTEREST_ACCT_ID	VARCHAR2(20)	X	The interest account ID used by security deposit interest calculation
EFFECTIVEDATE	DATE	X	The effective date of the new interest change
INTEREST_RATE	NUMBER(18,8)		The interest rate to apply from the effective date

4.7 Table: BILLING_SECDEPOSIT_APPLICATION

<i>Name</i>	BILLING_SECDEPOSIT_APPLICATION
<i>Comment</i>	The security deposit application details

4.7.1 Description

BILLING_SECDEPOSIT_APPLICATION data is confidential, and is available only to the relevant participant.

4.7.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Private

4.7.3 Primary Key Columns

Name
 BILLRUNNO
 CONTRACTYEAR
 PARTICIPANTID
 WEEKNO

4.7.4 Content

Name	Data Type	Mandatory	Comment
CONTRACTYEAR	NUMBER(4,0)	X	The billing contract year where (security deposit application) SDA is applied
WEEKNO	NUMBER(3,0)	X	The billing week no. where the SDA is applied
BILLRUNNO	NUMBER(3,0)	X	The billing run no. where the SDA is applied
PARTICIPANTID	VARCHAR2(20)	X	The Participant ID lodging the SDA
APPLICATION_AMOUNT	NUMBER(18,8)		The SDA application amount

5 Package: DEMAND_FORECASTS

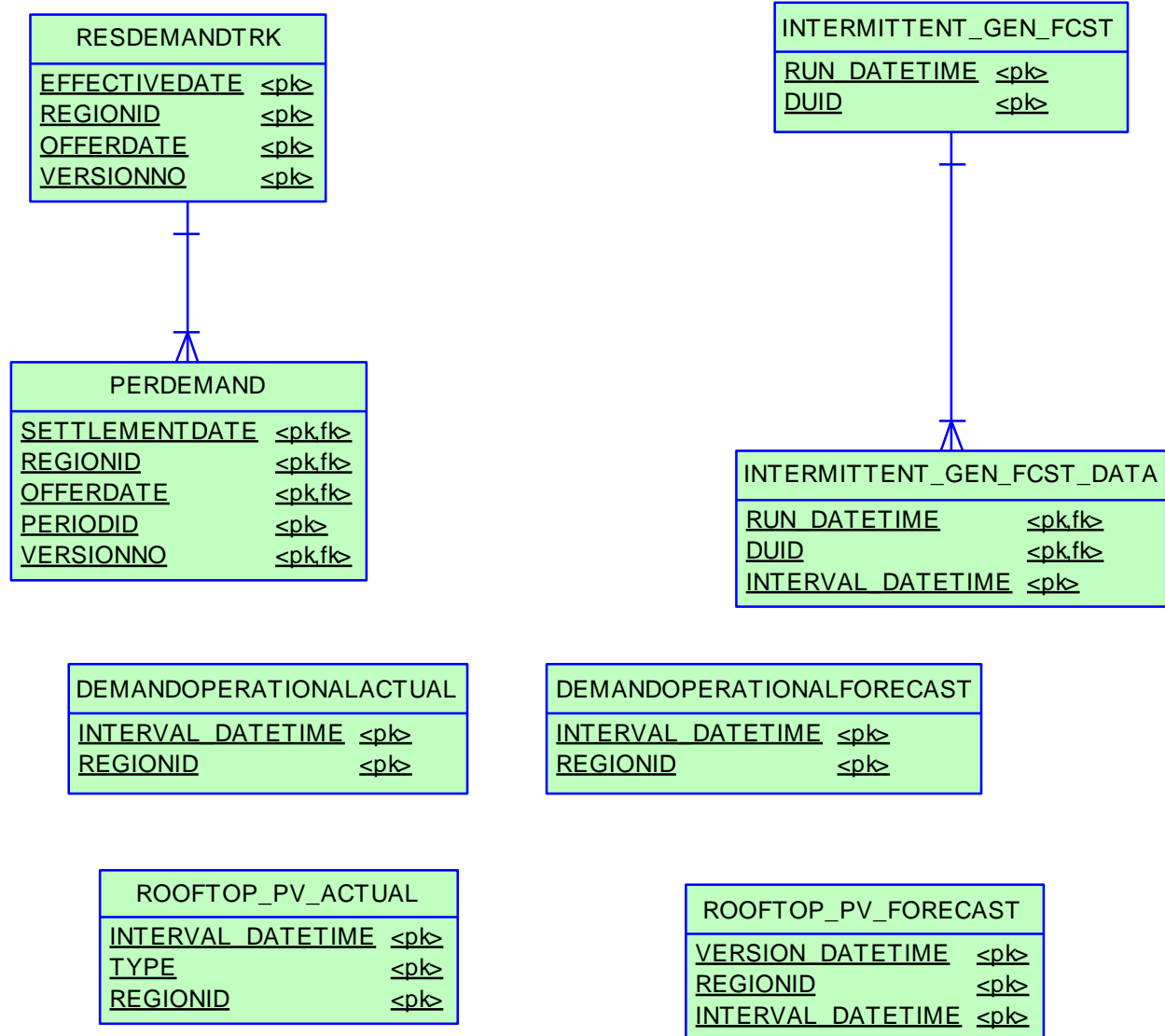
Name DEMAND_FORECASTS

Comment Regional Demand Forecasts and Intermittent Generation forecasts.

5.1 List of tables

Name	Comment
ROOFTOP_PV_ACTUAL	Estimate of regional Rooftop Solar actual generation for each half-hour interval in a day

5.2 Diagram: Entities: Demand Forecasts



5.3 Table: ROOFTOP_PV_ACTUAL

<i>Name</i>	ROOFTOP_PV_ACTUAL
<i>Comment</i>	Estimate of regional Rooftop Solar actual generation for each half-hour interval in a day

5.3.1 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

5.3.2 Primary Key Columns

Name
 INTERVAL_DATETIME
 REGIONID
 TYPE

5.3.3 Index Columns

Name
 INTERVAL_DATETIME
 TYPE
 REGIONID

5.3.4 Content

Name	Data Type	Mandatory	Comment
INTERVAL_DATETIME	DATE	X	The forecast half-hour interval (time ending)
TYPE	VARCHAR2(20)	X	One of DAILY, MEASUREMENT or SATELLITE
REGIONID	VARCHAR2(20)	X	Region identifier
POWER	NUMBER(12,3)		Estimated generation in MW at the interval end
QI	NUMBER(2,1)		Quality indicator. Represents the quality of the estimate.
LASTCHANGED	DATE		Last date and time record changed

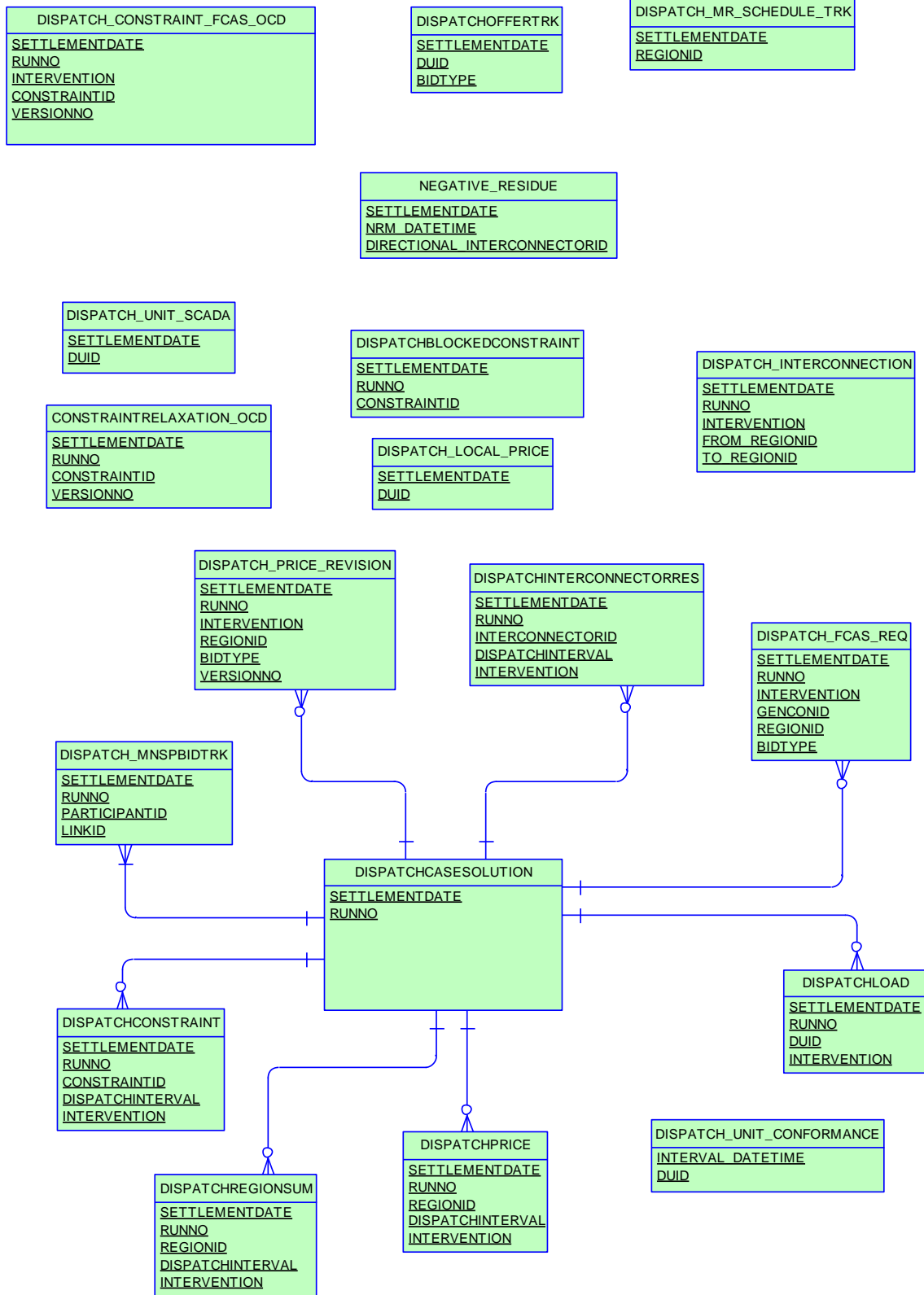
6 Package: DISPATCH

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

6.1 List of tables

Name	Comment
DISPATCH_INTERCONNECTI ON	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'

6.2 Diagram: Entities: Dispatch



6.3 Table: DISPATCH_INTERCONNECTION

Name DISPATCH_INTERCONNECTION

Comment 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'

6.3.1 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

6.3.2 Primary Key Columns

Name
 FROM_REGIONID
 INTERVENTION
 RUNNO
 SETTLEMENTDATE
 TO_REGIONID

6.3.3 Content

Name	Data Type	Mandatory	Comment
SETTLEMENTDATE	DATE	X	Market date starting at 04:05
RUNNO	NUMBER(3,0)	X	Dispatch run no; always 1
INTERVENTION	NUMBER(2,0)	X	Intervention case or not
FROM_REGIONID	VARCHAR2(20)	X	Nominated RegionID from which the energy flows
TO_REGIONID	VARCHAR2(20)	X	Nominated RegionID to which the energy flows
DISPATCHINTERVAL	NUMBER(22,0)		Dispatch period identifier, from 001 to 288 in format YYYYMMDDPPP
IRLF	NUMBER(15,5)		Inter-Regional Loss Factor. Calculated based on the MWFLOW and the nominal From and To Region losses.
MWFLOW	NUMBER(16,6)		Summed MW flow of the parallel regulated Interconnectors
METEREDMWFLOW	NUMBER(16,6)		Summed Metered MW flow of the parallel regulated Interconnectors
FROM_REGION_MW_LOSSES	NUMBER(16,6)		Losses across the Interconnection attributable to the nominal From Region
TO_REGION_MW_LOSSES	NUMBER(16,6)		Losses across the Interconnection attributable to the nominal To Region
LASTCHANGED	DATE		The datetime that the record was last changed

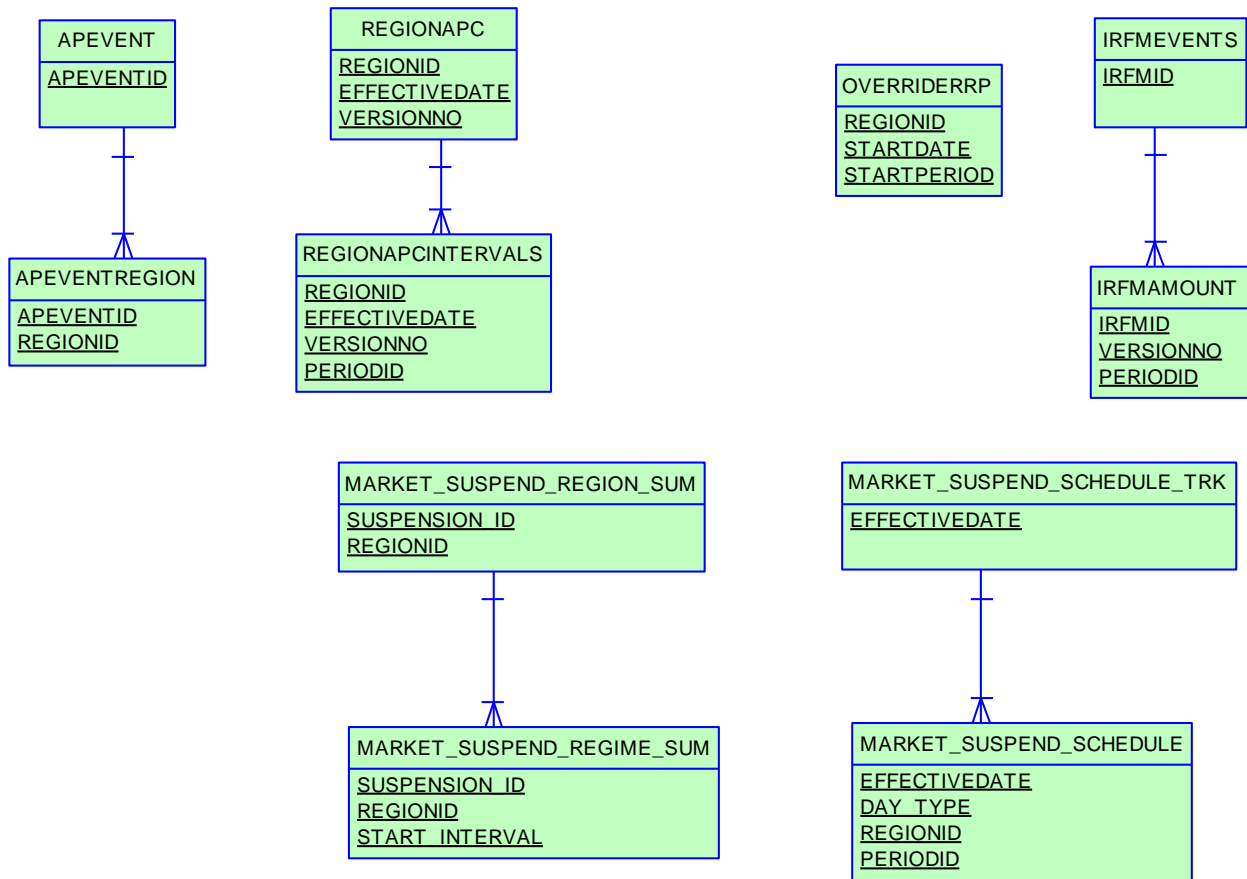
7 Package: FORCE_MAJEURE

<i>Name</i>	FORCE_MAJEURE
<i>Comment</i>	Market Suspensions and administer pricing event data

7.1 List of tables

Name	Comment
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

7.2 Diagram: Entities: Force Majeure



7.3 Table: MARKET_SUSPEND_REGIME_SUM

<i>Name</i>	MARKET_SUSPEND_REGIME_SUM
<i>Comment</i>	Tracks the evolution of pricing regimes applied to the suspended region and from which Dispatch Interval

7.3.1 Description

MARKET_SUSPEND_REGIME_SUM is public data, so is available to all participants.

7.3.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

7.3.3 Primary Key Columns

Name
 REGIONID
 START_INTERVAL
 SUSPENSION_ID

7.3.4 Content

Name	Data Type	Mandatory	Comment
SUSPENSION_ID	VARCHAR2(20)	X	Unique identifier for this suspension event
REGIONID	VARCHAR2(20)	X	Region(s) covered by this evolution of the event
START_INTERVAL	DATE	X	First Dispatch interval from which this regime applies
END_INTERVAL	DATE		Last Dispatch interval for which this regime applies
PRICING_REGIME	VARCHAR2(20)		Pricing Regime applied
LASTCHANGED	DATE		Last date and time record changed

7.4 Table: MARKET_SUSPEND_REGION_SUM

<i>Name</i>	MARKET_SUSPEND_REGION_SUM
<i>Comment</i>	Summary of Market Suspension timings

7.4.1 Description

MARKET_SUSPEND is public data, so is available to all participants.

7.4.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

7.4.3 Primary Key Columns

Name
 REGIONID
 SUSPENSION_ID

7.4.4 Content

Name	Data Type	Mandatory	Comment
SUSPENSION_ID	VARCHAR2(20)	X	Unique identifier for this suspension event
REGIONID	VARCHAR2(20)	X	Region(s) covered by the Suspension event
INITIAL_INTERVAL	DATE		Initial interval of the Suspension event
END_REGION_INTERVAL	DATE		Last Dispatch interval for the Suspension event for this Region
END_SUSPENSION_INTERVAL	DATE		Last Dispatch interval for the Suspension event
LASTCHANGED	DATE		Last DateTime the Suspension was administered

7.5 Table: MARKET_SUSPEND_SCHEDULE

<i>Name</i>	MARKET_SUSPEND_SCHEDULE
<i>Comment</i>	Trading prices that will apply in the event of a market suspension event updated weekly.

7.5.1 Description

MARKET_SUSPEND_SCHEDULE is public data, so is available to all participants.

7.5.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

7.5.3 Primary Key Columns

Name
DAY_TYPE
EFFECTIVEDATE
PERIODID
REGIONID

7.5.4 Content

Name	Data Type	Mandatory	Comment
EFFECTIVEDATE	DATE	X	Calendar date from when this record set is effective
DAY_TYPE	VARCHAR2(20)	X	Distinguishes which record set to apply - at time of writing this was Business or Non-business day but may change in the future depending on outcome of consultation
REGIONID	VARCHAR2(20)	X	Region affected.
PERIODID	NUMBER(3,0)	X	48 intervals for a day, midnight base (equates to 00:30 - 00:00)
ENERGY_RRP	NUMBER(15,5)		Energy Price applied for this period for this Day Type
R6_RRP	NUMBER(15,5)		Raise 6Sec contingency Price applied for this period for this Day Type
R60_RRP	NUMBER(15,5)		Raise 60Sec contingency Price applied for this period for this Day Type
R5_RRP	NUMBER(15,5)		Raise 5Min contingency Price applied for this period for this Day Type
RREG_RRP	NUMBER(15,5)		Raise Regulation contingency Price applied for this period for this Day Type
L6_RRP	NUMBER(15,5)		Lower 6Sec contingency Price applied for this period for this Day Type
L60_RRP	NUMBER(15,5)		Lower 60Sec contingency Price applied for this period for this Day Type
L5_RRP	NUMBER(15,5)		Lower 5Min contingency Price applied for this period for this Day Type
LREG_RRP	NUMBER(15,5)		Lower Regulation Price applied for this

			period for this Day Type
LASTCHANGED	DATE		Last date and time record changed

7.6 Table: MARKET_SUSPEND_SCHEDULE_TRK

Name MARKET_SUSPEND_SCHEDULE_TRK
Comment Parent table for pricing regimes used in suspensions

7.6.1 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

7.6.2 Primary Key Columns

Name
EFFECTIVEDATE

7.6.3 Content

Name	Data Type	Mandatory	Comment
EFFECTIVEDATE	DATE	X	Calendar date from when this record set is effective
SOURCE_START_DATE	DATE		Start Date of the date range for the source data
SOURCE_END_DATE	DATE		End Date of the date range for the source data
COMMENTS	VARCHAR2(1000)		Reason why this regime was applied
AUTHORISEDDATE	DATE		DateTime this record set was loaded
LASTCHANGED	DATE		Last date and time record changed

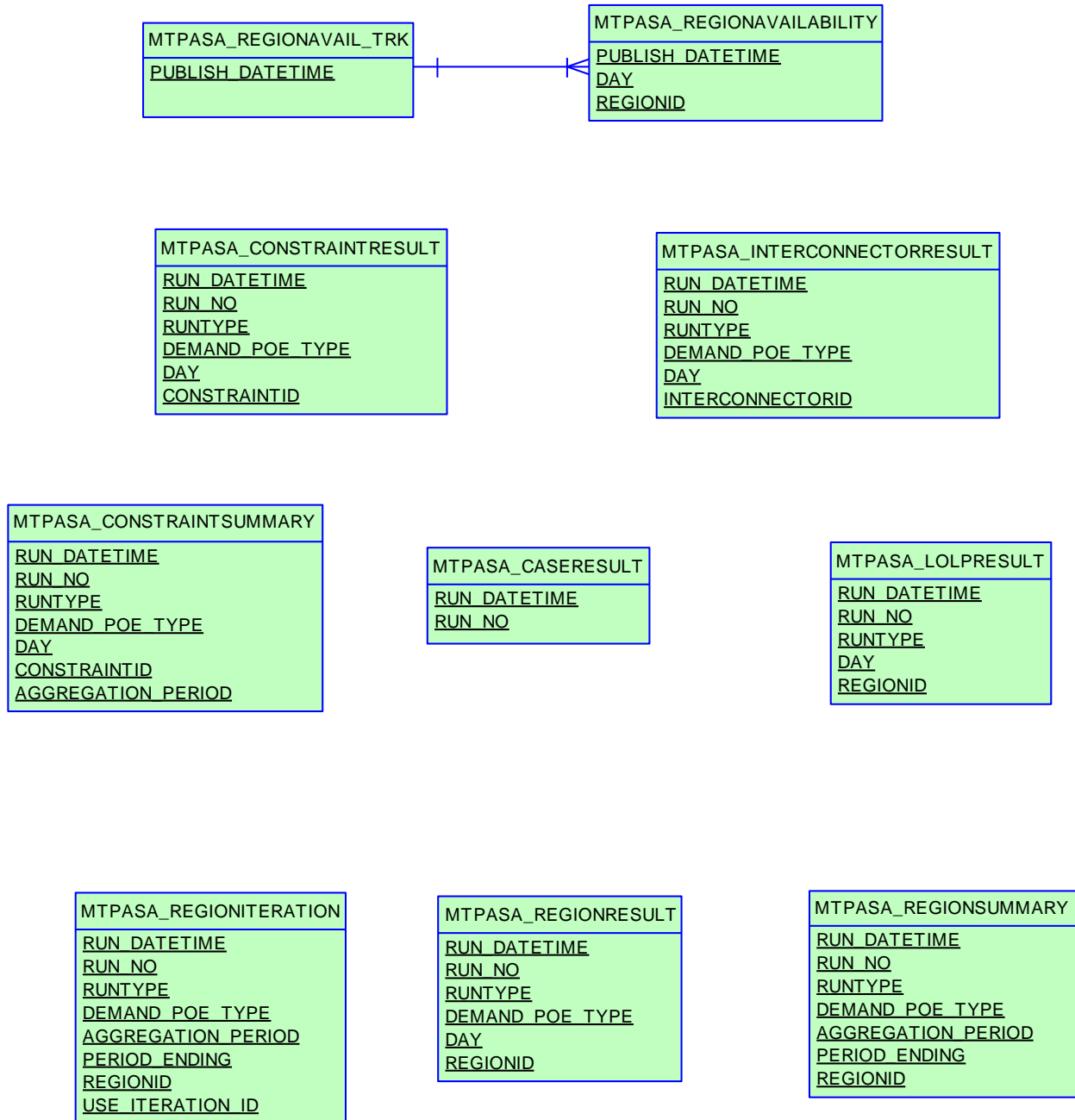
8 Package: MTPASA

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

8.1 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_INTERCONNECTORRESULT	Interconnector results for interval of max demand per day
MTPASA_LOLRESULT	Results for Loss of Load Probability (LOLP) run per day
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.

8.2 Diagram: Entities: MT PASA



8.3 Table: MTPASA_CASERESULT

<i>Name</i>	MTPASA_CASERESULT
<i>Comment</i>	MTPASA solution header table

8.3.1 Description

MTPASA_CASERESULT is public data.

Holds one Record for entire solution

8.3.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

8.3.3 Primary Key Columns

Name
 RUN_DATETIME
 RUN_NO

8.3.4 Content

Name	Data Type	Mandatory	Comment
RUN_DATETIME	DATE	X	Date processing of the run begins.
RUN_NO	NUMBER(4)	X	Unique run id.
PLEXOS_VERSION	VARCHAR2(20)		Version of PLEXOS used
LASTCHANGED	DATE		Last date and time record changed

8.4 Table: MTPASA_CONSTRAINTRESULT

<i>Name</i>	MTPASA_CONSTRAINTRESULT
<i>Comment</i>	Constraint results for Binding or Violating Constraints

8.4.1 Description

MTPASA_CONSTRAINTRESULT is public data.

8.4.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

8.4.3 Primary Key Columns

Name
 CONSTRAINTID
 DAY
 DEMAND_POE_TYPE
 RUN_DATETIME
 RUN_NO
 RUNTYPE

8.4.4 Content

Name	Data Type	Mandatory	Comment
RUN_DATETIME	DATE	X	Date processing of the run begins.
RUN_NO	NUMBER(4)	X	Unique run id.
RUNTYPE	VARCHAR2(20)	X	Type of run. Always RELIABILITY
DEMAND_POE_TYPE	VARCHAR2(20)	X	Demand POE type used. Value is POE10
DAY	DATE	X	Day this result is for
CONSTRAINTID	VARCHAR2(20)	X	The unique identifier for the constraint. Only binding or violating constraints are reported
EFFECTIVEDATE	DATE		The effective date of the constraint used
VERSIONNO	NUMBER(3,0)		The version of the constraint used
PERIODID	NUMBER(3,0)		Half hourly period reported, selected as period of maximum NEM scheduled demand (calculated as maximum of scheduled demands, averaged across iterations and reference years)
PROBABILITYOFBINDING	NUMBER(8,5)		Proportion of a constraint binding, across iterations and reference years
PROBABILITYOFVIOLATION	NUMBER(8,5)		Proportion of a constraint violating, across iterations and reference years
CONSTRAINTVIOLATION90	NUMBER(12,2)		The 90th percentile violation degree for this constraint, across iterations and reference years (MW)
CONSTRAINTVIOLATION50	NUMBER(12,2)		The 50th percentile violation degree for this constraint, across iterations and reference years (MW)
CONSTRAINTVIOLATION10	NUMBER(12,2)		The 10th percentile violation degree for

N10			this constraint, across iterations and reference years (MW)
LASTCHANGED	DATE		Last date and time record changed

8.5 Table: MTPASA_CONSTRAINTSUMMARY

<i>Name</i>	MTPASA_CONSTRAINTSUMMARY
<i>Comment</i>	Constraint Summary results over aggregation periods

8.5.1 Description

MTPASA_CONSTRAINTSUMMARY is public data.

8.5.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

8.5.3 Primary Key Columns

Name
 AGGREGATION_PERIOD
 CONSTRAINTID
 DAY
 DEMAND_POE_TYPE
 RUN_DATETIME
 RUN_NO
 RUNTYPE

8.5.4 Content

Name	Data Type	Mandatory	Comment
RUN_DATETIME	DATE	X	Date processing of the run begins.
RUN_NO	NUMBER(4)	X	Unique run id.
RUNTYPE	VARCHAR2(20)	X	Type of run. Always RELIABILITY
DEMAND_POE_TYPE	VARCHAR2(20)	X	Demand POE type used. Value is POE10
DAY	DATE	X	Day this result is for
CONSTRAINTID	VARCHAR2(20)	X	The unique identifier for the constraint. Only binding or violating constraints are reported
EFFECTIVEDATE	DATE		The effective date of the constraint used
VERSIONNO	NUMBER(3,0)		The version of the constraintID
AGGREGATION_PERIOD	VARCHAR2(20)	X	Period data is aggregated over. Values are PEAK, SHOULDER, OFFPEAK. PEAK = 14:00-19:59, SHOULDER = 07:00-13:59 and 20:00-21:59, OFFPEAK = 22:00-06:59
CONSTRAINTHOURSBINDING	NUMBER(12,2)		Constraint hours binding or violating for period, averaged across iterations and reference years
LASTCHANGED	DATE		Last date and time record changed

8.6 Table: MTPASA_INTERCONNECTORRESULT

<i>Name</i>	MTPASA_INTERCONNECTORRESULT
<i>Comment</i>	Interconnector results for interval of max demand per day

8.6.1 Description

MTPASA_INTERCONNECTORRESULT is public data.

8.6.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

8.6.3 Primary Key Columns

Name
 DAY
 DEMAND_POE_TYPE
 INTERCONNECTORID
 RUN_DATETIME
 RUN_NO
 RUNTYPE

8.6.4 Content

Name	Data Type	Mandatory	Comment
RUN_DATETIME	DATE	X	Date processing of the run begins.
RUN_NO	NUMBER(4)	X	Unique run id.
RUNTYPE	VARCHAR2(20)	X	Type of run. Always RELIABILITY
DEMAND_POE_TYPE	VARCHAR2(20)	X	Demand POE type used. Value is POE10
DAY	DATE	X	Day this result is for
INTERCONNECTORID	VARCHAR2(20)	X	The unique identifier for the interconnector
PERIODID	NUMBER(3,0)		Half hourly period reported, selected as period of maximum NEM scheduled demand (calculated as maximum of scheduled demands, averaged across iterations and reference years)
FLOW90	NUMBER(12,2)		The 90th percentile for flows, across iterations and reference years. Positive values indicate exporting, negative values indicate importing (MW)
FLOW50	NUMBER(12,2)		The 50th percentile for flows, across iterations and reference years. Positive values indicate exporting, negative values indicate importing (MW)
FLOW10	NUMBER(12,2)		The 10th percentile for flows, across iterations and reference years. Positive values indicate exporting, negative values indicate importing (MW)
PROBABILITYOFBINDINGEXPORT	NUMBER(8,5)		Proportion of iterations and reference years with interconnector constrained

			when exporting
PROBABILITYOFBINDINGIMPORT	NUMBER(8,5)		Proportion of iterations and reference years with interconnector constrained when importing
CALCULATEDEXPORTLIMIT	NUMBER(12,2)		Calculated Interconnector limit of exporting energy on the basis of invoked constraints and static interconnector export limit, averaged across iterations and reference years
CALCULATEDIMPORTLIMIT	NUMBER(12,2)		Calculated Interconnector limit of importing energy on the basis of invoked constraints and static interconnector import limit, averaged across iterations and reference years
LASTCHANGED	DATE		Last date and time record changed

8.7 Table: MTPASA_LOLRESULT

<i>Name</i>	MTPASA_LOLRESULT
<i>Comment</i>	Results for Loss of Load Probability (LOLP) run per day

8.7.1 Description

MTPASA_LOLRESULT is public data.

8.7.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

8.7.3 Primary Key Columns

Name
 DAY
 REGIONID
 RUN_DATETIME
 RUN_NO
 RUNTYPE

8.7.4 Content

Name	Data Type	Mandatory	Comment
RUN_DATETIME	DATE	X	Date processing of the run begins.
RUN_NO	NUMBER(4)	X	Unique run id.
RUNTYPE	VARCHAR2(20)	X	Type of run. Always LOLP
DAY	DATE	X	Day this result is for
REGIONID	VARCHAR2(20)	X	The unique region identifier
WORST_INTERVAL_PERIODID	NUMBER(3,0)		The half hourly interval period with the highest LOLP, or highest region demand if LOLP = 0 for all intervals (1..48)
WORST_INTERVAL_DEMAND	NUMBER(12,2)		The Abstract Operational Demand for the worst interval in this region (MW)
WORST_INTERVAL_INTERRUPTIBLE	NUMBER(12,2)		The half hourly aggregate intermittent generation for the worst interval in this region (MW)
WORST_INTERVAL_DEMAND_SIDE	NUMBER(12,2)		The half hourly aggregate demand side participation for the worst interval period in this region (MW)
LOSSOFLOADPROBABILITY	NUMBER(8,5)		Loss of Load Probability for the worst interval in this region
LOSSOFLOADMAGNITUDE	VARCHAR2(20)		Loss of Load Magnitude for the worst interval in this region. Values are LOW, MEDIUM, HIGH
LASTCHANGED	DATE		Last date and time record changed

8.8 Table: MTPASA_REGIONAVAILABILITY

<i>Name</i>	MTPASA_REGIONAVAILABILITY
<i>Comment</i>	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.

8.8.1 Description

MTPASA_REGIONAVAILABILITY is public data.

8.8.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

8.8.3 Primary Key Columns

Name
DAY
PUBLISH_DATETIME
REGIONID

8.8.4 Content

Name	Data Type	Mandatory	Comment
PUBLISH_DATETIME	DATE	X	Date Time the report was published.
DAY	DATE	X	Date on which the aggregation applies.
REGIONID	VARCHAR2(20)	X	NEM Region.
PASAAVAILABILITY_SCHEDULED	NUMBER(12,0)		Aggregate of the offered PASA Availability for all Scheduled generators in this region.
LATEST_OFFER_DATE TIME	DATE		Date Time of the latest offer used in the aggregation for this region and date.
ENERGYUNCONSTRAINEDCAPACITY	NUMBER(12,0)		Region energy unconstrained MW capacity
ENERGYCONSTRAINEDCAPACITY	NUMBER(12,0)		Region energy constrained MW capacity
NONSCHEDULEDGENERATION	NUMBER(12,2)		Allowance made for non-scheduled generation in the demand forecast (MW)
DEMAND10	NUMBER(12,2)		10% probability demand (ex non-scheduled demand)
DEMAND50	NUMBER(12,2)		50% probability demand (ex non-scheduled demand)
ENERGYREQDEMAND10	NUMBER(12,2)		Total weekly operational as generated consumption (POE 10)
ENERGYREQDEMAND50	NUMBER(12,2)		Total weekly operational as generated consumption (POE 50)
LASTCHANGED	DATE		Last date and time record changed

8.9 Table: MTPASA_REGIONITERATION

<i>Name</i>	MTPASA_REGIONITERATION
<i>Comment</i>	Region results for Unserved Energy (USE)

8.9.1 Description

MTPASA_REGIONITERATION is public data.

8.9.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

8.9.3 Primary Key Columns

Name
 AGGREGATION_PERIOD
 DEMAND_POE_TYPE
 PERIOD_ENDING
 REGIONID
 RUN_DATETIME
 RUN_NO
 RUNTYPE
 USE_ITERATION_ID

8.9.4 Content

Name	Data Type	Mandatory	Comment
RUN_DATETIME	DATE	X	Date processing of the run begins.
RUN_NO	NUMBER(4)	X	Unique run id.
RUNTYPE	VARCHAR2(20)	X	Type of run. Always RELIABILITY
DEMAND_POE_TYPE	VARCHAR2(20)	X	Demand POE type used. Value is POE10 or POE50
AGGREGATION_PERIOD	VARCHAR2(20)	X	Period data is aggregated over. Values are YEAR
PERIOD_ENDING	DATE	X	Datetime of day at end of period (i.e. last day of year reported)
REGIONID	VARCHAR2(20)	X	The unique region identifier
USE_ITERATION_ID	NUMBER(5)	X	Iteration ID, only produced for iterations showing unserved energy>0
USE_ITERATION_EVENT_NUMBER	NUMBER(12,2)		Number of half hours showing unserved energy over year, for iteration
USE_ITERATION_EVENT_AVERAGE	NUMBER(12,2)		Average unserved energy event size for iteration over year (MW)
LASTCHANGED	DATE		Last date and time record changed

8.10 Table: MTPASA_REGIONRESULT

<i>Name</i>	MTPASA_REGIONRESULT
<i>Comment</i>	Region results for interval of max demand per day.

8.10.1 Description

MTPASA_REGIONRESULT is public data.

8.10.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

8.10.3 Primary Key Columns

Name
 DAY
 DEMAND_POE_TYPE
 REGIONID
 RUN_DATETIME
 RUN_NO
 RUNTYPE

8.10.4 Content

Name	Data Type	Mandatory	Comment
RUN_DATETIME	DATE	X	Date processing of the run begins.
RUN_NO	NUMBER(4)	X	Unique run id.
RUNTYPE	VARCHAR2(20)	X	Type of run. Always RELIABILITY
DEMAND_POE_TYPE	VARCHAR2(20)	X	Demand POE type used. Value is POE10
DAY	DATE	X	Day this result is for
REGIONID	VARCHAR2(20)	X	The unique region identifier
PERIODID	NUMBER(3,0)		Half hourly period reported, selected as period of maximum NEM scheduled demand (calculated as maximum of scheduled demands, averaged across iterations and reference years)
DEMAND	NUMBER(12,2)		Demand value from selected half hourly interval (MW)
AGGREGATEINSTALLED_CAPACITY	NUMBER(12,2)		The total installed capacity of all generation (MW)
NUMBEROFITERATIONS	NUMBER(12,2)		Total number of iterations and reference years performed
USE_NUMBEROFITERATIONS	NUMBER(12,2)		Number of iterations and reference years with unserved energy>0
USE_MAX	NUMBER(12,2)		Maximum unserved energy, across iterations and reference years (MW)
USE_UPPERQUARTILE	NUMBER(12,2)		Upper quartile unserved energy, across iterations and reference years (MW)
USE_MEDIAN	NUMBER(12,2)		Median unserved energy, across iterations and reference years (MW)
USE_LOWERQUARTILE	NUMBER(12,2)		Lower quartile unserved energy, across

			iterations and reference years (MW)
USE_MIN	NUMBER(12,2)		Minimum unserved energy, across iterations and reference years (MW)
USE_AVERAGE	NUMBER(12,2)		Average unserved energy, across iterations and reference years (MW)
USE_EVENT_AVERAGE	NUMBER(12,2)		Average unserved energy event size, across iterations and reference years (MW)
TOTALSCHEDULEDGEN90	NUMBER(12,2)		The 90th percentile for scheduled generation across iterations and reference years (MW)
TOTALSCHEDULEDGEN50	NUMBER(12,2)		The 50th percentile for scheduled generation across iterations and reference years (MW)
TOTALSCHEDULEDGEN10	NUMBER(12,2)		The 10th percentile for scheduled generation across iterations and reference years (MW)
TOTALINTERMITTENTGEN90	NUMBER(12,2)		The 90th percentile for intermittent generation, across iterations and reference years (MW)
TOTALINTERMITTENTGEN50	NUMBER(12,2)		The 50th percentile for intermittent generation, across iterations and reference years (MW)
TOTALINTERMITTENTGEN10	NUMBER(12,2)		The 10th percentile for intermittent generation, across iterations and reference years (MW)
DEMANDSIDEPARTICIPATION90	NUMBER(12,2)		The 90th percentile for demand side participation, across iterations and reference years (MW)
DEMANDSIDEPARTICIPATION50	NUMBER(12,2)		The 50th percentile for demand side participation, across iterations and reference years (MW)
DEMANDSIDEPARTICIPATION10	NUMBER(12,2)		The 10th percentile for demand side participation, across iterations and reference years (MW)
LASTCHANGED	DATE		Last date and time record changed

8.11 Table: MTPASA_REGIONSUMMARY

<i>Name</i>	MTPASA_REGIONSUMMARY
<i>Comment</i>	Region Results summary over aggregation periods.

8.11.1 Description

MTPASA_REGIONSUMMARY is public data.

8.11.2 Notes

Name	Comment	Value
Visibility	Data in this table is:	Public

8.11.3 Primary Key Columns

Name
 AGGREGATION_PERIOD
 DEMAND_POE_TYPE
 PERIOD_ENDING
 REGIONID
 RUN_DATETIME
 RUN_NO
 RUNTYPE

8.11.4 Content

Name	Data Type	Mandatory	Comment
RUN_DATETIME	DATE	X	Date processing of the run begins.
RUN_NO	NUMBER(4)	X	Unique run id.
RUNTYPE	VARCHAR2(20)	X	Type of run. Always RELIABILITY
DEMAND_POE_TYPE	VARCHAR2(20)	X	Demand POE type used. Value are POE10, POE50
AGGREGATION_PERIOD	VARCHAR2(20)	X	Period data is aggregated over. Values are YEAR, MONTH
PERIOD_ENDING	DATE	X	Datetime of day at end of period (i.e. last day of month or year reported)
REGIONID	VARCHAR2(20)	X	The unique region identifier
NATIVEDEMAND	NUMBER(12,2)		Native demand calculated from Operational As Generated trace supplied by Energy Forecasting
USE_PERCENTILE10	NUMBER(12,2)		Unserviced energy period amount at the 10th percentile of iterations and reference years (MWh)
USE_PERCENTILE20	NUMBER(12,2)		Unserviced energy period amount at the 20th percentile of iterations and reference years (MWh)
USE_PERCENTILE30	NUMBER(12,2)		Unserviced energy period amount at the 30th percentile of iterations and reference years (MWh)
USE_PERCENTILE40	NUMBER(12,2)		Unserviced energy period amount at the 40th percentile of iterations and reference years (MWh)

USE_PERCENTILE50	NUMBER(12,2)		Unserviced energy period amount at the 50th percentile of iterations and reference years (MWh)
USE_PERCENTILE60	NUMBER(12,2)		Unserviced energy period amount at the 60th percentile of iterations and reference years (MWh)
USE_PERCENTILE70	NUMBER(12,2)		Unserviced energy period amount at the 70th percentile of iterations and reference years (MWh)
USE_PERCENTILE80	NUMBER(12,2)		Unserviced energy period amount at the 80th percentile of iterations and reference years (MWh)
USE_PERCENTILE90	NUMBER(12,2)		Unserviced energy period amount at the 90th percentile of iterations and reference years (MWh)
USE_PERCENTILE100	NUMBER(12,2)		Unserviced energy period amount at the 100th percentile of iterations and reference years (MWh)
USE_AVERAGE	NUMBER(12,2)		Average period unserved energy across iterations and reference years (MWh)
NUMBEROFITERATIONS	NUMBER(12,2)		Total number of iterations and reference years performed
USE_NUMBEROFITERATIONS	NUMBER(12,2)		Number of iterations and reference years showing unserved energy
USE_EVENT_MAX	NUMBER(12,2)		Maximum unserved energy event size across all half hourly intervals and iterations and reference years that have unserved energy>0 (MW)
USE_EVENT_UPPERQUARTILE	NUMBER(12,2)		Upper quartile unserved energy event size across all half hourly intervals and iterations and reference years that have unserved energy>0 (MW)
USE_EVENT_MEDIAN	NUMBER(12,2)		Median unserved energy event size across all half hourly intervals and iterations and reference years that have unserved energy>0 (MW)
USE_EVENT_LOWERQUARTILE	NUMBER(12,2)		Lower quartile unserved energy event size across all half hourly intervals and iterations and reference years that have unserved energy>0 (MW)
USE_EVENT_MIN	NUMBER(12,2)		Minimum unserved energy event size across all half hourly intervals and iterations and reference years that have unserved energy>0 (MW)
WEIGHT	NUMBER(12,2)		Fixed Values of 0.696 for 50 POE and 0.304 for 10 POE.
USE_WEIGHTED_AVG	NUMBER(12,2)		Weighted average USE per region = (USE_AVERAGE_POE10/NATIVE_DEMAND_POE_10*WEIGHT_POE_10 + USE_AVERAGE_POE50/NATIVE_DEMAND_POE_50*WEIGHT_POE_50)*100
LRC	NUMBER(12,2)		LRC Condition reported (Value=1) if USE_WEIGHTED_AVG >= 0.002% otherwise (Value=0)
LASTCHANGED	DATE		Last date and time record changed



