

GAS MMS DATA MODEL PACKAGE SUMMARY

AEMO Gas Data Model v2.1 Oracle

PREPARED BY: IMT

DATE: 11/02/2019

Table of Contents

1	List of packages	2
2	Description of model AEMO Gas Data Model v2.1 Oracle	2
3	Package: GAS_BB	3
3.1	List of tables	3
3.2	Diagram: Entities: Gas Bulletin Board	5
4	Package: GAS_SUPPLY_HUB	6
4.1	List of tables	6
4.2	Diagram: Entities: Gas Supply Hub	11

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
GAS_BB	
GAS_SUPPLY_HUB	Gas Supply Hub markets reports to provide Participants with information on their trades, prudential exposure, settlement runs, and registration details

2 Description of model AEMO Gas Data Model v2.1 Oracle

This page is intentionally blank

3 Package: GAS_BB

Name GAS_BB

Comment

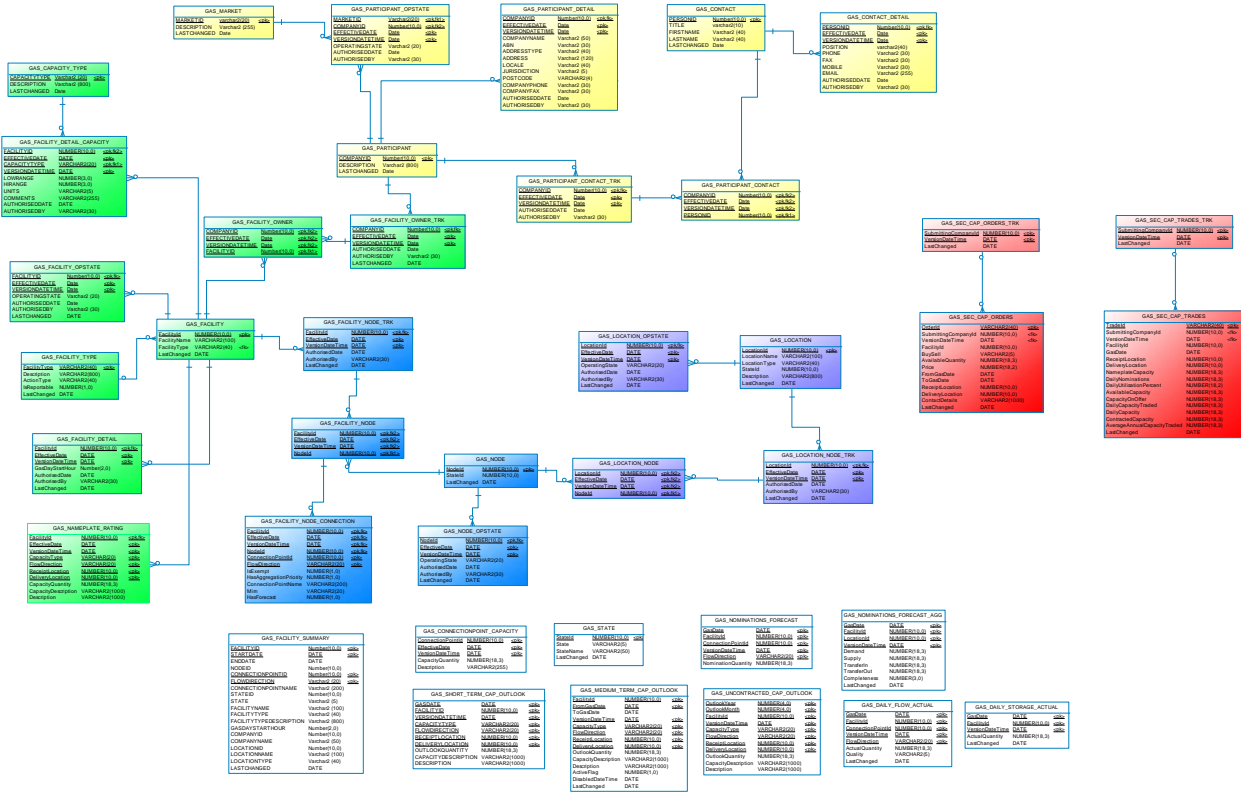
3.1 List of tables

Name	Comment
GAS_CAPACITY_TYPE	Capacity Type - The type of capacity detailed. Valid entries are: STORAGE, MDQ
GAS_CONNECTIONPOINT_CAPACITY	Provide details of the gate station capacity on a particular day.
GAS_CONTACT	The registered user list of responsible contact persons for each BB Participant organisation as identified at registration or otherwise
GAS_CONTACT_DETAIL	The registered user list details of responsible contact persons for each BB Participant organisation as identified at registration or otherwise
GAS_DAILY_FLOW_ACTUAL	Provides on each gas day D, the BB facility operator's daily gas flow data for injections and withdrawals at each connection point for gas day D-1.
GAS_DAILY_STORAGE_ACTUAL	Provide on each gas day D, the actual quantity of natural gas held in each storage facility at the end of the gas day D-1.
GAS_DATA_MODEL_AUDIT	GAS_DATA_MODEL_AUDIT shows the audit trail of scripts applied to this installation of Gas Data Model. Participants should ensure that if a database is cloned the content of this table is copied to the target database
GAS_FACILITY	Provides details of all facilities
GAS_FACILITY_DETAIL	The details of all gas plant facilities over time
GAS_FACILITY_DETAIL_CAPACITY	The standing details on capacity of all gas plant facilities over time
GAS_FACILITY_NODE	Identifies the set of nodes linked to facilities. A facility can have any number of nodes.
GAS_FACILITY_NODE_CONNECTION	Identifies the set of connections associated with a node. There are up to four. Up to two for each facility/node combination. For example, a pipe might be connected to a store via a node. Two of the connections in the node are connected to the pipe and two to the store. Each pair of connections is a delivery or a receipt type of connection.
GAS_FACILITY_NODE_TRK	A facility tracking record. A parent record relating to sets of child nodes linked to a facility. The set can be found in GAS_FACILITY_NODE.
GAS_FACILITY_OPSTATE	The operating status of all facilities over time
GAS_FACILITY_OWNER	The detail of facility ownership over time
GAS_FACILITY_OWNER_TRK	The tracking of Facility ownership over time
GAS_FACILITY_SUMMARY	A summary of gas FACILITY, capacity and ownership through time
GAS_FACILITY_TYPE	A lookup table identifying the type of facilities stored in AEMO's GBB system
GAS_LINEPACK_ADEQUACY	The linepack adequacy (flag) for each of the (non-exempt) BB pipelines
GAS_LOCATION	Lists all production and demand locations within the Bulletin Board system.
GAS_LOCATION_NODE	Provides a list of nodes within a location.
GAS_LOCATION_NODE_TRK	Provides a record of node tracking.
GAS_LOCATION_OPSTATE	The operating status of all locations over time.

GAS_MARKET	The list of defined Gas Markets against which the Participant Operating Status is activated
GAS_MEDIUM_TERM_CAP_OUTLOOK	Provide the details of activities that may affect the daily capacity of the facility over the next 12 months.
GAS_NAMEPLATE_RATING	Provide the nameplate rating of each facility or information about any planned permanent capacity reduction or expansion due to modification of the facility.
GAS_NODE	A container for up to four connections
GAS_NODE_OPSTATE	The operating status of all facility nodes over time
GAS_NOMINATIONS_FORECAST	For BB pipelines forming part of a Declared Transmission System, provide on each gas day the aggregated scheduled injections and aggregated scheduled withdrawals at each controllable system point for gas day D to D+2. For all other BB facility operators, provide on each gas day D the aggregated nominated and forecast injections and aggregated nominated and forecast withdrawals for gas day D to D+6.
GAS_NOMINATIONS_FORECAST_AGG	Provides the aggregate of forecast and nominations by location.
GAS_PARTICIPANT	The list of all registered organisations i.e the BB Participants of the Bulletin Board
GAS_PARTICIPANT_CONTACT	The detail of contacts against a gas participant over time
GAS_PARTICIPANT_CONTACT_TRK	The tracking of sets of contacts against a gas participant over time
GAS_PARTICIPANT_DETAIL	The details of all registered organisations i.e the BB Participants of the Bulletin Board over time
GAS_PARTICIPANT_OPSTATE	The operating status of all registered organisations i.e the BB Participants of the Bulletin Board over time
GAS_SEC_CAP_ORDERS	Information related to the bids and offers of secondary pipeline capacity, which is derived from a secondary pipeline capacity trading platform
GAS_SEC_CAP_ORDERS_TRK	Bids and offer tracking information of secondary pipeline capacity
GAS_SEC_CAP_TRADES	Information related to summary trading data, which is derived from a secondary pipeline capacity trading platform.
GAS_SEC_CAP_TRADES_TRK	Information related to summary trading data, which is derived from a secondary pipeline capacity trading platform.
GAS_SHORT_TERM_CAP_OUTLOOK	Provides on each gas day D, the BB facility operator's good faith estimate of the daily capacity of the BB Facility for gas days D+1 to D+7.
GAS_STATE	List of states.
GAS_UNCONTRACTED_CAPACITY_OUTLOOK	Provide the uncontracted capacity of the facility over the next 12 months.

3.2 Diagram: Entities: Gas Bulletin Board

Name	Code	Comment
Entities: Gas Bulletin Board		
ENTITIES_GAS_BULLETIN_BOARD		
The Gas BB ERD is Colour Coded as an aid.		
The Yellow tables denote Participant Registration.		
The Green tables denote Participant - Facility ownership and Facility properties.		
The Purple tables denote Location details.		
The Blue tables denote Node and Node connection details		



4 Package: GAS_SUPPLY_HUB

<i>Name</i>	GAS_SUPPLY_HUB
<i>Comment</i>	Gas Supply Hub markets reports to provide Participants with information on their trades, prudential exposure, settlement runs, and registration details

4.1 List of tables

Name	Comment
GSH_AUCTION_BID	Information for a single bid contained within a bid profile
GSH_AUCTION_BID_PRODUCT	Information for a single auction product contained within a bid
GSH_AUCTION_BID_PROFILE	Top-level table for a profile of auction bids on a given gas date
GSH_AUCTION_BID_STEPS	Information for a single step contained within a bid.
GSH_AUCTION_BID_SUBMISSION	Provides a confirmation to trading participants that their auction bid has been successfully submitted.
GSH_AUCTION_BID_TRK	List of bids considered for an auction
GSH_AUCTION_CURTAIL_NOTICE	Contains details of curtailment of nominations against secondary firm rights (CTP trades) for service points (receipt and delivery points).
GSH_AUCTION_PRICE_VOLUME	The cleared quantity, cleared price and price sensitivity for each auction product component following each auction run
GSH_AUCTION_QUANTITIES	Auction limit quantities for each product component available for the day ahead auction
GSH_AUCTION_RESULTS	Specifies the details of the capacity won at auction
GSH_AUCTION_RUN	Specifies the Auction Run has completed, issued to any participants bidding in the auction (regardless of whether any auction bids are won), and facility operators who have a facility in the Auction
GSH_BENCHMARK_PRICE	The report contains the benchmark prices for the day ahead (non-firm price) PLUS the last two years of daily benchmark prices (firm price)
GSH_CAP_XFR_AUCTION_NOTICE	Notifies participants when the market delay or cancellation process is triggered
GSH_CAP_XFR_NOTICE	Capacity transfer notice includes a list of capacity quantities per shipper contract that facility operators use to update the capacity quantity on the relevant shipper contracts in their own systems.
GSH_CAPACITY_TRANSACTION	Consolidated list of all secondary capacity trades which includes GSH trades (screen traded and off-market trades) and Bilateral trades submitted into the GBB
GSH_CONTRACT_DETAILS	Provides participants with a list of all the facility operator service references and STTM contract references that are available to them for capacity trading
GSH_CONTRACT_REFERENCES	This report is available to participants as an audit trail of the entries in the Contract References markets portal application.
GSH_DELIVERED_QUANTITY	The purpose of this report is to provide the Participants (buyer and seller) an acknowledgement whenever a delivered quantity record is submitted or confirmed. The report will also provide Participants with a list of all their delivered quantity records updated within the last thirty days when triggered daily prior to the start of trades for the current day.
GSH_DELIVERY_NETT_POINTS	List of delivery point preferences if delivery points are overridden. Child record of GSH_DELIVERY_NETT_PREFS
GSH_DELIVERY_NETT_PREFERENCES	Provide a history of Delivery Netting Preferences entered through

FS	the new Delivery Netting Web Interface.
GSH_DELIVERY_OBLIGATIONS	The purpose of this report is to provide the Participants with their Delivery Obligations at each location. Delivery Obligation quantities are results of the delivery netting process.
GSH_FACILITIES	Facilities currently registered, for capacity trading and day ahead auction.
GSH_HISTORICAL_SUMMARY	The report provides a summary of all trades delivered in the current gas day and the last thirty gas days per product location. It provides information on the volume weighted average price, and the total traded quantities.
GSH_NOTIONAL_POINTS	Notional Point currently registered under Part 24 of the Rules
GSH_ORDERS	The purpose of this report is to provide the Participant a confirmation whenever an order (bid or offer) is submitted, amended, or cancelled.
GSH_PARK_SERVICES	Park Services currently registered under Part 24 of the Rules
GSH_PARTICIPANT_CONTACTS	The purpose of this report is to provide the participant with a list of all their contact details.
GSH_PARTICIPANT_OPERATING_STATUS	Operating Status of Participant
GSH_PARTICIPANTS	The report contains the registration details of all participants currently registered in the GSH market.
GSH_PIPELINE_SEGMENTS	Pipeline Segments currently registered under Part 24 of the Rules for the capacity trading and day ahead auction.
GSH_PRD_AUCT_FWD_EXPOSURE	The purpose of the Prudential Exposure report is to provide organisations with daily estimates of their market exposure. The report also contains details of their bank guarantees and security deposits as well as their outstanding amounts for all settlement runs included in the prudential run. The Auction Forward Exposure subreport provides a summary of auction forward exposure amounts for the organisation by gas day.
GSH_PRD_BANK_GUARANTEES	The purpose of the Prudential Exposure report is to provide organisations with daily estimates of their market exposure. The report also contains details of their bank guarantees and security deposits as well as their outstanding amounts for all settlement runs included in the prudential run. The Bank Guarantees subreport provides a list of all bank guarantees used in the prudential run.
GSH_PRD_EST_MARKET_EXPOSURE	The purpose of the Prudential Exposure report is to provide organisations with daily estimates of their market exposure. The report also contains details of their bank guarantees and security deposits as well as their outstanding amounts for all settlement runs included in the prudential run. The Estimated Market Exposure subreport provides summary information for the Organisation's estimated market exposure.
GSH_PRD_REALLOCATIONS	The purpose of the Prudential Exposure report is to provide organisations with daily estimates of their market exposure. The report also contains details of their bank guarantees and security deposits as well as their outstanding amounts for all settlement runs included in the prudential run. The Reallocations subreport provides a breakdown of all reallocation amounts used in the prudential run at the participant level.
GSH_PRD_SECURITY_DEPOSITS	The purpose of the Prudential Exposure report is to provide organisations with daily estimates of their market exposure. The report also contains details of their bank guarantees and security deposits as well as their outstanding amounts for all settlement runs included in the prudential run. The Security Deposits subreport provides a list of all security deposits used in the prudential run (Note: only security deposits that are maturing on a day later than the prudential date time are included in this report).
GSH_PRD_SETTLEMENT_AMOUNTS	The purpose of the Prudential Exposure report is to provide organisations with daily estimates of their market exposure. The

	report also contains details of their bank guarantees and security deposits as well as their outstanding amounts for all settlement runs included in the prudential run. The Settlement Amounts subreport provides a breakdown of all settlement amounts at the participant level for all settlement runs included in the prudential run
GSH_PRD_TRADE_FWD_EXPOSURE	The purpose of the Prudential Exposure report is to provide organisations with daily estimates of their market exposure. The report also contains details of their bank guarantees and security deposits as well as their outstanding amounts for all settlement runs included in the prudential run. The Trade Forward Exposure subreport provides a summary of forward exposure amounts for the organisation by product location by gas day.
GSH_RCPT_DELIV_POINT_PREFS	This report is available to participants as an audit trail of the entries in the CTP Receipt and Delivery Point Preferences markets portal application.
GSH_REALLOC_DAILY_AMOUNT	The purpose of the Reallocation Confirmation report is to provide the participants (Credit and Debit Parties) a confirmation wherever an allocation is submitted, authorised, cancelled or expired. The Daily Amount subreport contains the reallocation daily amount for each gas day in the reallocation period.
GSH_REALLOC_REALLOCATION	The purpose of the Reallocation Confirmation report is to provide the participants (Credit and Debit Parties) a confirmation wherever an allocation is submitted, authorised, cancelled or expired. The Reallocation subreport contains the main reallocation details.
GSH_REVISD_AUCT_QUANTITIES	The report lists the following items for each facility and service type: initial cleared quantity as determined by the Auction Solver; where there has been a curtailment of the initial cleared quantity, the revised auction quantity which must be the aggregate minimum quantity made available to auction participants on the gas day; final aggregated scheduled nominations.
GSH_SECDEPOSIT_INTEREST_RATE	The Security Deposit Interest Rate On Daily Basis. This is the public table published when a new floating daily interest rate is entered and authorised
GSH_SERVICE_POINTS	Service Points currently registered under Part 24 of the Rules for the capacity trading and day ahead auction.
GSH_SHIPPER_CAPACITY_TRANSFER_NOTICE	Provides the status of a trading participant's capacity transfer related to one or more capacity trades. This notice is issued each time a capacity transfer record has a status change because of capacity transfer in the facility operator system or AEMO system. For non-STTM and non-DWGM capacity products, the status is reported as received from the facility operator. For STTM and DWGM capacity products, the status is reported once the capacity transfer has been completed in the relevant market system (STTM or DWGM).
GSH_SUPP_ADHOC	The Settlements Supporting Data Report is generated when Final and Revision settlement statements are issued; it is also generated daily with details of the latest initial settlement run of the day. The report contains settlements summary information as well as participant specific data from that settlement run for the relevant charges and payments per gas day. It provides a breakdown of all executed trades and delivered quantities records included in this settlement run to assist participant in their settlement statements reconciliation. The Adhoc subreport provides a list of all individual ad-hoc payments and charges included in the settlement run.
GSH_SUPP_AUCTION_QUANTITIES	Details of Auction Quantities won used in Settlements
GSH_SUPP_CAPACITY_AUCTION	Includes Auction items won that are included in the settlement run
GSH_SUPP_CAPACITY_TRANSFERS	Provides a list of all individual capacity transfer records included in the settlement run.

GSH_SUPP_CAPACITY_VARIANCE	The Delivery Variance subreport provides a breakdown of total capacity variance payments and charges included in the settlement run per gas day, note that total payments and total charges are listed separately for each gas day
GSH_SUPP_DELIVERED_QUANTITY	The Settlements Supporting Data Report is generated when Final and Revision settlement statements are issued; it is also generated daily with details of the latest initial settlement run of the day. The report contains settlements summary information as well as participant specific data from that settlement run for the relevant charges and payments per gas day. It provides a breakdown of all executed trades and delivered quantities records included in this settlement run to assist participant in their settlement statements reconciliation. The Delivered Quantity subreport provides a list of all individual delivered quantity records included in the settlement run.
GSH_SUPP_DELIVERY_VARIANCE	The Settlements Supporting Data Report is generated when Final and Revision settlement statements are issued; it is also generated daily with details of the latest initial settlement run of the day. The report contains settlements summary information as well as participant specific data from that settlement run for the relevant charges and payments per gas day. It provides a breakdown of all executed trades and delivered quantities records included in this settlement run to assist participant in their settlement statements reconciliation. The Delivery Variance subreport provides a breakdown of total delivery variance payments and charges included in the settlement run per gas day, note that total payments and total charges are listed separately for each gas day.
GSH_SUPP_EXECUTED_TRADES	The Settlements Supporting Data Report is generated when Final and Revision settlement statements are issued; it is also generated daily with details of the latest initial settlement run of the day. The report contains settlements summary information as well as participant specific data from that settlement run for the relevant charges and payments per gas day. It provides a breakdown of all executed trades and delivered quantities records included in this settlement run to assist participant in their settlement statements reconciliation. The Executed Trades subreport provides a list of all individual executed trades records included in the settlement run.
GSH_SUPP_FEE	The Settlements Supporting Data Report is generated when Final and Revision settlement statements are issued; it is also generated daily with details of the latest initial settlement run of the day. The report contains settlements summary information as well as participant specific data from that settlement run for the relevant charges and payments per gas day. It provides a breakdown of all executed trades and delivered quantities records included in this settlement run to assist participant in their settlement statements reconciliation. The Fee subreport provides a list of all market and transaction fees included in the prudential run against the gas dates.
GSH_SUPP_PHYSICAL_GAS	The Settlements Supporting Data Report is generated when Final and Revision settlement statements are issued; it is also generated daily with details of the latest initial settlement run of the day. The report contains settlements summary information as well as participant specific data from that settlement run for the relevant charges and payments per gas day. It provides a breakdown of all executed trades and delivered quantities records included in this settlement run to assist participant in their settlement statements reconciliation. The Physical Gas subreport provides a breakdown of total physical gas payments and charges included in the settlement run per gas day, note that total payments and total charges are listed separately for each gas day.
GSH_SUPP_REALLOCATION	The Settlements Supporting Data Report is generated when Final

S	and Revision settlement statements are issued; it is also generated daily with details of the latest initial settlement run of the day. The report contains settlements summary information as well as participant specific data from that settlement run for the relevant charges and payments per gas day. It provides a breakdown of all executed trades and delivered quantities records included in this settlement run to assist participant in their settlement statements reconciliation. The Reallocations subreport provides a list of all individual reallocations included in the settlement run per gas day.
GSH_SUPP_SERVICES	This report adds details from the settlements run for the new Wallumbilla Compression Services product. It is produced when a settlements run is completed.
GSH_SUPP_SETTLEMENT_RUN	The Settlements Supporting Data Report is generated when Final and Revision settlement statements are issued; it is also generated daily with details of the latest initial settlement run of the day. The report contains settlements summary information as well as participant specific data from that settlement run for the relevant charges and payments per gas day. It provides a breakdown of all executed trades and delivered quantities records included in this settlement run to assist participant in their settlement statements reconciliation. The Settlement Run subreport provides header details of the settlement run.
GSH_SUPP_SETTLEMENT_SUMMARY	The Settlements Supporting Data Report is generated when Final and Revision settlement statements are issued; it is also generated daily with details of the latest initial settlement run of the day. The report contains settlements summary information as well as participant specific data from that settlement run for the relevant charges and payments per gas day. It provides a breakdown of all executed trades and delivered quantities records included in this settlement run to assist participant in their settlement statements reconciliation. The Settlement Summary subreport provides summary details of the settlement run.
GSH_TRADES	The purpose of this report is to provide the Participants (buyer and seller) a confirmation whenever a trade is executed through auto matching of bids and offers or by off-Market trades. The report will also provide Participants with a list of all their future trades when triggered daily after the end of the trades for the current day.
GSH_TRADING_CONTACTS	The purpose of this report is to provide all GSH participants with a list of all Trading and Delivery contacts details for all registered participants in the GSH market. This report will be made available to all GSH participants.
GSH_TRANSACTION_SUMMARY	The report provides a summary of all trades executed in the current gas day per product. It provides information on the high/low open/close prices, total traded quantities and number of trades.
GSH_ZONE_CURTAILMENT	Contains details of curtailment of nominations against secondary firm rights (CTP trades) for service points (receipt and delivery points).
GSH_ZONES	Zones currently registered under Part 24 of the Rules for the capacity trading and day ahead auction.

