

BB DATA SUBMISSION PROCEDURES VERSION 4.0

PREPARED BY: AEMO Strategy and Markets

VERSION: 4.0

EFFECTIVE DATE: 1 March 2020

STATUS: FINAL

Approved for distribution and use by:

APPROVED BY: Peter Geers

TITLE: Chief Strategy and Markets

DATE: / / 20

Important notice

PURPOSE

These BB Data Submission Procedures specify the requirements for submitting information to AEMO for the Natural Gas Services Bulletin Board and have effect only for the purposes set out in the Rules. The Rules, the National Gas Law and the document named the BB Procedures prevail over these BB Data Submission Procedures to the extent of any inconsistency.

DISCLAIMER

This document or the information in it may be subsequently updated or amended. This document does not constitute legal or business advice, and should not be relied on as a substitute for obtaining detailed advice about the National Gas Law, the National Gas Rules, or any other applicable laws, procedures or policies. AEMO has made every effort to ensure the quality of the information in this document but cannot guarantee its accuracy or completeness.

Accordingly, to the maximum extent permitted by law, AEMO and its officers, employees and consultants involved in the preparation of this document:

- make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of the information in this document; and
- are not liable (whether by reason of negligence or otherwise) for any statements or representations in this document, or any omissions from it, or for any use or reliance on the information in it.

VERSION CONTROL

Version	Release date	Changes
1.0	30 September 2018	First issue
2.0	17 December 2018	Updated for the National Gas (Capacity Trading and Auctions) Amendment Rule 2018
3.0	1 March 2019	Updated to include Auction Curtailment Notices and Daily Auction Curtailment Notices as required under the National Gas (Capacity Trading and Auctions) Amendment Rule 2018.
<u>4.0</u>		<u>Merge of Guide to Gas Bulletin Board Data Submission V2.1 for clarity and consistency.</u>

Contents

1.	Overview	5
1.1	Purpose	5
1.2	Application	5
1.3	Terminology and Definitions	5
1.4	Interpretation of these Procedures	6
2.	Technical Overview	7
3.	Data Provision Requirements	8
3.1	Facility and Connection Point Identifiers	11
4.	Transaction Data Responsibilities and Submission Formats	13
4.1	Short Term Capacity Outlook	13
4.2	Daily Production Flow	16
4.3	Daily Storage	19
4.4	Connection Point Nameplate Rating	20
4.5	Linepack Capacity Adequacy	21
4.6	Medium Term Capacity Outlook	22
4.7	Nameplate Rating	25
4.8	Nominations and Forecasts	28
4.9	[Removed]	30
4.10	[Removed]	30
4.11	Uncontracted Capacity Outlook	30
4.12	BB Capacity Transaction	33
4.13	Auction Curtailment Notice	35
4.14	Daily Auction Service Curtailment Information	36
A1.	Data Submission	37
A1.1	System requirements	37
A1.2	CSV Format	37
A1.3	Uploading a CSV file using FTP	38
A1.4	Uploading a file using MarketNet	38
A1.5	Transaction acknowledgment	39
A2.	RESTful web services data submission	40
A2.1	API Web Portal	40
A2.2	System Requirements	40
A2.3	HTTPS POST request format	40
A2.4	Submission URLs	42
A2.5	HTTPS response format	43
A3.	Data Submission Examples	45
A3.1	Short Term Capacity Outlook	45
A3.2	Daily Production Flow	57
A3.3	Daily Storage	59
A3.4	Connection Point Nameplate Rating	60
A3.5	Linepack Capacity Adequacy	61
A3.6	Medium Term Capacity Outlook	63
A3.7	Nameplate Rating	66

A3.8	Nominations and Forecasts	68
A3.9	Uncontracted Capacity Outlook	71
A3.10	BB Capacity Transaction	72
A4.	Validation Error Codes	75

Tables

Table 1	Transaction data responsibilities	8
---------	-----------------------------------	---

1. Overview

1.1 Purpose

These BB Data Submission Procedures specify the requirements for submitting the following information to AEMO for the Natural Gas Services Bulletin Board:

- *BB reporting entities* to submit forecast and actual data and information on curtailed quantities of auction services; and
- capacity sellers or their agents to submit capacity transaction information.

These BB Data Submission Procedures form part of the *BB Procedures*. If there is any inconsistency between these BB Data Submission Procedures and the document named the 'BB Procedures', the document named the 'BB Procedures' prevails.

In relation to *transitional compression facilities*:

- these BB Data Submission Procedures specify the requirements for registered *transportation service providers* for *transitional compression facilities* to submit forecast and actual data to AEMO for the Natural Gas Services Bulletin Board;
- these BB Data Submission Procedures should be read in conjunction with section 25 of the *Capacity Transfer and Auction Procedures*; and
- if there is any inconsistency between these BB Data Submission Procedures and the *Capacity Transfer and Auction Procedures*, the *Capacity Transfer and Auction Procedures* prevail.

1.2 Application

These BB Data Submission Procedures apply to AEMO and each person to whom they are expressed to apply under the National Gas Law or Rules.

These BB Data Submission Procedures also apply to the *transportation service provider* for a *transitional compression facility* registered with AEMO under the *Capacity Transfer and Auction Procedures* in accordance with section 91BRR of the Law.

1.3 Terminology and Definitions

The words, phrases and abbreviations set out below have the meanings set out opposite them when used in these BB Data Submission Procedures. Terms defined in the National Gas Law or the Rules have the same meanings in these BB Data Submission Procedures unless otherwise specified in this clause. Those terms are intended to be identified in these BB Data Submission Procedures by italicising them, but failure to italicise a defined term does not affect its meaning.

1.3.1 Abbreviations

Abbreviation	Meaning
AEMO	Australian Energy Market Operator.
API	Application Programming Interface.
BB	The Natural Gas Services Bulletin Board.
CSV	Comma Separated Values. Stores tabular data (numbers and text) in plain-text form. Plain text means the content is a sequence of characters, with no data that has to be interpreted instead, as binary numbers.

Abbreviation	Meaning
FTP	File Transfer Protocol – a protocol that allows users to copy files between any systems they can reach on the network.
HTTPS	Hypertext Transfer Protocol over SSL.
JSON	JavaScript Object Notation.
RESTful	Representational State Transfer.
URL	Uniform Resource Locator.

1.3.2 Terms

Term	Meaning
Authorised User	A person authorised by a <i>BB reporting entity</i> to submit information to the Bulletin Board for that <i>BB reporting entity</i> .
BB facility	<i>BB facility</i> within this document includes a <i>BB facility</i> as defined under Part 18 of the National Gas Rules and <i>transitional compression facilities</i> .
BB reporting entity	<i>BB reporting entity</i> within this document includes <i>BB reporting entity</i> as defined under Part 18 of the National Gas Rules and a <i>transportation service provider</i> for a <i>transitional compression facility</i> registered with AEMO under the <i>Capacity Transfer and Auction Procedures</i> in accordance with section 91BRR of the National Gas Law.
Connection Point	A <i>receipt point</i> or <i>delivery point</i> or, in relation to a <i>transitional compression facility</i> , a <i>compression delivery point</i> or <i>compression receipt point</i> .
BB Procedures	The BB Procedures made under Part 18 of the National Gas Rules, which comprise of the document named the BB Procedures and these BB Data Submission Procedures.
Declared Transmission System	The Declared Transmission System (DTS), also known as the Victorian Transmission System (VTS), transports natural gas within Victoria, supplying the Melbourne metropolitan area and country areas.
e-Hub	API Web Portal and the API Gateway for both electricity and gas.
Rules	The National Gas Rules.

1.4 Interpretation of these Procedures

The following principles of interpretation apply to these BB Data Submission Procedures unless otherwise expressly indicated:

- (a) These BB Data Submission Procedures are subject to the principles of interpretation set out in Schedule 2 of the National Gas Law.
- (b) References to time are references to Australian Eastern Standard Time.
- (c) References to rules or sub-rules are to the relevant provision in the Rules.
- (d) A reference to a change in capacity or quantity includes an increase or decrease.
- (e) Where these Procedures contain a summary of a Rule in italics, the summary is for ease of reference only and does not form part of the Procedures.

2. Technical Overview

The provision of data from *BB reporting entities* to the BB in these BB Data Submission Procedures are explained and divided into two key areas:

- Data transfer formats which includes the form, validation rules, and timing of submissions.
- Data transfer mechanisms to submit data to the BB, and how the success and failure of those submissions is communicated back to the submitter.

There are several methods available to submit data to the BB:

- BB website file upload: CSV file upload using the BB website upload page.
- CSV file transfer using FTP: CSV file upload using FTP.
- RESTful web services: HTTP POST request using a RESTful interface.

Any of the above-mentioned methods may be used depending on the IT systems and requirements of the *BB reporting entity*.

All *BB reporting entities* submitting data to the BB must be registered in accordance with the Rules to be given access credentials to the BB.

Refer to Appendix A2 for how to submit transaction data in a RESTful style by a HTTPS POST request to Bulletin Board submission URLs.

3. Data Provision Requirements

In addition to the requirements in the National Gas Rules and the document named the *BB Procedures*, these BB Data Submission Procedures specifies provision of data from *BB reporting entities* to the BB as required by the Rules. This information includes the form, requirements, and timing of submissions.

Table 1 summarises the transaction data responsibilities of all parties as defined within Division 5 of the Rules and is explained in detail in section 4.

Table 1 Transaction data responsibilities

Transaction	Description	Reporting frequency	Submission cut-off times	BB reporting entity obligation under the Rules to provide data to AEMO					
				Production Facility Operators	Storage Facility Operators	Pipeline Operators	Transitional Compression Facility	Auction Facility Operators	Capacity Sellers
Short Term Capacity Outlook	Provides on each gas day D, the <i>BB facility</i> operator's good faith estimate of the daily capacity of the <i>BB facility</i> for gas days D+1 to D+7.	Daily	7:00 pm on gas day D.	●	●	●	●		
Daily Production and Flow	Provides on each gas day D for gas day D-1 , the <i>BB facility</i> operator's daily gas flow data for injections and withdrawals. Pipeline Operators must provide this information at each connection point for gas day D-1 .	Daily	1:00 pm on gas day D.	●	●	●	●		
Daily Storage	Provides on each gas day D at the end of gas day D-1 , the actual quantity of natural gas held in each <i>BB storage facility</i> at the end of gas day D-1 .	Daily	1:00 pm on gas day D.		●				
Connection Point Nameplate Rating	Provides the nameplate rating for each gate station connection point owned, controlled, or operated by the <i>BB pipeline</i> operator and connected to each of its <i>BB pipelines</i> . Where a gate station connection point that is connected to a <i>BB pipeline</i> is not owned by the <i>BB pipeline</i> operator, the nameplate rating will be provided by the <i>BB pipeline</i> operator if available. Provide the nameplate rating for each connection point on a <i>BB pipeline</i> or <i>transitional compression facility</i> .	Annually	31 March annually and whenever the standing capacity changes.			●	●		

Transaction	Description	Reporting frequency	Submission cut-off times	BB reporting entity obligation under the Rules to provide data to AEMO					
				Production Facility Operators	Storage Facility Operators	Pipeline Operators	Transitional Compression Facility	Auction Facility Operators	Capacity Sellers
Linepack Capacity Adequacy	Provides on each gas day D for gas days D to D+2 , the BB pipeline or transitional compression facility operator's Linepack Capacity Adequacy (LCA) flag for gas days D to D+2 .	Daily	7:00 pm on gas day D.			●	●		
Medium Term Capacity Outlook	Provides details of any activity expected to affect the daily capacity of a BB pipeline, BB production or BB storage facility in the next 12 months.	Ad_hoc	Not applicable as this report is ad hoc. Whenever the Medium Term Capacity changes.	●	●	●			
Nameplate Rating	Provides the nameplate rating of each BB facility annually or information about any planned permanent capacity reduction or expansion due to modification of the BB facility.	Annually	31 March annually and whenever the standing capacity changes.	●	●	●	●		
Nomination and Forecasts	For BB pipelines forming part of a Declared Transmission System, provides on each gas day D, the aggregated scheduled injections and withdrawals at each controllable system point for gas days D+1 and D+2. For all other BB facility-pipeline operators, provides on each gas day D the aggregate nominated and forecast injections and withdrawals at each connection point for gas days D+1 to D+6. For all other BB facility operators, provides on each gas day D the aggregate nominated and forecast injections and withdrawals, as applicable, for gas days D+1 to D+6.	Daily	For nominations, one hour after the start of gas day D. For forecast information and for other facilities in all cases, 9:00 pm on gas day D.	●	●	●	●		

Transaction	Description	Reporting frequency	Submission cut-off times	BB reporting entity obligation under the Rules to provide data to AEMO					
				Production Facility Operators	Storage Facility Operators	Pipeline Operators	Transitional Compression Facility	Auction Facility Operators	Capacity Sellers
			9:00 pm on gas day D						
Uncontracted Capacity Outlook	<p>Uncontracted primary pipeline capacity on <i>BB pipelines</i> for the next 12-36 months. Note: This does not include <i>BB pipelines</i> in the Declared Transmission System.</p> <p>Uncontracted storage capacity on <i>BB storage facilities</i> for each of the next 12 months.</p> <p>Uncontracted primary compression capacity on <i>transitional compression facilities</i> for each of the next 12 months.</p>	Monthly	7:00 pm on the last gas day of each month.		●	●	●		
BB Capacity Transaction	Provides information on <i>BB capacity transactions</i> , excluding those concluded through the <i>gas trading exchange</i> .	Ad hoc	7:00 pm on the day required in Rule 190C (3)						●
Auction curtailment notice	Provides a notice if an auction service is subject to curtailment in respect of a gas day.	Ad hoc	As soon as practicable after BB reporting entity becomes aware					●	
Daily auction service curtailment notice	Provides information about the amount of curtailed quantity of an auction service for each BB Auction Facility.	Daily	As per the Capacity Transfer and Auction Procedures					●	

3.1 Facility and Connection Point Identifiers

This section describes the changes to naming conventions for Facility Identifiers and Connection Point Identifiers Facility identifiers.

3.1.1 Facility Identifiers

Facility identifiers ([FacilityId](#)) used in transactions and reports subscribe to the following format:

```
5[2-8](?!0000)[0-9]{4}
```

Item	Description	Values
1	Energy type identifier	5 Gas
2	State code of element	2 NSW and ACT 3 Victoria 4 Queensland 5 South Australia 6 Western Australia 7 Tasmania 8 Northern Territory
3	State based unique identifying number	1 to 9999

Facility identifiers have the following characteristics:

- Facility identifiers ([FacilityIds](#)) are defined and allocated by AEMO to *BB reporting entities* during the registration process.
- A *BB reporting entity* may report on multiple Facility Identifiers.

For example, [Facility identifiersFacilityId](#) "520345" relates to an element (*BB reporting entity*) within NSW and ACT with a unique identifier of "0345" which is related to the gas industry.

3.1.2 Connection Point Identifiers

Connection Point Identifiers ([ConnectionPointId](#)) used in transactions and reports subscribe to the following format:

```
1[2-8](?!00000)[0-9]{5}
```

Item	Description	Values
1	Connection point identifier	1
2	State code of element	2 NSW and ACT 3 Victoria 4 Queensland 5 South Australia 7 Tasmania 8 Northern Territory
3	State based unique identifying number	1 to 99999

Connection Point Ids have the following characteristics:

- Connection-Point-Ids are defined and allocated by AEMO to *BB reporting entities* during the registration process.
- Individual Connection Point Ids will be assigned to support each injected or withdrawn gas flow from *BB pipelines* and *transitional compression facilities*.
- Individual Connection Point Ids may be assigned to *BB Production* and *BB Storage facilities* to support each injected or withdrawn gas flow.
- *BB reporting entities* must report flows into their respective facilities as receipts, and flows out of their respective facilities as deliveries, for each Connection Point Id.
- The state code element for a Connection Point Id corresponds to its physical location. In the case of *BB pipelines* that traverse multiple states, state codes for Connection Point Ids along the line can differ from that of other Connection Point Id and the pipeline's Facility Id.
- The 00001-99999 unique identifying number of a Connection Point Id to be unique for each state. Thus two Connection Point Ids in different states can have the same identifying number.

For example:

- Connection Point Id "1301000" relates to a connection point within Victoria with the state based unique numeric identifier of "01000".
- Connection Point Id "1401000" relates to a connection point within Queensland with the state based unique numeric identifier of "01000".

4. Transaction Data Responsibilities and Submission Formats

This section provides details on the form, requirements, and timing of submissions for gas transactions.

4.1 Short Term Capacity Outlook

Transaction name [SHORT TERM CAPACITY OUTLOOK](#)

Purpose Provide 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.

Submission cut-off time [Whenever there is a material change: 7:00 pm on gas day D](#)

Rollover Submitted values roll forward in the following manner:
The short term capacity outlook data is deemed to be unchanged for each of the gas days specified in the most recent submission; and
For subsequent gas days the short term capacity outlook data is deemed to be the same as the data for the last gas day included in the most recent short term capacity outlook submission.

Required by [The BB reporting entity for BB pipelines, BB production facilities, BB storage facilities and transitional compression facilities.](#)

Exemptions No exemptions will be given for this submission.

Notes [Submissions are made on gas day D for D + 1 up to D + 7 and can be updated on gas day D \(for that gas day D\). Further nominations beyond D + 7 may also be made. Submission can contain values for gas days from D up to D+7.](#)
In the case that the submission contains values for the current gas day (D), the submission is deemed to be an intra-day submission.
Intra-day submissions for the current gas day (D) will be accepted up to the end of gas day.
AEMO will always publish the latest Capacity Outlook submission, however a timeline of historic submissions may be reportable.

4.1.1 Data elements

Data	Data field name	Description	Mandatory	Data type	Example / Allowed values
Facility Id	FacilityId	A unique AEMO defined Facility identifier.	Yes	int	520345
Gas Date	GasDate	Date of gas day. Any time component supplied will be ignored. The gas day is that applicable under the pipeline contract or market rules.	Yes	datetime	2018-09-23
Capacity Type	CapacityType	Capacity type may be: Storage: Holding capacity in storage, or MDQ: Daily maximum firm capacity under the expected operating conditions.	Yes	varchar(10)	STORAGE;MDQ
Outlook Quantity	OutlookQuantity	Capacity Outlook quantity in TJ to three decimal places. Three decimal places is not required if the value has trailing zeros after the decimal place.	Yes	number(18,3)	200.531 190.2 (if the value is 190.200)

Data	Data field name	Description	Mandatory	Data type	Example / Allowed values
Flow Direction	FlowDirection	Indicates whether the capacity is for a <i>BB storage facility's</i> capacity for injecting into or withdrawing from a <i>BB pipeline</i> . Flow Direction can be: Receipt: The flow of gas <u>into</u> the <i>BB storage facility</i> , or Delivery: The flow of gas <u>out</u> of the <i>BB storage facility</i> .	Conditional This field is mandatory for <i>BB storage facilities</i> with MDQ Capacity Type value. Otherwise leave this blank.	char(8)	RECEIPT; DELIVERY
Capacity Description	CapacityDescription	Free text to describe the meaning of the capacity number provided, including a description of material factors that impact the capacity number and any other relevant information. This could be clarifying the 'name plate' or describing the limiting factor used to determine the 'name plate' capacity. For <i>transitional compression facilities</i> this should include expected inlet and outlet pressures.	Conditional This information is mandatory for <i>BB pipelines</i> and <i>transitional compression facilities</i> . Otherwise leave this blank.	varchar(800)	
Receipt Location	ReceiptLocation	The Connection Point Id that best represents the receipt location. In conjunction with the Delivery location, this will indicate direction and location of the capacity.	Conditional This information is mandatory for <i>BB pipelines</i> . Otherwise leave this blank.	int	1200001
Delivery Location	DeliveryLocation	The Connection Point Id that best represents the delivery location. In conjunction with the receipt location, this will indicate direction and location of the capacity.	Conditional This information is mandatory for <i>BB pipelines</i> . Otherwise leave this blank.	int	1300056
Description	Description	Free text facility use is restricted to a description for Describe the reasons or provide comments directly related to the quantity or the change in outlook quantity provided in relation to a <i>BB facility</i> and the times, dates, or duration for which those quantities or changes in quantities are expected to apply. This would be the 'outage type' and include the equipment involved. Include information on describing the location of transport routes affected for example, Eastern Gas Pipeline from Longford to Horsley Park. Where this is expected to affect multiple days for the same reason, each event is to be summarised as one line, rather than multiple entries across multiple days	No/Yes	varchar(255)	

Refer Appendix A3 for Data submission examples.

4.1.2 Requirements

- Outlook Quantity values must be submitted in TJs accurate to three decimal places.
- BB pipelines are required to submit capacities for each direction in which natural gas can be transported on the pipeline. An Outlook Quantity must be submitted with a Capacity Description and the Delivery Receipt Points. For complex pipeline facilities that involve more than two directions of flow, more than two capacity quantities may be required.
- Transitional compression facilities are required to report capacity for the facility. The Outlook Quantity must be submitted with a Capacity Description, including expected inlet and outlet pressures. BB storage facilities are required to report capacity for receipts into, and deliveries from, the BB storage facility as well as the quantity of natural gas that can be held in storage.
- Where a facility's capacity is reduced to zero, a zero value must be submitted.
- Submissions must only contain *BB pipelines*, *BB production facilities*, *BB storage facilities* or *transitional compression facilities* for which the *BB reporting entity* is registered.

4.1.3 Validation rules

- GasDate must conform to the date format YYYY-MM-DD.
- Submissions must only contain FacilityIds operated by registered to the Compld.
- Negative values are not accepted for the receipt or delivery Outlook Quantity.
- Where a submission contains values for the current gas day (D), the submission is deemed to be an intra-day submission.
- Intra-day submissions are accepted up to the end of the gas day.
- Nomination and actual flow submissions for facilities will be validated against the capacity for that facility.
- For pipelines the validations will be on the individual connection point capacities and flows
- For production and compression validations will be the MDQ capacity against flows
- For storage the validations will be against the MDQ capacity for Receipt and Delivery and Storage capacity for the held in storage volume
- The source of the capacity information will be from Short Term Capacity Outlook for MDQ and Storage capacity
- The source of the capacity to compare will be from connection point nameplate rating for pipelines.
- A configurable parameter will be used to validate the submission, initially this will be
 1. A soft warning will appear for submitting higher than capacity
 2. Another soft warning will appear for submitting higher than capacity multiplied by 1.3 (1.3 being configurable)
 3. Hard validation of 2 (configurable) times the capacity will be rejected
- Where a file contains multiple entries for one or more facilities, the validation will only apply to the exception. Valid entries within a submission will be stored in the database.
- For CSV file submissions, Description and Capacity Description with commas must be enclosed in double quotes or exclude any commas.
- Users will be able to submit short term capacity outlook flow data for any future gas day.

4.2 Daily Production Flow

Transaction name	<u>DAILY PRODUCTION AND FLOW</u>
Purpose	Provide on each gas day D, the <i>BB facility</i> operator's daily gas flow data for receipts and deliveries <u>and transitional compression facility operator's daily gas compression for gas day D-1.</u>
Submission cut-off time	1:00 pm on gas day D.
Rollover	No rollover.
Required by	<u>The BB reporting entity for BB pipelines, BB production facilities, BB storage facilities and transitional compression facilities.</u>
Exemptions	Two facilities connected to a single connection point may both be registered by AEMO. If one of these facilities is exempt from reporting flows for the connection point, submissions from that Facility Id in respect of the shared connection point are not mandatory.
Notes	Re-submissions and amendments on the initial submission are permitted. The BB Operator is notified if a re-submission is made after the submission cut-off time. AEMO always publish the latest actual flow submission. However, a timeline of historic submissions may be reportable.

4.2.1 Data elements and fields

Data	<u>Data Field Name</u>	Description	Mandatory	<u>Data Type</u>	<u>Example/ Allowed Values</u>
<u>Facility Id</u>	<u>FacilityId</u>	<u>A unique AEMO defined Facility identifier.</u>	<u>Yes</u>	<u>int</u>	<u>520345</u>
Gas Date	<u>GasDate</u>	Date of gas day. Any time component supplied will be ignored. The gas day is that applicable under the pipeline contract or market rules.	Yes	<u>datetime</u>	<u>2018-09-23</u>
Actual Quantity	<u>ActualQuantity</u>	The actual quantity of gas that flowed into a <i>BB facility</i> or out of a <i>BB facility</i> , or The actual quantity of gas compressed by the <i>transitional compression facility</i> .	Conditional This field is mandatory where Quality value is "OK"	<u>number(18,3)</u>	<u>32.232</u> <u>25.2 (if Actual Quantity is 25.200)</u>
Connection Point Id	<u>ConnectionPointId</u>	A unique AEMO defined connection point identifier.	Conditional This information is mandatory for <i>BB pipelines</i> . Otherwise leave this blank.	<u>int</u>	<u>1201001</u>
Flow Direction	<u>FlowDirection</u>	Flow Direction can be: Receipt: The flow of gas <u>into</u> the <i>BB facility</i> , or Delivery: The flow of gas <u>out</u> of the <i>BB facility</i> . N/A: Zero gas flows have been measured for the gas date or data is unavailable. Compressed: The action performed by the <i>transitional compression facility</i>	Yes	<u>char(8)</u>	<u>RECEIPT;</u> <u>DELIVERY;</u> <u>N/A;</u> <u>COMPRESSED</u>
Quality	<u>Quality</u>	Indicates whether meter data for the gas date is available.	Yes	<u>char(3)</u>	<u>OK; NIL</u>

Data	<u>Data Field Name</u>	Description	Mandatory	<u>Data Type</u>	<u>Example/ Allowed Values</u>
		Quality can be: OK: Connection Point Actual Quantity data for gas flow into or out of the <i>BB facility</i> is based on meter data. Nil: Connection Point Actual Quantity data for gas flow into or out of the <i>BB facility</i> cannot be determined due to an operational issue.			

4.2.2 Requirements

- Actual Quantity values represent physical gas flows and must be submitted in TJs accurate to three decimal places.
- Where there are zero gas flows at a connection point, an Actual Quantity of zero must be submitted with a flow direction of 'N/A' and Quality of 'OK'.
- A *BB pipeline* must provide gas flow for each connection point during a gas day.
- Where a *BB storage* or *BB production* facility has flows in both directions during a gas day, an aggregated Actual Quantity and Flow Direction must be submitted for the facility.
- A *transitional compression facility* must provide the quantity of gas compressed by the facility during the gas day.
- Where no available data exists for a connection point during the submission period due to an operational issue then a NULL Actual Quantity with a flow direction of 'N/A' and Quality of 'NIL' should be submitted.
- Submitted connection points must be registered against the Facility Id during the connection point registration process.
- Submissions must only contain *BB pipelines*, *BB production*, *BB storage facilities* or *transitional compression facility* operated by for which the BB reporting entity is registered.

Data Submission examples are listed in [Appendix A3](#).

4.2.3 Validation rules

- Gas Date must conform to the date format YYYY-MM-DD.
- Submissions must only contain Facility Ids operated by registered to the BB reporting entity.
- Connection Point Ids submitted must be registered against the Facility Id.
- Actual Quantity values must represent physical gas flows or compressed gas.
- Negative Actual Quantity values are not accepted.
- Connection point Actual Quantity must be provided as a receipt or delivery value.
- Transitional compression facility Actual Quantity must be provided as a compressed value.
- Where there are zero gas flows at a connection point, an Actual Quantity of zero must be submitted with a flow direction of 'N/A' and Quality of 'OK'.
- For each connection point in a submission, check the connection point's 'Flow Direction' as defined in the Detailed Information Facility in the BB.
- Where no available data exists for a connection point during the submission period due to an operational issue then a NULL Actual Quantity with a flow direction of 'N/A' and Quality of 'NIL' should be submitted.

- Connection point Actual Quantity is validated against the connection point nameplate rating.
- Facility Actual Quantity is validated against the most recent Short Term Capacity Outlook for that facility and gas date.

4.3 Daily Storage

Transaction name DAILY STORAGE

Purpose Provide ~~for on~~ each gas day D, the actual quantity of natural gas held in each *BB storage facilities* ~~at the end of the gas day D for gas day D-1~~.

Submission cut-off time 1:00 pm on gas day D.

Rollover No Rollover.

Required by The BB reporting entity for BB storage facilities.

Exemptions No exemptions are given for this submission.

4.3.1 Data elements and fields

Data	<u>Data field name</u>	Description	Mandatory	<u>Data type</u>	<u>Example / Allowed values</u>
Facility Id	<u>FacilityId</u>	A unique AEMO defined Facility identifier.	Yes	<u>datetime</u>	<u>2018-09-23</u>
Gas Date	<u>GasDate</u>	Date of gas day. Any time component supplied will be ignored. The gas day is that applicable under the pipeline contract or market rules.	Yes	<u>int</u>	<u>520345</u>
Actual Quantity	<u>ActualQuantity</u>	The actual quantity of gas held in a <i>BB storage facility</i> .	Yes	<u>number(18,3)</u>	<u>32.232</u> <u>25.2 (if Actual Quantity is 25.200)</u>

Data Submission examples are listed in Appendix A3.

4.3.2 Requirements

- Actual Held Quantity must be submitted in TJs accurate to three decimal places.
- Submissions must only contain *BB storage facilities* operated by for which the *BB reporting entity* is registered.

4.3.3 Validation rules

- Gas Date must conform to the date format YYYY-MM-DD.
- Submissions must only contain Facility Ids operated by registered to the Company Id.
- Actual Quantity values greater than zero must be submitted in TJs accurate to three decimal places.
- Negative Actual Quantity values are not accepted.

4.4 Connection Point Nameplate Rating

Transaction name	CP NAMEPLATE RATING
Purpose	<p>Provide nameplate ratings:</p> <p>For each <i>gate station connection point</i> owned, controlled, or operated by the <i>BB pipeline</i> operator and connected to each of its <i>BB pipelines</i>.</p> <p>For each <i>gate station connection point</i> connected to each of its <i>BB pipelines</i> which is not owned, controlled, or operated by the <i>BB pipeline</i> operator where the connection point nameplate rating has been provided to the <i>BB pipeline</i> operator by the facility who owns, controls, or operates the gate station connection point.</p> <p>For each connection point on a <i>BB pipeline</i> or a <i>transitional compression facility</i>.</p>
Submission frequency	Annually
Submission cut-off time	31 March annually and whenever the standing capacity changes.
Rollover	No rollover.
Required by	The BB reporting entity for BB pipelines.
Exemptions	No exemptions are given for this submission.

4.4.1 Data elements [and fields](#)

Data	Data field name	Description	Mandatory	Data type	Example/ Allowed values
Connection Point Id	ConnectionPointId	A unique AEMO defined connection point identifier.	Yes	int	1201001
Capacity Quantity	CapacityQuantity	Standing capacity quantity.	Yes	number(18,3)	32.232 25.2 (if the value is 25.200)
Effective Date	EffectiveDate	Gas day date that corresponding record takes effect. Any time component supplied will be ignored.	Yes	datetime	2018-03-23
Description	Description	Free text facility use is restricted to a description for reasons or comments directly related to the capacity quantity or the change in quantity provided in relation to a <i>BB facility</i> and the times, dates, or duration for which those quantities or changes in quantities are expected to apply.	No	varchar(255)	

[Data Submission examples are listed in Appendix A3.](#)

4.4.2 Requirements

- Capacity Quantity values must be submitted in TJs accurate to three decimal places.
- Submitted connection points must be registered against the Facility Id during the connection point registration process.

4.4.3 Validation rules

- Effective Date must conform to the date format YYYY-MM-DD.
- Submissions must only contain Connection Point Ids connected to a Pipeline or transitional compression facility operated by registered to the CompanyId.
- A Capacity Quantity value of zero must be submitted if there is no delivery flow.
- For CSV file submissions, Description and Capacity Description with commas must be enclosed in double quotes or exclude any commas.
- This is only required for *gate stations*, and information for a non-delivery point that is not a gate station should not be able to be submitted owner information.

4.5 Linepack Capacity Adequacy

<u>Transaction name</u>	<u>LINEPACK CAPACITY ADEQUACY</u>
Purpose	Provide on any gas day D, the <i>BB pipeline</i> and <i>transitional compression facility</i> operator's Linepack Capacity Adequacy (LCA) flag for gas days D to D+2.
Submission cut-off time	<u>7:00 pm on gas day D. Whenever there is a change.</u>
Rollover	Submitted values roll forward in the following manner: The last 3-day LCA Outlook provided for that <i>BB pipeline</i> or <i>transitional compression facility</i> is deemed to be unchanged. The <i>LCA flag</i> for the subsequent gas day is deemed to be the same as the <i>LCA flag</i> for D+2.
Required by	<u>The BB reporting entity for BB pipelines and transitional compression facilities.</u>
Exemptions	No exemptions are given for this submission.
Notes	Submissions <u>made on gas day D</u> can contain values <u>on gas day D for gas days D + 1 to D + 3 and can be updated on gas day D (for that gas day). Further nominations/submissions beyond D + 3 can may be made for gas days from D onwards.</u> Intra-day submissions for the current gas day (D) will be accepted up to the end of gas day. AEMO always publishes the latest LCA submission.

4.5.1 Data elements and fields

Data	<u>Data field name</u>	Description	Mandatory	<u>Data type</u>	<u>Example / Allowed values</u>
Facility Id	<u>FacilityId</u>	A unique AEMO defined Facility identifier.	Yes	<u>int</u>	<u>520345</u>
Gas Date	<u>GasDate</u>	Date of gas day. Any time component supplied will be ignored. The gas day is that applicable under the pipeline contract or market rules.	Yes	<u>datetime</u>	<u>2018-09-23</u>
Flag	<u>Flag</u>	<i>LCA flag</i> for a <i>BB pipeline</i> or <i>transitional compression facility</i> categorised as red, amber, or green.	Yes	<u>char(5)</u>	<u>RED; AMBER; GREEN</u>
Description	<u>Description</u>	Free text facility use is restricted to a description for reasons or comments directly related to the change in the <i>LCA flag</i> and the times, dates, or duration for which those changes are expected to apply.	Yes	<u>varchar(255)</u>	

LCA flags for BB pipelines are as follows in the BB Procedures.

LCA Flag	BB Pipelines	Declared Transmission System
GREEN	<u>Pipeline is accommodating increased gas flows.</u>	<u>Pipeline is accommodating increased gas flows.</u>
AMBER	<u>Pipeline is flowing at full capacity, but no involuntary curtailment of 'firm' load is likely or happening.</u>	<u>A Net Flow Transportation Constraint has been applied to the BB Pipeline or transitional compression facility that is impacting a schedule, but no involuntary curtailment of load is likely or happening.</u>
RED	<u>Involuntary curtailment of 'firm' load is likely or happening.</u>	<u>Involuntary curtailment of load is likely or happening.</u>

Data submission examples are listed in Appendix A3.

4.5.2 Validation Rules

- Gas Date must conform to the date format YYYY-MM-DD.
- Gas Date can be for D, D+1, or D+2.
- Submissions must only contain Facility Ids operated by registered to the Company Id.
- Rolling forward - The last three-day Linepack Capacity Adequacy Outlook provided for that BB pipeline or transitional compression facility is deemed to be unchanged.
- Rolling forward - The Linepack Capacity Adequacy flag for the subsequent gas day is deemed to be the same as the Linepack Capacity Adequacy flag for D+2.
- For CSV file submissions, Description, and Capacity Description with commas must be enclosed in double quotes, or exclude any commas
- Users will be able to submit linepack capacity adequacy data for any future gas date.

4.6 Medium Term Capacity Outlook

4.6.1 Transaction definition

Transaction name	MEDIUM TERM CAPACITY OUTLOOK
Purpose	Provide details of any activity expected to affect the daily capacity <u>in the medium term</u> of a BB pipeline, BB production, or BB storage facility in the next 12 months <u>beyond the current short term capacity outlook.</u>
Submission cut-off time	Not applicable as this report is ad hoc.
Rollover	No rollover.
Required by	<u>The BB reporting entity for BB pipelines, BB production facilities, or BB storage facilities.</u>
Exemptions	No exemptions are given for this submission.
Notes	<u>Medium Term Capacity Outlook (MTCO) is an adhoc submission with a start and end date and is typically only provided if there is a change of capacity materially different to nameplate rating on each day that the information is provided to BB shippers by a facility operator for the BB facility. A subsequent submission for the same (or crosses over) a all or part of the previous date range of a previous MTCO will replace the MTCO for that submission BB facility.</u> <u>a meaningful description of the key reason for the change in capacity</u> Where a BB reporting entity submits a Facility Id with record blank values for the remaining fields, this clears previous Medium Term Capacity Outlook submissions where the From Gas Date is on or after the current gas day (D) for the BB facility.

AEMO always publishes the latest Medium Term Capacity Outlook submission. However, a timeline of historic submissions may be reportable.

Provide a meaningful description of the key reason for the change in capacity in the 'Description Field'.

4.6.2 Data elements and fields

Data	<u>Data field name</u>	Description	Mandatory	<u>Data type</u>	<u>Example / Allowed values</u>
Facility Id	<u>FacilityId</u>	A unique AEMO defined Facility identifier.	Yes	<u>int</u>	<u>520345</u>
From Gas Date	<u>FromGasDate</u>	Date of gas day. Any time component supplied is ignored. The gas day is applicable under the pipeline contract or market rules.	Conditional This field can be left blank if all other fields (excluding Facility Id) are also left blank. This clears all existing future dated Medium Term Capacity Outlook submissions.	<u>datetime</u>	<u>2018-09-23</u>
To Gas Date	<u>ToGasDate</u>	Date of gas day. Any time component supplied is ignored. The gas day is that applicable under the pipeline contract or market rules.	Conditional This field can be left blank if all other fields (excluding Facility Id) are also left blank. This clears all existing future dated Medium Term Capacity Outlook submissions.	<u>datetime</u>	<u>2018-09-23</u>
Capacity Type	<u>CapacityType</u>	Capacity type can be either: Storage: Holding capacity in storage, or MDQ: Daily maximum firm capacity (name plate) under the expected operating conditions adjusted for any facility that is 'mothballed', decommissioned or down-rated and / or cannot be recalled within 1 week, planned maintenance excepted. Reflects any long terms changes (greater than 12 months).	Conditional This field can be left blank if all other fields (excluding Facility Id) are also left blank. This clears all existing future dated Medium Term Capacity Outlook submissions.	<u>varchar(10)</u>	<u>STORAGE; MDQ</u>
Outlook Quantity	<u>OutlookQuantity</u>	Capacity Outlook quantity. <u>Value in TJ to three decimal places. Three decimal places is not required if the value has trailing zeros after the decimal place.</u>	Conditional This field can be left blank if all other fields (excluding Facility Id) are also left blank. This clears all existing future dated Medium Term Capacity	<u>number(18,3)</u>	<u>200.531</u> <u>190.2 (if the value is 190.200)</u>

Data	Data field name	Description	Mandatory	Data type	Example / Allowed values
			Outlook submissions.		
Flow Direction	FlowDirection	Indicates whether the capacity is for a <i>BB storage facility's</i> capacity for injecting into or withdrawing from a <i>BB pipeline</i> . <u>Gas</u> Flow Direction can be: Receipt: The flow of gas <u>into</u> the <i>BB storage facility</i> , or Delivery: The flow of gas <u>out</u> of the <i>BB storage facility</i> .	Conditional This field is mandatory for <i>BB storage facilities</i> with a MDQ Capacity Type. Otherwise leave this blank.	char(8)	RECEIPT; DELIVERY
Capacity Description	CapacityDescription	Free text to describe the meaning of the capacity number provided, including a description of material factors that impact the capacity number and any other relevant information. <u>This could be clarifying the 'name plate' or describing the limiting factor used to determine the 'name plate' capacity.</u>	Conditional This information is mandatory for <i>BB pipeline</i> submissions with a MDQ Capacity Type. Otherwise leave this blank.	varchar(800)	
Receipt Location	ReceiptLocation	The Connection Point Id that best represents the receipt location. In conjunction with the Delivery location, this will indicate direction and location of the capacity.	Conditional This information is mandatory for <i>BB pipeline</i> submissions with a MDQ Capacity Type. Otherwise leave this blank.	int	1200001
Delivery Location	DeliveryLocation	The Connection Point Id that best represents the delivery location. In conjunction with the receipt location, this will indicate direction and location of the capacity.	Conditional This information is mandatory for <i>BB pipelines</i> submissions with a MDQ Capacity Type. Otherwise leave this blank.	int	1300056
Description	Description	<u>Free text facility use is restricted to a description. Describe for reasons or provide</u> comments directly related to the outlook quantity <u>or the change in quantity provided in relation to a BB facility</u> and the times, dates, or duration for which those <u>quantities or</u> changes in quantities are expected to apply. <u>This would be the 'outage type' and include the equipment involved. Include information on describing the location of transport routes affected for example, Eastern Gas Pipeline from Longford to Horsley Park. Where this is expected to affect multiple days for the same reason, each event is to be summarised as one line, rather than multiple entries across multiple days.</u>	Conditional This field can be left blank if all other fields (excluding Facility Id) are also left blank.	varchar(255)	

[Data Submission example is listed in Appendix A3.](#)

4.6.3 Requirements

- Outlook Quantity values must be submitted in TJs accurate to three decimal places.
- BB pipelines are required to submit capacities for each direction in which natural gas can be transported on the pipeline. An Outlook Quantity must be submitted with a Capacity Description and the Delivery and Receipt Points. Note that for complex pipeline facilities that involve more than two directions of flow, more than two capacities may be required.
- BB storage facilities are required to report capacity for receipts into, and deliveries from, the BB storage facility as well as the quantity of natural gas that can be held in storage.
- Where a facility's capacity is reduced to zero, a zero value must be submitted.
- On submission of an Medium Term Capacity Outlook, all existing submissions for a facility, where the start date is on or after the current gas day, shall be deleted and replaced with the new submission. Active Medium Term Capacity Outlooks where the start date is before the current gas day and the end date is on or after the current gas day will be end dated to the current gas day-1.
- Participants shall have the ability to delete all existing Medium Term Capacity Outlook submissions for a facility by submitting a record with the Facility ID and blank values for the remaining fields. This will delete all Medium Term Capacity Outlook submissions for the specified facility where the start date is on or after the current gas day, and will also end date any active Medium Term Capacity Outlook submissions.
- Historical records where the Medium Term Capacity Outlook end date is before the current gas day cannot be modified or deleted.
- Submissions must only contain BB pipelines, BB production facilities, or BB storage facilities operated by for which the BB reporting entity is registered.

4.6.4 Validation rules

- GasDate must conform to the date format YYYY-MM-DD.
- Submissions must only contain Facility Ids operated by registered to the Company Id.
- Negative values are not accepted for the receipt or delivery Capacity Quantity.
- Pipelines are required to submit capacities for each direction in which natural gas can be transported on the pipeline.
- Pipeline Outlook Quantity must be submitted with a Capacity Description and the Delivery and Receipt Points.
- Storage facilities are required report capacity for receipts into, and deliveries from, the BB storage facility as well as the quantity of natural gas that can be held in storage.
- For CSV file submissions, Description and Capacity Description with commas must be enclosed in double quotes, or exclude any commas.

4.7 Nameplate Rating

Transaction name	NAMEPLATE RATING
Purpose	Provide the nameplate rating of each <i>BB facility</i> annually or information about any planned permanent capacity reduction or expansion due to modification of the <i>BB facility</i> . With respect to production capacity, Standing Capacity should take long term field performance trends into account.
Submission frequency	Annually
Submission cut-off time	31 March annually and whenever the standing capacity changes.

Rollover	No rollover.
Required by	<u>The BB reporting entity for BB pipelines, BB production facilities, BB storage facilities or and transitional compression facilities.</u>
Exemptions	No exemptions are given for this submission.
Notes	<p><u>BB pipelines are required to submit capacities for each direction in which natural gas can be transported on the pipeline. A Capacity Quantity must be submitted with a Capacity Description and the Delivery and Receipt Locations. Note that for complex pipeline facilities that involve more than two directions of flow, more than two capacities may be required.</u></p> <p><u>Transitional compression facilities must provide a Capacity Description of other maximum quantities under other standard operating conditions including a description of those conditions including expected inlet and outlet pressures</u></p>

4.7.1 Data elements and fields

Data	<u>Date field name</u>	Description	Mandatory	<u>Data type</u>	<u>Example / Allowed values</u>
Facility Id	<u>FacilityId</u>	A unique AEMO defined Facility identifier.	Yes	<u>int</u>	<u>520345</u>
Capacity Type	<u>CapacityType</u>	Capacity type can be either: Storage: Holding capacity in storage, or MDQ: Daily maximum firm capacity (name plate) under the expected operating conditions adjusted for any facility that is 'mothballed', decommissioned or down-rated and / or cannot be recalled within 1 week, planned maintenance excepted. Reflects any long terms changes (greater than 12 months), or The maximum quantity of gas that can be compressed by the <i>transitional compression facility</i> on a given day, without breaching operational limits.	Yes	<u>varchar(10)</u>	<u>STORAGE; MDQ</u>
Capacity Quantity	<u>CapacityQuantity</u>	Standing capacity quantity.	Yes	<u>number(18,3)</u>	<u>32.232</u> <u>25.2 (if the value is 25.200)</u>
Flow Direction	<u>FlowDirection</u>	Indicates whether the capacity is for a <i>BB storage facility's</i> capacity for injecting into or withdrawing from a <i>BB pipeline</i> . Flow Direction can be: Receipt: The flow of gas <u>into</u> the <i>BB storage facility</i> , or Delivery: The flow of gas <u>out</u> of the <i>BB storage facility</i> .	Conditional This field is mandatory for BB storage facilities. Otherwise leave this blank.	<u>varchar(10)</u>	<u>RECEIPT; DELIVERY</u>
Capacity Description	<u>CapacityDescription</u>	Free text to describe the meaning of the capacity number provided, including a description of material factors that impact the capacity	Conditional This information is mandatory for BB pipelines	<u>varchar(800)</u>	

Data	<u>Date field name</u>	Description	Mandatory	<u>Data type</u>	<u>Example / Allowed values</u>
		number and any other relevant information. If applicable, <i>transitional compression facilities</i> must also provide a Capacity Description of other maximum quantities under other standard operating conditions including a description of those conditions including expected inlet and outlet pressures.	and <i>transitional compression facilities</i> . Otherwise leave this blank.		
Receipt Location	<u>ReceiptLocation</u>	The Connection Point ID for the receipt location. In conjunction with the Delivery point, this will indicate direction and location of the capacity.	Conditional This information is mandatory for BB pipelines. Otherwise leave this blank.	<u>int</u>	<u>1200001</u>
Delivery Location	<u>DeliveryLocation</u>	The Connection Point ID for the delivery location. In conjunction with the Receipt point, this will indicate direction and location of the capacity.	Conditional This information is mandatory for BB pipelines. Otherwise leave this blank.	<u>int</u>	<u>1300056</u>
Effective Date	<u>EffectiveDate</u>	Gas day date that corresponding record takes effect. Any time component supplied will be ignored.	Yes	<u>datetime</u>	<u>2018-03-23</u>
Description	<u>Description</u>	Free text facility use is restricted to a description for reasons or comments directly related to the quantity or the change in quantity provided in relation to a <i>BB facility</i> (such as daily production data, nameplate rating, <i>LCA flag</i> , etc.), and the times, dates, or duration for which those quantities or changes in quantities are expected to apply.	Yes	<u>varchar(255)</u>	

[Data submission examples are listed in Appendix A3.](#)

4.7.2 Requirements

- Capacity Quantity must be submitted in TJs accurate to three decimal places.
- *BB pipelines* are required to submit capacities for each direction in which natural gas can be transported on the pipeline. A Capacity Quantity must be submitted with a Capacity Description and the Delivery and Receipt Points. Note that for complex pipeline facilities that involve more than two directions of flow, more than two capacities may be required.

- *Transitional compression facilities* must submit a Capacity Quantity with a Capacity Description for the facility.
- If applicable, *transitional compression facilities* must also provide a Capacity Description of other maximum quantities under other standard operating conditions including a description of those conditions.
- *BB storage facilities* are required to report capacity for receipts into, and deliveries from, the *BB storage facility* as well as the quantity of natural gas that can be held in storage.
- Submissions must only contain *BB pipelines*, *BB production facilities*, *BB storage facilities* or *transitional compression facility* operated by for which the *BB reporting entity* is registered.

4.7.3 Validation rules

- Effective Date must conform to the date format YYYY-MM-DD.
- Submissions must only contain Facility Ids operated by registered to the Company Id.
- Submissions must only contain Facility Ids operated by for which the BB reporting entity identity is registered.
- Negative values are not accepted for the receipt or delivery Capacity Quantity.
- Pipelines are required to submit capacities for each direction in which natural gas can be transported on the pipeline.
- Pipeline Capacity Quantity must be submitted with a Capacity Description and the Delivery and Receipt Points.
- *Transitional compression facilities* must submit a Capacity Quantity with a Capacity Description for the facility.
- If applicable, *transitional compression facilities* must also provide a Capacity Description of other maximum quantities under other standard operating conditions including a description of those conditions
- Storage facilities are required to report capacity for receipts into, and deliveries from, the BB storage facility as well as the quantity of natural gas that can be held in storage.
- For CSV file submissions, Description and Capacity Description with commas must be enclosed in double quotes or exclude any commas.

4.8 Nominations and Forecasts

Transaction name	NOMINATIONS_AND_FORECASTS
Purpose	For <i>BB pipelines</i> 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 D to D+2. For all other <i>BB facility</i> operators, provide on each gas day D the aggregated nominated and forecast injections and aggregated nominated and forecast withdrawals for D to D+6.
Submission frequency	Daily
Submission cut-off time	For storage facilities providing nominations, one hour after the start of gas day D. For storage facilities providing forecast information and for other facilities in all cases, 9:00pm on gas day D
Rollover	No rollover.
Required by	<u>The BB reporting entity for</u> <i>BB pipelines</i> , <i>BB production facilities</i> , <i>BB storage facilities</i> and <i>transitional compression facilities</i> .
Exemptions	Two facilities connected to a single connection point may both be registered by AEMO. If one of these facilities is exempt from reporting flows for the connection point, submissions from that Facility ID are not mandatory.

Notes Submissions may contain data for the current gas day, which are intra-day changes to nominations and forecasts. Intra-day submissions are accepted four hours after the close of gas day D until midday on the gas day after (D+1).
AEMO always publish the latest Delivery Nomination submission. However, a timeline of historic submissions may be reportable.

4.8.1 Data elements and fields

Data	<u>Data field name</u>	Description	Mandatory	<u>Data type</u>	<u>Example / Allowed values</u>
Gas Date	<u>GasDate</u>	Date of gas day. Any time component supplied will be ignored. The gas day is that applicable under the pipeline contract or market rules.	Yes	<u>datetime</u>	<u>2018-09-23</u>
Facility ID	<u>FacilityId</u>	A unique AEMO defined Facility identifier.	Yes	<u>int</u>	<u>520345</u>
Connection Point ID	<u>ConnectionPointId</u>	A unique AEMO defined connection point identifier.	Conditional This information is mandatory for <i>BB pipelines</i> Otherwise leave this blank.	<u>int</u>	<u>1201001</u>
Flow Direction	<u>FlowDirection</u>	Flow Direction can be: Receipt: The flow of gas <u>into</u> the <i>BB facility</i> , or Delivery: The flow of gas <u>out</u> of the <i>BB facility</i> . Compressed: The action performed by the <i>transitional compression facility</i>	Yes	<u>char(8)</u>	<u>RECEIPT; DELIVERY; COMPRESSED;</u>
Nomination Quantity	<u>NominationQuantity</u>	Delivery Nomination quantity, or Gas compression Nomination quantity.	Yes	<u>number(18,3)</u>	<u>32.561</u> <u>25.2 (if the value is 25.200)</u>

4.8.2 Requirements

- Nomination Quantity values greater than zero must be submitted in TJs accurate to three decimal places.
- A *BB pipeline* must provide Nomination Quantities for each connection point.
- Where a *BB storage* or *BB production* facility has flows in both directions, an aggregated Nomination Quantity and Flow Direction must be submitted for the facility.
- A *transitional compression facility* must provide Nomination Quantities of gas compressed by the facility
- Where there are zero receipts or zero deliveries at a connection point, a Nomination Quantity of zero must be submitted for the relevant direction.
- Where a connection point is unidirectional a Nomination Quantity for this direction, either as a receipt or delivery must be provided.
- Submitted connection points must be registered against the Facility ID during the connection point registration process.

- Submissions must only contain BB pipelines, BB production facilities, BB storage facilities or *transitional compression facilities* operated by for which the BB reporting entity is registered.

Data submission examples are listed in Appendix A3.

4.8.3 Validation Rules

- GasDate must conform to the date format YYYY-MM-DD.
- Submissions must only contain Facility Ids operated by registered to the Company Id.
- Negative values are not accepted for the receipt or delivery Nomination Quantity.
- For each connection point in a submission, check the connection point's 'Flow Direction' as defined in the reference data. If the connection point is bi-directional, a submission must contain a Nomination Quantity for receipt and delivery.
- If the connection point is unidirectional, a Nomination Quantity must be provided for the direction.
- Users will be able to submit nomination and forecast flow data for any future gas date.

4.9 [Removed]

4.10 [Removed]

4.11 Uncontracted Capacity Outlook

Transaction name	UNCONTRACTED_CAPACITY_OUTLOOK
Purpose	Provides information on: Uncontracted primary pipeline capacity on <i>BB pipelines</i> for the next <u>3612</u> months. Note: This does not include <i>BB pipelines</i> in the Declared Transmission System. Uncontracted storage capacity on <i>BB storage facilities</i> for the next 12 months. Uncontracted primary compression capacity on <i>transitional compression facilities</i> for the next 12 months.
Submission cut-off time	By 7:00 pm on the last gas day of each month.
Rollover	Submitted values roll forward in the following manner: The Uncontracted Capacity Outlook data is deemed to be unchanged for each of the months specified in the most recent submission; and For subsequent months, the Uncontracted Capacity Outlook data is deemed to be the same as the data for the last month in the most recent Uncontracted Capacity Outlook submission.
Required by	<u>The BB reporting entity for</u> <i>BB pipelines, BB storage facilities and transitional compression facilities</i> .
Exemptions	No exemptions are given for this submission.

4.11.1 Data elements and fields

Data	<u>Data field name</u>	Description	Mandatory	<u>Data type</u>	<u>Example / Allowed values</u>
Facility Id	<u>FacilityId</u>	A unique AEMO defined Facility identifier.	Yes	<u>int</u>	<u>520345</u>
Outlook Month	<u>OutlookMonth</u>	The outlook month.	Yes	<u>int</u>	<u>04</u>

Data	Data field name	Description	Mandatory	Data type	Example / Allowed values
Outlook Year	OutlookYear	The outlook year.	Yes	int	2018
Capacity Type	CapacityType	Capacity type can be either: Storage: Holding capacity in storage, or MDQ: Daily maximum firm capacity (name plate) under the expected operating conditions adjusted for any Facility that is 'mothballed', decommissioned or down-rated and / or cannot be recalled within 1 week, planned maintenance excepted. Reflects any long terms changes (greater than 12 months), or The maximum quantity of gas that can be compressed by the <i>transitional compression facility</i> on a given day, without breaching operational limits.	Yes	varchar(10)	STORAGE; MDQ
Outlook Quantity	OutlookQuantity	Daily average quantity across a month, expressed in TJ to three decimal places. Three decimal places is not required if the value has trailing zeros after the decimal place.Capacity Outlook quantity.	Yes	number(18,3)	200.531 190.2 (if the value is 190.200)
Flow Direction	FlowDirection	Indicates whether the capacity is for a <i>BB storage facility's</i> capacity for injecting into or withdrawing from a <i>BB pipeline</i> . Flow Direction can be: Receipt: The flow of gas <u>into</u> the <i>BB storage facility</i> , or Delivery: The flow of gas <u>out</u> of the <i>BB storage facility</i> .	Conditional This field is mandatory for <i>BB storage facilities with MDQ Capacity Type value</i> . Otherwise leave this blank.	char(8)	RECEIPT; DELIVERY
Capacity Description	CapacityDescription	Free text to describe the meaning of the capacity number provided, including a description of material factors that impact the capacity number and any other relevant information.	Conditional This information is mandatory for <i>BB pipelines and transitional compression facilities with a MDQ Capacity Type</i> . Otherwise leave this blank.	varchar(800)	
Receipt Location	ReceiptLocation	The Connection Point Id for the receipt location. In conjunction with the Delivery point, this will indicate direction and location of the capacity.	Conditional This information is mandatory for <i>BB pipelines submissions with a MDQ Capacity Type</i> . Otherwise leave this blank.	int	1200001

Data	Data field name	Description	Mandatory	Data type	Example / Allowed values
Delivery Location	DeliveryLocation	The Connection Point Id for the delivery location. In conjunction with the Receipt point, this will indicate direction and location of the capacity.	Conditional This information is mandatory for <i>BB pipelines with a MDQ Capacity Type</i> . Otherwise leave this blank.	int	1300056
Description	Description	Free text facility use is restricted to a description for reasons or comments directly related to the quantity or the change in quantity provided in relation to a <i>BB facility</i> (such as daily production data, nameplate rating, <i>LCA flag</i> , etc.), and the times, dates, or duration for which those quantities or changes in quantities are expected to apply.	No	varchar(255)	

4.11.2 Requirements

- Outlook Quantity must be submitted in TJs accurate to three decimal places.
- *BB pipelines* are required to submit capacities for each direction in which natural gas can be transported on the pipeline. An Outlook Quantity must be submitted with a Capacity Description and the Delivery and Receipt Points. Note that for complex pipeline facilities that involve more than two directions of flow, more than two capacities may be required.
- *BB storage facilities* are required to report capacity for receipts into, and deliveries from, the *BB storage facility* as well as the quantity of natural gas that can be held in storage.
- *Transitional compression facilities* must submit an Outlook Quantity with a Capacity Description for the facility.
- Where a facility's capacity is reduced to zero, a zero value must be submitted.
- Submissions must only contain *BB pipelines*, *BB storage facilities* or *transitional compression facilities operated by* for which the *BB Reporting Entity is registered*.

[Data submission examples are listed in Appendix A3.](#)

4.11.3 Validation Rules

- [GasDate must conform to the date format YYYY-MM-DD.](#)
- [Submissions must only contain Facility Ids operated by registered to the Company Id.](#)
- [Negative values are not accepted for the receipt or delivery Capacity Quantity.](#)
- [For CSV file submissions, Description and Capacity Description with commas must be enclosed in double quotes, or exclude any commas.](#)
- [Pipelines are required to submit capacities for each direction in which natural gas can be transported on the pipeline.](#)
- [Pipeline Outlook Quantity must be submitted with a Capacity Description and the Delivery and Receipt Points.](#)

- Transitional compression facilities must submit an Outlook Quantity with a Capacity Description for the facility.
- Storage facilities are required report capacity for receipts into, and deliveries from, the BB storage facility as well as the quantity of natural gas that can be held in storage.

4.12 BB Capacity Transaction

Transaction name	BB_CAPACITY_TRANSACTION
Purpose	Provides information on: <i>BB capacity transactions, excluding those concluded through the gas trading exchange.</i>
Submission cut-off time	The earlier of: 1 business day after the <i>trade date</i> for the <i>BB capacity transaction</i> ; and The day prior to the date on which the <i>service term</i> for the <i>BB capacity transaction</i> starts. Or where the <i>service term</i> for a <i>BB capacity transaction</i> starts on the <i>trade date</i> for the transaction, as soon as reasonably practicable on the <i>trade date</i> .
Rollover	No Rollover
Required by	<u>The BB reporting entity for BB transportation facility user or capacity transaction reporting agent</u>
Exemptions	No exemptions are given for this submission.

4.12.1 Data elements and fields

Data	<u>Data field name</u>	Description	Mandatory	<u>Data type</u>	<u>Example / Allowed values</u>
Trade Id	<u>TradeId</u>	A unique AEMO defined trade identifier.	Conditional This field is mandatory when updating an existing trade.	<u>int</u>	<u>123456</u>
Trade Date	<u>TradeDate</u>	Date the trade was made.	Yes	<u>datetime</u>	<u>2018-03-01</u>
From Gas Date	<u>FromGasDate</u>	Effective start date of the trade	Yes	<u>datetime</u>	<u>2018-03-10</u>
To Gas Date	<u>ToGasDate</u>	Effective end date of the trade	Yes	<u>datetime</u>	<u>2018-03-20</u>
Buyers Name	<u>BuyerName</u>	The descriptive name of the buyer	Yes	<u>String (255)</u>	<u>Star Energy</u>
Sellers Name	<u>SellerName</u>	The descriptive name of the seller	Yes	<u>String (255)</u>	<u>Purple Energy</u>
Facility Id	<u>FacilityId</u>	The unique AEMO defined Part 24 Facility Identifier	Conditional This information is mandatory for Part 24 facilities. Otherwise leave this blank.	<u>int</u>	<u>520001</u>
Facility Name	<u>FacilityName</u>	The descriptive name of the Facility that is not	Conditional This information is mandatory for	<u>String (255)</u>	<u>Tamworth pipeline</u>

Data	<u>Data field name</u>	Description	Mandatory	<u>Data type</u>	<u>Example / Allowed values</u>
		registered as a Part 24 Facility.	facilities that are NOT Part 24 facilities. Otherwise leave this blank.		
Flow Direction	<u>FlowDirection</u>	The directional of flow relative to the general direction of the facility that is not registered as a Part 24 facility. Valid values are: NORTH NORTH_EAST NORTH_WEST EAST SOUTH SOUTH_EAST SOUTH_WEST WEST	Conditional This information is mandatory for facilities that are NOT Part 24 facilities. Otherwise leave this blank.	<u>String (10)</u>	<u>NORTH</u>
Standard OTSA	<u>StandardOTSA</u>	Identify if a standard OTSA was used. Valid values: YES NO	Yes	<u>String (255)</u>	<u>YES</u>
BB Transportation Service Type	<u>BBTransportationServiceType</u>	The transportation service type. Valid values: FORWARD_HAUL BACKHAUL PARK LOAN COMPRESSION	Yes	<u>String (12)</u>	<u>FORWARD_HAUL;</u>
Priority	<u>Priority</u>	The priority of the traded capacity	Yes	<u>String (3)</u>	<u>Secondary firm</u>
Receipt Point Id	<u>ReceiptPointId</u>	The unique AEMO defined Receipt Part 24 Service Point identifier. This is the point where gas is injected into the pipeline.	Conditional This information is mandatory for Part 24 facilities; and BB Transportation Service Type = FORWARD_HAUL, BACKHAUL or COMPRESSION.	<u>int</u>	<u>3001</u>
Delivery Point Id	<u>DeliveryPointId</u>	The unique AEMO defined Delivery Part 24 Service Point identifier. This is the point where gas is withdrawn from the pipeline.	Conditional This information is mandatory for Part 24 facilities; and BB Transportation Service Type = FORWARD_HAUL, BACKHAUL or COMPRESSION.	<u>int</u>	<u>4001</u>

Data	Data field name	Description	Mandatory	Data type	Example / Allowed values
Park Loan Point Id	ParkLoanPointId	The unique AEMO defined Part 24 Service Point identifier.	Conditional This information is mandatory for Part 24 facilities; and BB Transportation Service Type = PARK or LOAN.	int	5001
Quantity	Quantity	The traded maximum daily quantity (MDQ) (GJ/day).	Yes	int	240
MHQ	MHQ	The traded maximum hourly quantity (GJ/hour).	Yes	int	10
Price	Price	The price of the capacity traded (\$/GJ/day).	Yes	Decimal (18,2)	4.20
Price structure	PriceStructure	The price structure applied over the term of the trade.	No	varchar (255)	Variable
Price escalation mechanism	PriceEscalationMechanism	The price escalation mechanism applied over the term of the trade.	No	varchar (255)	10% per annum

[Data submission example is listed in Appendix A3.](#)

4.12.2 Validation rules

- [Delivery and Receipt Point Id's must be valid within the registered list of service points in the transportation service point register established under Part 24 where the Facility Id is populated.](#)
- [Park Loan Point Id's must be valid within the registered list of service points in the transportation service point register established under Part 24 where the Facility Id is populated.](#)
- [Facility Name and Flow Direction must be populated where the Facility is not registered under Part 24.](#)
- [Quantity and MHQ must be greater than 0](#)
- [Price must be equal to or greater than 0.](#)

4.13 Auction Curtailment Notice

Purpose	Provides a notice if an auction service is subject to curtailment in respect of a gas day.
Submission cut-off time	In accordance with Rule 190A(2), an auction curtailment notice must be provided to AEMO as soon as practicable after the BB reporting entity becomes aware of the circumstances giving rise to the curtailment. In accordance with Rule 190A(3), a BB reporting entity must update the auction curtailment notice for its BB auction facility if the information provided in the auction curtailment notice is no longer accurate, including due to circumstances resulting in additional curtailment of the auction service for the gas day.
Rollover	No Rollover
Required by	The BB reporting entity for BB reporting entity for a BB auction facility.
Exemptions	No exemptions are given for this submission.

4.13.1 Requirements

- The data elements and requirements for this submission are specified in the Capacity Transfer and Auction Interface Protocol, provided for by the Capacity Transfer and Auction Procedures.
- The transaction has been specified such that the facility operator for a Part 24 facility will provide this information in accordance the Capacity Transfer and Auction Interface Protocol.

4.14 Daily Auction Service Curtailment Information

Purpose	Provides information about the amount of curtailed quantity of an auction service for each BB Auction Facility.
Submission cut-off time	As specified in the Capacity Transfer and Auction Procedures
Rollover	No Rollover
Required by	<i>BB reporting entity for a BB auction facility.</i>
Exemptions	No exemptions are given for this submission.

4.14.1 Requirements

- The data elements and requirements for this submission are specified in the Capacity Transfer and Auction Interface Protocol, provided for by the Capacity Transfer and Auction Procedures.
- The report has been specified such that the facility operator for a Part 24 facility will provide this information in accordance with 21.2.1 of the Capacity Transfer and Auction Procedures.
- AEMO will aggregate RQs provided to AEMO in accordance with 21.2.1 of the Capacity Transfer and Auction Procedures for each BB auction facility for each gas day for publication on the BB as daily auction service curtailment information for each BB auction facility – this will be published as the ‘Revised Auction Quantities’ report.

A1. Data Submission

This Appendix describes how to submit and validate transaction data using:

- File transfer protocol (FTP)
- MarketNet

A1.1 System requirements

Submitting data using the FTP interface requires:

- Access credentials to the BB file server.
- Public internet access (AEMO network access is not required).
- FTP client software.

Submitting data over MarketNet requires:

- Access credentials to MarketNet. Access is provided during registration.
- Participant user access rights provided by your company's participant administrator.
- Internet access (MarketNet connection is required).

A1.2 CSV Format

CSV data format is used to submit data using FTP. Details and examples of transaction data in CSV format are provided in transaction specifications. See A1.3.

A comma in a free text field (such as Capacity Description and Description) is treated as a value separator in the validation process and results in validation errors. To prevent this validation error, exclude commas in the description, or enclose the description with commas in double quotes "".

Filename convention

BB submitted CSV files must conform to the following naming convention:

[COMPID]_[TRANSACTIONNAME]_[CCYYMMDDHHMMSS].CSV

The format of each filename component is:

<u>Name part</u>	<u>Description</u>	<u>Format</u>
<u>COMPID</u>	<u>The relevant gas company identifier of the BB reporting entity as allocated by AEMO during the registration process.</u>	<u>Text</u>
<u>TRANSACTIONNAME</u>	<u>The name of the transaction to which the CSV file is supplied, with no white spaces. The list of possible transaction names is:</u> <ul style="list-style-type: none">• <u>SHORT TERM CAPACITY OUTLOOK</u>• <u>DAILY PRODUCTION AND FLOW</u>• <u>DAILY STORAGE</u>• <u>NOMINATIONS AND FORECASTS</u>• <u>GS NAMEPLATE RATING</u>• <u>CP NAMEPLATE RATING</u>• <u>LINEPACK CAPACITY ADEQUACY</u>• <u>MEDIUM TERM CAPACITY OUTLOOK</u>• <u>SECONDARY BID OFFER SUMMARY</u>• <u>SECONDARY TRADE SUMMARY</u>• <u>NAMEPLATE RATING</u>	<u>Text</u>

<u>Name part</u>	<u>Description</u>	<u>Format</u>
	<ul style="list-style-type: none"> • <u>UNCONTRACTED_CAPACITY_OUTLOOK</u> 	
<u>CCYYMMDDHHMMSS</u>	<u>Date/time stamp in the format CCYYMMDDHHmmSS when the file has been generated, 24-hour format, local time.</u>	<u>Datetime (CCYYMMDDhhmmss)</u>
<u>CSV</u>	<u>The file extension of "CSV", separated from the file name with a period "."</u>	

For example, a filename for a linepack capacity adequacy transaction generated on the 2018-09-01 at 13:15:00 by the *BB reporting entity* with a company identifier of 123 is:

123_LINEPACK_CAPACITY_ADEQUACY_20180901131500.CSV

A1.3 Uploading a CSV file using FTP

To upload a CSV file using FTP:

1. Prepare a data file in CSV format utilising a text editor, or third-party tool.

If you open a text file with .CSV extension in Microsoft Excel, the date format changes to dd-MM-YY that is incompatible with the AEMO date format specification YYYY-MM-DD.

Each CSV file can contain multiple records but only data pertaining to the transaction type specified in the <TRANSACTIONNAME> component of the filename.

2. Connect to one of the following FTP servers manually or using automated system/s by specifying a username and password.

- Pre-production FTP server: ftp.preprod.gbb.aemo.com.au
- Production FTP server: ftp.gbb.aemo.com.au
- Once connected, you are directed to the default directory.

AEMO recommends the use of PASSIVE mode for FTP connections.

3. Transfer the files using FTP into the "Export" subdirectory within your organisation's FTP directory. The BB systems continually poll each 'Export' subdirectory for any new files and processes them accordingly. For example, /Export/COMPID_TRANSACTIONNAME YYYYMMDDHHMMSS.csv

The files are validated and transaction success or failure is provided in the INT944 Transaction Log which is deposited in the "Import" subdirectory in your organisation's FTP directory. The Transaction Log includes details of any error found within the submitted file/s.

The CSV transaction file will only be accepted by the system if **all** its records have passed all validations.

A1.4 Uploading a file using MarketNet

To find out more about:

- How to submit data using CSV
- How to view Nominations and Forecasts data

Refer to the [AEMO Guide To Information Systems](#).

A1.5 Transaction acknowledgment

A1.5.1 FTP

A Transaction Log report is generated for each FTP file submission which is available in the *BB reporting entities* private FTP file directory. The Transaction Log files are retained in a *BB reporting entities* file directory for seven days. Files exceeding the retention period are automatically moved into the Archive folder.

- If the CSV transaction file passed all validations, then the file is accepted, and the Transaction Log file is generated with a success message and error code 0.
- If at least one record in the submitted CSV transaction file fails validation, then the file is rejected and the Transaction Log file is generated with a list of the error codes. For a list of error codes, see Appendix A5 (Validation error codes).

A1.5.2 MarketNet

- If the uploaded CSV transaction file passes all validations, the file is accepted and a success message is displayed.
- If at least one record in the submitted CSV transaction file fails validation, then the file is rejected and an error message is displayed.

A2. RESTful web services data submission

You can submit transaction data in a RESTful style by a HTTPS POST request to BB submission URLs. To use the RESTful interface through HTTPS, AEMO's web services are accessed through a MarketNet connection.

A2.1 API Web Portal

The AEMO API Web Portal provides information to implement your APIs and includes documentation, examples, code samples, and API policies:

- Pre-production environment: <https://apis.preprod.aemo.com.au:9319/ws/gbb/report/v1/{resourceName}>
- Production environment: <https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/{resourceName}>

For detailed information on accessing the e-Hub (API Web Portal and API Gateway), and using the API Portal, see the [Guide to AEMO's e-Hub APIs](#).

A2.2 System Requirements

API Web Portal

- MarketNet or internet connection. For more information about MarketNet, see [Guide to Information Systems](#).
- User ID and password.

API Gateway

- Access to MarketNet.
- An application to Base64 encode your User Rights Management (URM) username and password for authorisation. Provided by your Participant Administrator.
- Authentication using an SSL digital certificate which contains a:
 - [Digitally signed certificate: A digital certificate provided by the participant that is digitally signed by AEMO.](#)
 - [E-Hub public certificate: AEMO's public key certificate.](#)
 - [Root certificate: Public key certificate that identifies the root certificate authority \(CA\).](#)
 - [For more information on how to obtain these certificates, see "SSL certificates" in the \[Guide to AEMO's e-Hub APIs\]\(#\).](#)

Access to production and pre-production APIs require different SSL certificates.

A2.3 HTTPS POST request format

A HTTPS POST request consists of:

- [HTTPS request header attributes as shown in the following table.](#)
- [Request body which contains the submission data in JSON objects and properties. It must only contain the content of a single transaction type.](#)

A2.3.1 HTTPS request header attributes

<u>Header parameter</u>	<u>Description</u>	<u>Allowed values / Example</u>
<u>Content-Type</u>	<u>HTTPS request format.</u>	<u>Content-type: application/json</u>
<u>Accept</u>	<u>HTTPS response format.</u>	<u>Accept: application/json</u>
<u>Content-Length</u>	<u>Content length of file. The value is populated when the request is sent.</u>	<u>Content-length: nnn</u>
<u>X-initiatingParticipantID</u>	<u>The participant ID</u>	<u>X-initiatingParticipantID: 123456</u>
<u>X-market</u>	<u>The market type that the request applies.</u>	<u>X-market: GAS</u>
<u>Authorization</u>	<u>Specifies basic HTTP authentication containing the Base64[1] encoded username and password. The participant's URM username and password are concatenated with a colon separator and then Base64 encoded.</u>	<u>Authorization: Basic QFhQVC0wMDAwMzoyZWRmOGJhYS0wY2I0LTQwZjctOTIyMS0yODUxNmM4N2MxNjQ=</u> <u>(For URM username "@XPT-00003" and password "2edf8baa-0cb4-40f7-9221-28516c87c164")</u>

An example of a Daily Storage HTTPS POST request is shown below.

- POST request URL: TBC
- Participant ID: 123456

OTHER HEADER INFORMATION TBC

```
Content-type: application/json  
Accept: application/json  
Content-length: nnn  
Authorization: Basic QFhQVC0wMDAwMzoyZWRmOGJhYS0wY2I0LTQwZjctOTIyMS0yODUxNmM4N2MxNjQ=  
X-initiatingParticipantID: 123456  
X-market: GAS  
  
{  
  "ItemList": [  
    {  
      "GasDate": "2018-12-01T00:00:00",  
      "FacilityId": 530038,  
      "ActualQuantity": 200.861  
    }  
  ]  
}
```

The JSON body properties for transaction POST requests is shown in the [AEMO API portal > API Gallery > Gas Bulletin Board](#) and the transaction specifications.

A swagger file can also be downloaded from [AEMO API portal > API Gallery > Gas Bulletin Board > API documents](#) which contains RESTful API specification for BB data submissions.

For NIL quality, you can use "null" for the property value, or alternatively excluding the data property in the submission automatically sets the property to null.

A2.4 Submission URLs

A data submission must be a HTTPS POST request to a valid BB submission URL. Each transaction type has a unique submission URL as shown in the following table.

The URLs for reports share a common base URL format. The format of the base URL is shown below.

Market Facing Internet web service host

<https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/{resourceName}>

<https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/{resourceName}>

Market Facing MarketNet web service host

<https://apis.preprod.marketnet.net.au:9319/ws/gbb/submission/v1/{resourceName}>

<https://apis.prod.marketnet.net.au:9319/ws/gbb/submission/v1/{resourceName}>

Notes:

- Participants can use either service (Internet or MarketNet) to submit data. For example, if you use MarketNet instead of the Internet service, substitute <https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/reportName> with <https://apis.preprod.marketnet.net.au:9319/ws/gbb/submission/v1/reportName>
- Submission URLs are case-sensitive. Resource Name is always camelCase.

A2.4.1 URLs for submitting transaction data

<u>Transaction Type</u>	<u>URL</u>
<u>Daily Production and Flow</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/dailyProductionAndFlow) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/dailyProductionAndFlow)
<u>Gate Station Nameplate Rating</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/gateStationNameplateRating) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/gateStationNameplateRating)
<u>Connection Pont Nameplate Rating</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/connectionPointNameplateRating) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/connectionPointNameplateRating)
<u>Linepack Capacity Adequacy</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/linepackCapacityAdequacy) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/linepackCapacityAdequacy)
<u>Medium Term Capacity Outlook</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/mediumTermCapacityOutlook) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/mediumTermCapacityOutlook)
<u>Nameplate Rating</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/nameplateRating) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/nameplateRating)
<u>Nomination and Forecasts</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/nominationsAndForecasts) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/nominationsAndForecasts)
<u>Secondary Pipeline Capacity Bid</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/secondaryPipelineCapacityBidsOffers) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/secondaryPipelineCapacityBidsOffers)

<u>Transaction Type</u>	<u>URL</u>
<u>and Offer Summary</u>	
<u>Secondary Pipeline Capacity Trade Summary</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/secondaryPipelineCapacityTrades) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/secondaryPipelineCapacityTrades)
<u>Uncontracted Capacity Outlook</u>	BB pre-production server: (https://apis.preprod.aemo.com.au:9319/ws/gbb/submission/v1/uncontractedCapacityOutlook) BB production server: (https://apis.prod.aemo.com.au:9319/ws/gbb/submission/v1/uncontractedCapacityOutlook)

Transaction data is only accepted by the system if all data passes validations.

A2.5 HTTPS response format

The submission response from the server consists of two parts: the response status code and the response body. The response status codes returned by the GBB are shown in the following table.

A2.5.1 Response Codes

<u>Code</u>	<u>Response body</u>	<u>Data condition</u>	<u>Description</u>
<u>200</u>	<u>OK</u>	<u>Successful request.</u>	<u>Successful request.</u>
<u>400</u>	<u>{ "Fault": "<SystemMessageExceptio nDump>" }</u>	<u>The service cannot be found for the endpoint reference (EPR) <URI></u>	<u>The service cannot be found for the endpoint reference (EPR) <URI></u>
<u>401</u>	<u>{ "Exception": "Unauthorized:Invalid UserName or Password" }</u>	<u>Invalid credentials.</u>	<u>Invalid credentials, or no username or password in the HTTP request header.</u>
<u>404</u>	<u>{ "Exception": "Resources for the endpoint URI not found. Endpoint URI: <Resource>" }</u>	<u>Resource not found.</u>	<u>Not found</u>
<u>405</u>	<u>{ "Exception": "Input request HTTP method is <Invalid Method passed> but operation <Resource Name> accepts only: [<Valid Method>]" }</u>	<u>Invalid Method used (e.g. GET used instead of POST)</u>	<u>Method Not Allowed</u>
<u>422</u>	<u>TBC</u>	<u>Business validation failure</u>	<u>Unprocessable entity.</u>

<u>Code</u>	<u>Response body</u>	<u>Data condition</u>	<u>Description</u>
500	{ "Exception": "Application Unavailable" }	e-Hub is operational but downstream systems are not available.	Application Unavailable
503	{ "Exception": "Service invocation for API was rejected based on policy violation" }	Exceeds throttling limits	Service invocation for API was rejected based on policy violation
	Error message: javax.net.ssl.SSLHandshake Exception: Received fatal alert: bad certificate	SSL Certificate authentication validation failed	

The server returns a Content-Type of application/json, and a JSON formatted string consisting of two fields: status and error.

A2.5.2 Response fields

<u>Field</u>	<u>Data Type</u>	<u>Description</u>
Data	Object	This data object contains all the results of the submission. The properties of the data object are dependent on the service call.

An example of a successful submission response is shown below:

```
{
  "data": {},
  "errors": null
}
```

An example of an unsuccessful submission with HTTP response code 422 is shown below. A transaction error code is shown with details of the error.

```
{
  "data": {},
  "errors": [
    {
      "code": 73,
      "title": "InvalidBuySell",
      "detail": "BuySell value 24.1 is not valid",
      "source": null
    }
  ]
}
```

For a complete list of transaction code errors, see Appendix A5.

A1.A3. Data Submission Examples

A1.A3.1 Short Term Capacity Outlook

A1.A3.1.1 Example 1

The following example shows a Short Term Capacity Outlook intra-day data submission for a *BB pipeline* NSW-Victoria Interconnect. This is an amendment to D+5 of submission period 2018-09-02 to 2018-09-08 due to unplanned maintenance on the Eurora Compressor Station.

A CSV file format example is shown for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data and does not include header file information.

- Submission for 2018-09-06 (D+5).
- A nominated and forecast flow submission for a *BB pipeline* (520047).
- A *BB pipeline* has a Capacity Type value "MDQ", and Capacity Description, Receipt Location, and Delivery Location must be provided.

CSV file format

```
GasDate, FacilityId, CapacityType, OutlookQuantity, FlowDirection, Capacity  
Description, ReceiptLocation, DeliveryLocation, Description
```

```
2018-09-06, 520047, MDQ, 170.1, , This transmission capacity is the amount of gas that the  
Culcairn delivery point is able to withdraw from this pipeline facility. This  
capacity is dependent on the forecast DTS demand and the availability of key assets  
on this pipeline facility, 1200001, 1200004, Capacity reduced due to unplanned  
maintenance of Euroa Compressor Station
```

JSON file format

```
{  
  "ItemList": [  
    {  
      "GasDate": "2018-09-06T00:00:00+10:00",  
      "FacilityId": 520047,  
      "CapacityType": "MDQ",  
      "OutlookQuantity": 170.1,  
      "FlowDirection": null  
      "CapacityDescription": "This transmission capacity is the amount of gas that  
the Culcairn delivery point is able to withdraw from this pipeline facility. This  
capacity is dependent on the forecast DTS demand and the availability of key assets  
on this pipeline facility",  
      "ReceiptLocation": 1200001,  
      "DeliveryLocation": 1200004,  
      "Description": Capacity reduced due to unplanned maintenance of Euroa  
Compressor Station  
    }  
  ]  
}
```

```
]
}
```

A3.1.2 Example 2

The following example shows a Short Term Capacity Outlook data submission for a *BB pipeline* Longford to Melbourne. A *BB pipeline* has a Capacity Type value "MDQ", and Capacity Description, Receipt Location, and Delivery Location must be provided.

A CSV file format example is shown for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission date 2017-12-01 for 2017-12-02 (D+1) to 2017-12-08 (D+7).
- A nominated and forecast flow submission for a *BB pipeline* (530067).

CSV file format

```
GasDate, FacilityId, CapacityType, OutlookQuantity, FlowDirection, Capacity
Description, ReceiptLocation, DeliveryLocation, Description
2017-12-02, 530067, MDQ, 1030.525, ,, This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant, 1700001, 1300004, ,,
2017-12-03, 530067, MDQ, 1020.938, ,, This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant, 1700001, 1300004, ,,
2017-12-04, 530067, MDQ, 1025.941, ,, This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant, 1700001, 1300004, ,,
2017-12-05, 530067, MDQ, 1023.856, ,, This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant, 1700001, 1300004, ,,
2017-12-06, 530067, MDQ, 1020.1, ,, This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant, 7200001, 1300004, ,,
2017-12-07, 530067, MDQ, 1023.350, ,, This transmission capacity is the amount of gas that
the Culcairn delivery point is able to withdraw from this pipeline facility. This
capacity is dependent on the forecast DTS demand and the availability of key assets
on this pipeline facility, 1700001, 1300004, ,,
2017-12-08, 530067, MDQ, 1021.556, ,, This transmission capacity is the amount of gas that
the Culcairn delivery point is able to withdraw from this pipeline facility. This
capacity is dependent on the forecast DTS demand and the availability of key assets
on this pipeline facility, 1700001, 1300004, ,,
```

JSON file format

```
{
  "ItemList": [
    {
      "GasDate": "2017-12-02T00:00:00+10:00",
      "FacilityId": 530067,
      "CapacityType": "MDQ",
      "OutlookQuantity": 1030.525,
      "FlowDirection": null,
      "CapacityDescription": "This transmission capacity is the amount of gas that the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang Lang receipt point are able to inject into this pipeline facility. This capacity is limited by the maximum operating pressure of this pipeline facility and the maximum injection pressure of the Longford Gas Plant",
      "ReceiptLocation": 1700001,
      "DeliveryLocation": 1300004,
      "Description": null,
    }
  ],
  {
    "GasDate": "2017-12-03T00:00:00+10:00",
    "FacilityId": 530067,
    "CapacityType": "MDQ",
    "OutlookQuantity": 1020.938,
    "FlowDirection": null,
    "CapacityDescription": "This transmission capacity is the amount of gas that the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang Lang receipt point are able to inject into this pipeline facility. This capacity is limited by the maximum operating pressure of this pipeline facility and the maximum injection pressure of the Longford Gas Plant",
    "ReceiptLocation": 1700001,
    "DeliveryLocation": 1300004,
    "Description": null,
  }
  {
    "GasDate": "2017-12-04T00:00:00+10:00",
    "FacilityId": 530067,
    "CapacityType": "MDQ",
    "OutlookQuantity": 1025.941,
    "FlowDirection": null,
```

```

    "CapacityDescription": "This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant",
    "ReceiptLocation": 1700001,
    "DeliveryLocation": 1300004,
    "Description": null,
  },
  {
    "GasDate": "2018-12-05T00:00:00+10:00",
    "FacilityId": 530067,
    "CapacityType": "MDQ",
    "OutlookQuantity": 1023.856,
    "FlowDirection": null,
    "CapacityDescription": "This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant",
    "ReceiptLocation": 1700001,
    "DeliveryLocation": 1300004,
    "Description": null,
  },
  {
    "GasDate": "2017-12-06T00:00:00+10:00",
    "FacilityId": 530067,
    "CapacityType": "MDQ",
    "OutlookQuantity": 1020.1,
    "FlowDirection": null,
    "CapacityDescription": "This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant",
    "ReceiptLocation": 1700001,
    "DeliveryLocation": 1300004,
    "Description": null,
  },
  {
    "GasDate": "2017-12-07T00:00:00+10:00",
    "FacilityId": 530067,

```



```

    "CapacityType": "MDQ",
    "OutlookQuantity": 1023.350,
    "FlowDirection": null,
    "CapacityDescription": "This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant",
    "ReceiptLocation": 1700001,
    "DeliveryLocation": 1300004,
    "Description": null,
  },
  {
    "GasDate": "2017-12-08T00:00:00+10:00",
    "FacilityId": 530067,
    "CapacityType": "MDQ",
    "OutlookQuantity": 1021.55,
    "FlowDirection": null,
    "CapacityDescription": "This transmission capacity is the amount of gas that
the Longford receipt point, VicHub receipt point, TasHub receipt point and the Lang
Lang receipt point are able to inject into this pipeline facility. This capacity is
limited by the maximum operating pressure of this pipeline facility and the maximum
injection pressure of the Longford Gas Plant",
    "ReceiptLocation": 1700001,
    "DeliveryLocation": 1300004,
    "Description": null
  }
]
}

```

A1.1.2A3.1.3 Example 3

The following scenario shows a Short Term Capacity Outlook data submission for a *BB storage facility* LNG Storage Dandenong for gas withdrawn from the Victorian Declared Transmission System to top-up this storage facility. *BB storage facilities* are required to report capacity for receipts into, and deliveries from the *BB storage facility* as well as natural gas quantities that can be held in storage.

A CSV file format example is provided for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission date 2018-10-14 for 2018-10-15 (D+1) to 2018-10-21 (D+7).
- A short term capacity submission for LNG Storage Dandenong (530020).
- A *BB storage facility* has a Capacity Type value "STORAGE". Flow direction, Capacity Description, Receipt Location, Delivery Location, and Description information are not required.

- A BB storage facility has a Capacity Type value "MDQ".

CSV file format

```
GasDate, FacilityId, CapacityType, OutlookQuantity, FlowDirection, Capacity
Description, ReceiptLocation, DeliveryLocation, Description
2018-10-15, 530020, STORAGE, , 237.525, , , ,
2018-10-15, 530020, MDQ, RECEIPT, , 150.321, , , ,
2018-10-15, 530020, MDQ, DELIVERY, , 37.601, , , ,
2018-10-16, 530020, STORAGE, , 300.961, , , ,
2018-10-16, 530020, MDQ, RECEIPT, , 135.901, , , ,
2018-10-16, 530020, MDQ, DELIVERY, , 126.781, , , ,
2018-10-17, 530020, STORAGE, , 240.961, , , ,
2018-10-17, 530020, MDQ, RECEIPT, , 130.805, , , ,
2018-10-17, 530020, MDQ, DELIVERY, , 160.729, , , ,
2018-10-18, 530020, STORAGE, , 238, , , ,
2018-10-18, 530020, MDQ, RECEIPT, , 237.525, , , ,
2018-10-18, 530020, MDQ, DELIVERY, , 240.647, , , ,
2018-10-19, 530020, STORAGE, , 236.1, , , ,
2018-10-19, 530020, MDQ, RECEIPT, , 236.189, , , ,
2018-10-19, 530020, MDQ, DELIVERY, , 240.665, , , ,
2018-10-20, 530020, STORAGE, , 235.35, , , ,
2018-10-20, 530020, MDQ, RECEIPT, , 235.792, , , ,
2018-10-20, 530020, MDQ, DELIVERY, , 234.15, , , ,
2018-10-21, 530020, STORAGE, , 236.556, , , ,
2018-10-21, 530020, MDQ, RECEIPT, , 242, , , ,
2018-10-21, 530020, MDQ, DELIVERY, , 239.185, , , ,
```

JSON file format

```
{
  "ItemList": [
    {
      "GasDate": "2018-10-15T00:00:00+10:00",
      "FacilityId": 530020,
      "CapacityType": "STORAGE",
      "OutlookQuantity": 237.525,
      "FlowDirection": null,
      "CapacityDescription": null,
      "ReceiptLocation": null,
      "DeliveryLocation": null,
      "Description": null
    },
    {
      "GasDate": "2018-10-15T00:00:00+10:00",
```

```
"FacilityId": 530020,  
"CapacityType": "MDQ",  
"OutlookQuantity": 150.321,  
"FlowDirection": "RECEIPT",  
"CapacityDescription": null,  
"ReceiptLocation": null,  
"DeliveryLocation": null,  
"Description": null  
},  
{  
"GasDate": "2018-10-15T00:00:00+10:00",  
"FacilityId": 530020,  
"CapacityType": "MDQ",  
"OutlookQuantity": 37.601,  
"FlowDirection": "DELIVERY",  
"CapacityDescription": null,  
"ReceiptLocation": null,  
"DeliveryLocation": null,  
"Description": null  
},  
{  
"GasDate": "2018-10-16T00:00:00+10:00",  
"FacilityId": 530020,  
"CapacityType": "STORAGE",  
"OutlookQuantity": 300.961,  
"FlowDirection": null,  
"CapacityDescription": null,  
"ReceiptLocation": null,  
"DeliveryLocation": null,  
"Description": null  
},  
{  
"GasDate": "2018-10-16T00:00:00+10:00",  
"FacilityId": 530020,  
"CapacityType": "MDQ",  
"OutlookQuantity": 135.961,
```

```

    "FlowDirection": "RECEIPT",
    "CapacityDescription": null,
    "ReceiptLocation": null,
    "DeliveryLocation": null,
    "Description": null
  },
  {
    "GasDate": "2018-12-16T00:00:00+10:00",
    "FacilityId": 530020,
    "CapacityType": "MDQ",
    "OutlookQuantity": 126.781,
    "FlowDirection": "DELIVERY",
    "CapacityDescription": null,
    "ReceiptLocation": null,
    "DeliveryLocation": null,
    "Description": null
  },
  {
    "GasDate": "2018-10-17T00:00:00+10:00",
    "FacilityId": 530020,
    "CapacityType": "STORAGE",
    "OutlookQuantity": 240.961,
    "FlowDirection": null,
    "CapacityDescription": null,
    "ReceiptLocation": null,
    "DeliveryLocation": null,
    "Description": null
  },
  {
    "GasDate": "2018-10-17T00:00:00+10:00",
    "FacilityId": 530020,
    "CapacityType": "MDQ",
    "OutlookQuantity": 130.805,
    "FlowDirection": "RECEIPT",
    "CapacityDescription": null,
    "ReceiptLocation": null,

```

```
"DeliveryLocation": null,  
  "Description": null  
},  
{  
  "GasDate": "2018-12-17T00:00:00+10:00",  
  "FacilityId": 530020,  
  "CapacityType": "MDQ",  
  "OutlookQuantity": 160.729,  
  "FlowDirection": "DELIVERY",  
  "CapacityDescription": null,  
  "ReceiptLocation": null,  
  "DeliveryLocation": null,  
  "Description": null  
},  
{  
  "GasDate": "2018-10-18T00:00:00+10:00",  
  "FacilityId": 530020,  
  "CapacityType": "STORAGE",  
  "OutlookQuantity": 238,  
  "FlowDirection": null,  
  "CapacityDescription": null,  
  "ReceiptLocation": null,  
  "DeliveryLocation": null,  
  "Description": null  
},  
{  
  "GasDate": "2018-10-18T00:00:00+10:00",  
  "FacilityId": 530020,  
  "CapacityType": "MDQ",  
  "OutlookQuantity": 237.525,  
  "FlowDirection": "RECEIPT",  
  "CapacityDescription": null,  
  "ReceiptLocation": null,  
  "DeliveryLocation": null,  
  "Description": null  
},
```

```
{
  "GasDate": "2018-12-18T00:00:00+10:00",
  "FacilityId": 530020,
  "CapacityType": "MDQ",
  "OutlookQuantity": 240.647,
  "FlowDirection": "DELIVERY",
  "CapacityDescription": null,
  "ReceiptLocation": null,
  "DeliveryLocation": null,
  "Description": null
},
{
  "GasDate": "2018-10-19T00:00:00+10:00",
  "FacilityId": 530020,
  "CapacityType": "STORAGE",
  "OutlookQuantity": 236.1,
  "FlowDirection": null,
  "CapacityDescription": null,
  "ReceiptLocation": null,
  "DeliveryLocation": null,
  "Description": null
},
{
  "GasDate": "2018-10-19T00:00:00+10:00",
  "FacilityId": 530020,
  "CapacityType": "MDQ",
  "OutlookQuantity": 236.189,
  "FlowDirection": "RECEIPT",
  "CapacityDescription": null,
  "ReceiptLocation": null,
  "DeliveryLocation": null,
  "Description": null
},
{
  "GasDate": "2018-12-19T00:00:00+10:00",
  "FacilityId": 530020,
```

```
"CapacityType": "MDQ",
"OutlookQuantity": 240.665,
"FlowDirection": "DELIVERY",
"CapacityDescription": null,
"ReceiptLocation": null,
"DeliveryLocation": null,
"Description": null
},
{
"GasDate": "2018-10-20T00:00:00+10:00",
"FacilityId": 530020,
"CapacityType": "STORAGE",
"OutlookQuantity": 235.35,
"FlowDirection": null,
"CapacityDescription": null,
"ReceiptLocation": null,
"DeliveryLocation": null,
"Description": null
},
{
"GasDate": "2018-10-20T00:00:00+10:00",
"FacilityId": 530020,
"CapacityType": "MDQ",
"OutlookQuantity": 235.792,
"FlowDirection": "RECEIPT",
"CapacityDescription": null,
"ReceiptLocation": null,
"DeliveryLocation": null,
"Description": null
},
{
"GasDate": "2018-12-20T00:00:00+10:00",
"FacilityId": 530020,
"CapacityType": "MDQ",
"OutlookQuantity": 234.15,
"FlowDirection": "DELIVERY",
```

```
"CapacityDescription": null,  
"ReceiptLocation": null,  
"DeliveryLocation": null,  
"Description": null  
},  
{  
"GasDate": "2018-10-21T00:00:00+10:00",  
"FacilityId": 530020,  
"CapacityType": "STORAGE",  
"OutlookQuantity": 236.556,  
"FlowDirection": null,  
"CapacityDescription": null,  
"ReceiptLocation": null,  
"DeliveryLocation": null,  
"Description": null  
},  
{  
"GasDate": "2018-10-21T00:00:00+10:00",  
"FacilityId": 530020,  
"CapacityType": "MDQ",  
"OutlookQuantity": 242,  
"FlowDirection": "RECEIPT",  
"CapacityDescription": null,  
"ReceiptLocation": null,  
"DeliveryLocation": null,  
"Description": null  
},  
{  
"GasDate": "2018-12-21T00:00:00+10:00",  
"FacilityId": 530020,  
"CapacityType": "MDQ",  
"OutlookQuantity": 239.185,  
"FlowDirection": "DELIVERY",  
"CapacityDescription": null,  
"ReceiptLocation": null,  
"DeliveryLocation": null,
```



```

    "Description": null
  }
]
}

```

A3.2 Daily Production Flow

The following scenarios show the Daily Production and Flow data submissions in a CSV file format for FTP transfer or BB website upload, and JSON file format for HTTP web services.

A3.2.1 Example 1

Example 1 is a Daily Production and Flow data submission for three connection points.

A CSV file format example is shown for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission date is 2018-09-01 for 2018-08-31 (D-1).
- Daily actual flow for a BB pipeline 520047.
- Connection Points:
 - Connection Point 1201001 with Storage Facility 520068.
 - Connection Point 1201002 with Production Facility 520070.
 - Connection Point 1201003 with Pipeline 530015.

CSV file example

```

GasDate, FacilityId, ConnectionPointId, FlowDirection, ActualQuantity, Quality
2018-08-31, 520047, 1201001, DELIVERY, 25.525, OK
2018-08-31, 520047, 1201001, RECEIPT, 0.345, OK
2018-08-31, 520047, 1201002, RECEIPT, 15.513, OK
2018-08-31, 520047, 1201003, RECEIPT, 12.221, OK

```

JSON format example

```

{
  "ItemList": [
    {
      "GasDate": "2017-08-31T00:00:00",
      "FacilityId": 520047,
      "ConnectionPointId": 1201001,
      "ActualQuantity": 25.525,
      "Quality": "OK",
      "FlowDirection": "DELIVERY"
    },
    {

```

```

    "GasDate": "2017-12-01T00:00:00",
    "FacilityId": 520047,
    "ConnectionPointId": 1201001,
    "ActualQuantity": 0.345,
    "Quality": "OK",
    "FlowDirection": "RECEIPT"
  },
  {
    "GasDate": "2017-12-01T00:00:00",
    "FacilityId": 520047,
    "ConnectionPointId": 1201002,
    "ActualQuantity": 15.513,
    "Quality": "OK",
    "FlowDirection": "RECEIPT"
  },
  {
    "GasDate": "2017-12-01T00:00:00",
    "FacilityId": 530038,
    "ConnectionPointId": 1201003,
    "ActualQuantity": 12.221,
    "Quality": "OK",
    "FlowDirection": "RECEIPT"
  }
]
}

```

A3.2.2 Example 2

Example 2 is a data submission that includes a connection point in the delivery flow direction that was not operational. Hence, gas flow could not be measured resulting in a "NIL" Quality value and null Actual Quantity value.

A CSV file format example is shown for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission date is 2018-09-01 for 2018-08-31 (D-1).
- Daily actual flow for a BB Storage Facility 520068.
- Connection Point 1201001 with Pipeline 520047.

CSV file example

```
GasDate, FacilityId, ConnectionPointId, FlowDirection, ActualQuantity, Quality
2018-08-31, 520068, , RECEIPT, 25.525, OK
2018-08-31, 520068, , N/A, , NIL
```

JSON format example

```
{
  "ItemList": [
    {
      "GasDate": "2018-08-31T00:00:00",
      "FacilityId": 520068,
      "ConnectionPointId": null,
      "ActualQuantity": 25.525,
      "Quality": "OK",
      "FlowDirection": "RECEIPT"
    },
    {
      "GasDate": "2018-08-31T00:00:00",
      "FacilityId": 520068,
      "ConnectionPointId": null,
      "ActualQuantity": null,
      "Quality": "NIL",
      "FlowDirection": "N/A"
    }
  ]
}
```

A3.3 Daily Storage

A3.3.1 Example 1

The following example shows the Daily Storage data submission in a CSV file format for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission date is 2018-09-01 for 2018-08-31 (D-1).
- BB storage facility 520047.

CSV file example

```
FacilityId, GasDate, ActualQuantity
520047, 2018-08-31, 158.335
520047, 2018-08-31, 160.753
520047, 2018-08-31, 199.324
```

JSON file example

```
{
  "ItemList": [
    {
      "GasDate": "2018-08-31T00:00:00",
      "FacilityId": 520047,
      "ActualQuantity": 158.335
    },
    {
      "GasDate": "2017-08-31T00:00:00",
      "FacilityId": 520047,
      "ActualQuantity": 160.753
    },
    {
      "GasDate": "2017-08-31T00:00:00",
      "FacilityId": 520047,
      "ActualQuantity": 199.324
    }
  ]
}
```

A3.4 Connection Point Nameplate Rating

A3.4.1 Example 1

The following example shows a Connection Point Nameplate Rating data submission. A CSV file format example is provided for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission date is 2018-08-06.
- Connection Point 1301002.

CSV file format

```
ConnectionPointId,CapacityQuantity,EffectiveDate,Description
1301002,201.65,2018-08-06,
1301003,200.783,2018-08-06,
```

JSON format example

```
{
  "ItemList": [
    {
```

```

    "ConnectionPointId": "1301002",
    "CapacityQuantity": 201.65,
    "EffectiveDate": 2018-08-06,
    "Description": null
  },
  {
    "ConnectionPointId": "1301003",
    "CapacityQuantity": 200.783,
    "EffectiveDate": 2018-08-06,
    "Description": null
  }
]
}

```

A3.5 Linepack Capacity Adequacy

A3.5.1 Example 1

The following scenarios is a LCA data submission for the Eastern pipeline.

A CSV file format example is shown for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission date is 2018-09-01 for 2018-09-03.
- *BB pipeline 520061.*

CSV file example

```

GasDate, FacilityId, Flag, Description
2018-09-01, 520061, GREEN, All ok
2018-09-02, 520061, GREEN, All ok
2018-09-03, 520061, GREEN, All ok

```

JSON file example

```

{
  "ItemList": [
    {
      "GasDate": "2018-09-01T00:00:00",
      "FacilityId": 520061,
      "Flag": GREEN
      "Description": All ok
    }
  ]
}

```

```

    },
    {
      "GasDate": "2018-09-02T00:00:00",
      "FacilityId": 520061,
      "Flag": GREEN
      "Description": All ok
    },
    {
      "GasDate": "2018-09-03T00:00:00",
      "FacilityId": 520061,
      "Flag": GREEN
      "Description": All ok
    }
  ]
}

```

A3.5.2 Example 2

The following scenarios is an intra-day LCA data submission for a BB pipeline that has an unplanned outage. A CSV file format example is shown for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Company Id is 100
- Submission date is 2018-09-01 for 2018-09-01 (D-1).
- BB pipeline 520052.

CSV file example

```

GasDate, FacilityId, Flag, Description
2018-09-01, 550052, AMBER, Unplanned outage on the Berwyndale to Wallumbilla Pipeline

```

JSON file example

```

{
  "CompanyId": 100,
  "ItemList": [
    {
      "GasDate": "2018-09-01T00:00:00",
      "FacilityId": 550052,
      "Flag": "AMBER",
      "Description": "Unplanned outage on the Berwyndale to Wallumbilla Pipeline"
    }
  ]
}

```

A3.6 Medium Term Capacity Outlook

A3.6.1 Example 1

A Medium Term Capacity Outlook data submission replaces all existing Medium Term Capacity Outlook data records for a facility where the start date is on or after the current gas day.

Active Medium Term Capacity Outlook data (where the start date is before the current gas day and the end date is on or after the current gas day) is end dated to the current gas date D-1.

You can delete all existing Medium Term Capacity Outlook data records for a facility by making a submission with the Facility Id and blank values for the remaining fields. All Medium Term Capacity Outlook data records are deleted for the specified facility where the start date is on or after the current gas day, and also end date any active Medium Term Capacity Outlook data.

Historical records where the Medium Term Capacity Outlook end date is before the current gas day cannot be modified or deleted.

The following example illustrates the system behaviour for a Medium Term Capacity Outlook data submission.

Initial state

Medium Term Capacity Outlook submission 1: 14-17 April

Medium Term Capacity Outlook submission 2: 18-23 April

Medium Term Capacity Outlook submission 3: 24-28 April

14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	
MTCO 1															
				MTCO 2											
										MTCO 3					

File submissions with updated data

Medium Term Capacity Outlook submission 4: 21-24 April

Medium Term Capacity Outlook submission 5: 27-28 April

14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	
							MTCO 4								
													MTCO 5		

End state after the file submission

Medium Term Capacity Outlook submission 1: 14-17 April

Medium Term Capacity Outlook submission 2: 18-20 April

Medium Term Capacity Outlook submission 4: 21-24 April

Medium Term Capacity Outlook submission 5: 27-28 April

25-26 April does not have Medium Term Capacity Outlook data, so the facility's capacity is defined by its Nameplate Rating.

14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr
MTCO 1														
				MTCO 2										
							MTCO 4							
													MTCO 5	

Where multiple capacity types apply to an individual facility, then all details must be provided. This data is used in the Medium Term Capacity Outlook report.

A3.6.2 Example 2 (submission format)

A CSV file format example is shown for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission for a BB pipeline (520066).
- A BB pipeline has a Capacity Type value "MDQ", and Capacity Description, Receipt Location, and Delivery Location must be provided.

CSV file format

```
FacilityId,FromGasDate,ToGasDate,CapacityType,OutlookQuantity,FlowDirection,CapacityDescription,ReceiptLocation,DeliveryLocation,Description
540066,2018-06-22,2018-06-30,MDQ,100.522,,This transmission capacity is the amount of gas that the Culcairn delivery point is able to withdraw from this pipeline facility. This capacity is dependent on the forecast DTS demand and the availability of key assets on this pipeline facility,1200001,1300004,Corrective maintenance requiring reduction of operating pressure
540066,2018-06-22,2018-06-30,MDQ,67.801,,This transmission capacity is the amount of gas that the Culcairn delivery point is able to withdraw from this pipeline facility. This capacity is dependent on the forecast DTS demand and the availability of key assets on this pipeline facility,1200001,1300004,Reversal of previous entry
540066,2018-08-01,2018-08-10,MDQ,56.764,, This transmission capacity is the amount of gas that the Culcairn delivery point is able to withdraw from this pipeline facility. This capacity is dependent on the forecast DTS demand and the availability of key assets on this pipeline facility,1200001,1300004,Gas Conditioning Vessel Filter Install
```

JSON format

```
{
  "ItemList": [
    {
      "FromGasDate": "2018-06-22T00:00:00+10:00",
      "ToGasDate": "2018-06-30T00:00:00+10:00",
      "FacilityId": 540066,
      "CapacityType": "MDQ",
      "OutlookQuantity": 100.522,
      "FlowDirection": null
      "CapacityDescription": "This transmission capacity is the amount of gas that the Culcairn delivery point is able to withdraw from this pipeline facility. This capacity is dependent on the forecast DTS demand and the availability of key assets on this pipeline facility",
      "ReceiptLocation": 1200001,
      "DeliveryLocation": 1300004,
      "Description": "Corrective maintenance requiring reduction of operating pressure"
    }
  ],
}
```



```

    {
      "FromGasDate": "2018-06-22T00:00:00+10:00",
      "ToGasDate": "2018-06-30T00:00:00+10:00",
      "FacilityId": 540066,
      "CapacityType": "MDQ",
      "OutlookQuantity": 67.801,
      "FlowDirection": null
      "CapacityDescription": "This transmission capacity is the amount of gas that
the Culcairn delivery point is able to withdraw from this pipeline facility. This
capacity is dependent on the forecast DTS demand and the availability of key assets
on this pipeline facility",
      "ReceiptLocation": 1200001,
      "DeliveryLocation": 1300004,
      "Description": "Reversal of previous entry"
    },
    {
      "FromGasDate": "2018-08-02T00:00:00+10:00",
      "ToGasDate": "2018-08-10T00:00:00+10:00",
      "FacilityId": 540066,
      "CapacityType": "MDQ",
      "OutlookQuantity": 67.801,
      "FlowDirection": null
      "CapacityDescription": "This transmission capacity is the amount of gas that
the Culcairn delivery point is able to withdraw from this pipeline facility. This
capacity is dependent on the forecast DTS demand and the availability of key assets
on this pipeline facility",
      "ReceiptLocation": 1200001,
      "DeliveryLocation": 1300004,
      "Description": "Reversal of previous entry"
    },
    {
      "FromGasDate": "2018-06-22T00:00:00+10:00",
      "ToGasDate": "2018-06-22T00:00:00+10:00",
      "FacilityId": 540066,
      "CapacityType": "MDQ",
      "OutlookQuantity": 56.764,
      "FlowDirection": null
      "CapacityDescription": "This transmission capacity is the amount of gas that
the Culcairn delivery point is able to withdraw from this pipeline facility. This
capacity is dependent on the forecast DTS demand and the availability of key assets
on this pipeline facility",

```

```

    "ReceiptLocation": 1200001,
    "DeliveryLocation": 1300004,
    "Description": "Gas Conditioning Vessel Filter Install"
  }
}
}

```

A3.7 Nameplate Rating

A3.7.1 Example 1

The following scenario shows a nameplate data submission for *BB pipelines* due to changes in standing capacities. A CSV file format example is provided for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission date is 2018-06-23.
- A nameplate submission for a BB pipelines (540043 and 540073)

CSV file format

```

FacilityId,CapacityType,CapacityQuantity,FlowDirection,CapacityDescription,ReceiptLocation,DeliveryLocation,EffectiveDate,Description
540043,MDQ,223.01,,This transmission capacity is the amount of gas that the Culcairn Delivery Location is able to withdraw from this pipeline facility.,1300502,1300405,2018-06-23,increase in nameplate pipeline capacity due to completion of VNIE Phase B
540073,MDQ,220.96,,This transmission capacity is the amount of gas that the Longford Receipt Location and VicHub Receipt Location and TasHub Receipt Location and the Lang Lang Receipt Location are able to inject into this pipeline facility. This capacity is limited by the maximum operating pressure of this pipeline facility and the maximum injection pressure of the Longford Gas Plant,1500061,1500110,2018-06-23,increased pipeline capacity due to new the commissioning of a new compressor facility

```

JSON format example

```

{
  "ItemList": [
    {
      "FacilityId": 5400067,
      "CapacityType": "MDQ",
      "CapacityQuantity": 223.01,
      "FlowDirection": null,
      "Capacity Description": "This transmission capacity is the amount of gas that the Culcairn Delivery Location is able to withdraw from this pipeline facility",
      "ReceiptLocation": "1300502",
      "DeliveryLocation": "1300405",
    }
  ]
}

```

```

    "EffectiveDate": "2018-06-23T00:00:00+10:00",
    "Description": "increase in nameplate pipeline capacity due to completion of
VNIE Phase B"
  },
  {
    "FacilityId": 5200073,
    "CapacityType": "MDQ",
    "CapacityQuantity": 220.96,
    "FlowDirection": null,
    "Capacity Description": "This transmission capacity is the amount of gas that
the Longford Receipt Location and VicHub Receipt Location and TasHub Receipt Location
and the Lang Lang Receipt Location are able to inject into this pipeline facility.
This capacity is limited by the maximum operating pressure of this pipeline facility
and the maximum injection pressure of the Longford Gas Plant",
    "ReceiptLocation": 1500061,
    "DeliveryLocation": 1500110,
    "EffectiveDate": "2018-06-23T00:00:00+10:00",
    "Description": "Increased pipeline capacity due to new the commissioning of a
new compressor facility"
  }
]
}

```

A3.7.2 Example 2

The following scenario shows a nameplate data submission for Silver Springs, a storage facility.

The facility has STORAGE Capacity Type value, therefore Flow Direction, Capacity Description, Receipt Location, and Delivery Location information are not required.

A CSV file format example is provided for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON file example only illustrates information relating to the transaction data, and does not include header file information.

CSV file format

```

FacilityId,CapacityType,CapacityQuantity,FlowDirection,CapacityDescription,ReceiptLoc
ation,DeliveryLocation,EffectiveDate,Description
540062,STORAGE,330.60,,,,,2018-06-23,New storage tank added to facility

```

JSON file example

```

{
  "CompanyId": 100,
  "ItemList": [
    {

```

```

    "FacilityId": 540062,
    "CapacityType": "STORAGE",
    "CapacityQuantity": 330.60,
    "FlowDirection": null,
    "Capacity Description": null,
    "ReceiptLocation": null,
    "DeliveryLocation": null,
    "EffectiveDate": "2018-06-23T00:00:00+10:00",
    "Description": "New storage tank added to facility"
  }
}
]

```

A3.8 Nominations and Forecasts

A3.8.1 Example 1

The following scenario shows a Nominations and Forecasts data submission for a *BB pipeline and gGate Station*. A CSV file format example is provided for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission date 2018-09-01 for 2018-09-02 (D+1) to 2018-09-07 (D+6).
- A nominated and forecast flow submission for a BB pipeline (520047).
- Connection Points:
 - Connection Point 1201001 with Pipeline 530015.
 - Connection Point 1201002 with a Gate Station.

CSV file format

```

GasDate, FacilityId, ConnectionPointId, FlowDirection, NominationQuantity
2018-09-02, 520047, 1201001, DELIVERY, 25.525
2018-09-02, 520047, 1201001, RECEIPT, 20.21
2018-09-02, 520047, 1201002, DELIVERY, 15.513
2018-09-02, 520047, 1201002, RECEIPT, 25.23
2018-09-03, 520047, 1201001, DELIVERY, 23.938
2018-09-03, 520047, 1201001, RECEIPT, 11.27
2018-09-03, 520047, 1201002, DELIVERY, 16.941
2018-09-03, 520047, 1201002, RECEIPT, 21.32
2018-09-04, 520047, 1201001, DELIVERY, 18.941
2018-09-04, 520047, 1201001, RECEIPT, 30.32
2018-09-04, 520047, 1201002, DELIVERY, 21.93
2018-09-04, 520047, 1201002, RECEIPT, 22.32
2018-09-05, 520047, 1201001, DELIVERY, 26

```

2018-09-05,520047,1201001,RECEIPT,25.3
2018-09-05,520047,1201002,DELIVERY,18.94
2018-09-05,520047,1201002,RECEIPT,20.32
2018-09-06,520047,1201001,DELIVERY,20.1
2018-09-06,520047,1201001,RECEIPT,24.4
2018-09-06,520047,1201002,DELIVERY,17
2018-09-06,520047,1201002,RECEIPT,31.3
2018-09-07,520047,1201001,DELIVERY,32.35
2018-09-07,520047,1201001,RECEIPT,28.1
2018-09-07,520047,1201002,RECEIPT,26.5
2018-09-07,520047,1201002,RECEIPT,25.2

JSON format example

```
{  
  "ItemList": [  
    {  
      "GasDate": "2018-09-02T00:00:00+10:00",  
      "FacilityId": 520047,  
      "ConnectionPointId":120001,  
      "FlowDirection": "DELIVERY",  
      "NominationQuantity": "25.525"  
    },  
    {  
      "GasDate": "2018-09-02T00:00:00+10:00",  
      "FacilityId": 520047,  
      "ConnectionPointId":120001,  
      "FlowDirection": "RECEIPT",  
      "NominationQuantity": "20.21"  
    },  
    {  
      "GasDate": "2018-09-02T00:00:00+10:00",  
      "FacilityId": 520047,  
      "ConnectionPointId":120002,  
      "FlowDirection": "DELIVERY",  
      "NominationQuantity": "15.513"  
    },  
    {  

```

```
"GasDate": "2018-09-02T00:00:00+10:00",  
"FacilityId": 520047,  
"ConnectionPointId":120002,  
"FlowDirection": "RECEIPT",  
"NominationQuantity": "25.23",  
  
},  
{  
"GasDate": "2018-09-03T00:00:00+10:00",  
"FacilityId": 520047,  
"ConnectionPointId":120001,  
"FlowDirection": "DELIVERY",  
"NominationQuantity": "23.938"  
  
},  
{  
"GasDate": "2018-09-03T00:00:00+10:00",  
"FacilityId": 520047,  
"ConnectionPointId":120001,  
"FlowDirection": "RECEIPT",  
"NominationQuantity": "11.27"  
  
},  
{  
"GasDate": "2018-09-03T00:00:00+10:00",  
"FacilityId": 520047,  
"ConnectionPointId":120002,  
"FlowDirection": "DELIVERY",  
"NominationQuantity": "25.525"  
  
},  
{  
"GasDate": "2018-09-03T00:00:00+10:00",  
"FacilityId": 520047,  
"ConnectionPointId":120002,  
"FlowDirection": "RECEIPT",
```

```

    "NominationQuantity": "21.32"
  }
  ...
}
]
}

```

A3.9 Uncontracted Capacity Outlook

A3.9.1 Example 1

The following examples is an Uncontracted Capacity Outlook submission for a *BB pipeline*.

A CSV file format example is shown for FTP transfer or BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data, and does not include header file information.

- Submission for a BB pipeline (540066).
- A BB pipeline has a Capacity Type value "MDQ", and Capacity Description, Receipt Location, and Delivery Location must be provided.

CSV file format

```

FacilityId,OutlookMonth,OutlookYear,CapacityType,OutlookQuantity,FlowDirection,CapacityDescription,ReceiptLocation,DeliveryLocation,Description
540066,2018,02,MDQ,100.522,,Capacity From BWP to SWQP facility,1200001,1300004,Capacity Outlook for 2018-02-19
540066,2018,03,MDQ,67.801,,Capacity From BWP to SWQP facility,1200001,1300004,Capacity Outlook for 2018-03-21

```

JSON format

```

{
  "ItemList": [
    {
      "FacilityId": 540066,
      "OutlookMonth": 02,
      "OutlookYear": 2018,
      "CapacityType": "MDQ",
      "OutlookQuantity": 100.522,
      "FlowDirection": null
      "CapacityDescription": "Capacity From BWP to SWQP facility",
      "ReceiptLocation": 1200001,
      "DeliveryLocation": 1300004,
      "Description": "Capacity Outlook for 2018-02-19"
    },
  ],
}

```

```

    {
      "FacilityId": 540066,
      "OutlookMonth": 02,
      "OutlookYear": 2018,
      "CapacityType": "MDQ",
      "OutlookQuantity": 67.801,
      "FlowDirection": null
      "CapacityDescription": "Capacity From BWP to SWQP facility",
      "ReceiptLocation": 1200001,
      "DeliveryLocation": 1300004,
      "Description": "Capacity Outlook for 2018-03-21"
    }
  ]
}

```

A3.10 BB Capacity Transaction

A3.10.1 Example 1

A CSV file format example is shown for BB website upload, and JSON file format for HTTP web services. The JSON format example only illustrates information relating to the transaction data and does not include header file information.

- Submission for 2019-03-01

CSV file format

```

TradeId,TradeDate,FromGasDate,ToGasDate,BuyerName,SellerName,FacilityId,FacilityName,
Flowdirection,StandardOTSA,BBTransportationServiceType,Priority,ReceiptPointId,Delive
ryPointId,ParkLoanPointId,Quantity,MHQ,Price,PriceStruture,PriceEscalationMechanism
123456,2019-03-01,2019-03-10,2019-03-20,Star Energy,Purple
Energy,52001,,,YES,FORWARD_HAUL,Secondary Firm, 3001,4001,,240,10,4.20,Variable,10%
per annum
,2019-03-01,2019-03-10,2019-03-20,Star Energy,Purple Energy,,Tamworth
pipeline,NORTH_EAST,NO,BACKHAUL,Primary Firm,,,,,240,10,4.20,Variable,

```

JSON format

```

{
  "ItemList": [
    {
      "TradeId": 123456,
      "TradeDate": "2019-03-01",
      "FromGasDate": "2019-03-10",
      "ToGasDate": "2019-03-20",

```



```

"BuyerName": "Star Energy",
"SellerName": "Purple Energy",
"FacilityId": 52001,
"FacilityName": null,
"FlowDirection": null,
"StandardOTSA": "YES",
"BBTransportationServiceType": "FORWARD HAUL",
"Priority": "Secondary Firm",
"ReceiptPointId": 3001,
"DeliveryPointId": 4001,
"ParkLoanPointId": null,
"Quantity": 240,
"MHQ": 10,
"Price": 4.20,
"PriceStructure": "Variable",
"PriceEscalationMechanism": "10% per annum"
},
{
"TradeId": null,
"TradeDate": "2019-03-01",
"FromGasDate": "2019-03-10",
"ToGasDate": "2019-03-20",
"BuyerName": "Star Energy",
"SellerName": "Purple Energy",
"FacilityId": null,
"FacilityName": "Tamworth pipeline",
"FlowDirection": "NORTH EAST",
"StandardOTSA": "NO",
"BBTransportationServiceType": "FORWARD HAUL",
"Priority": "Primary Firm",
"ReceiptPointId": null,
"DeliveryPointId": null,
"ParkLoanPointId": null,
"Quantity": 240,
"MHQ": 10,
"Price": 4.20,

```

```
"PriceStructure": "Variable",  
"PriceEscalationMechanism": null  
}  
]  
}
```

Requesting IT Assistance

Information to provide

IT assistance is requested through one of the following methods:

Phone: 1300 AEMO 00 (1300 236 600)

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

Email: supporthub@aemo.com.au

When requesting assistance from AEMO, please provide the following IT information:

Your name

Organisation name

Participant ID

System or application name

Environment: production or pre-production

Problem description

Screenshots

A4. Validation Error Codes

[These are the validation error codes for all transaction types where](#)

Label	Description
{0}	The invalid data provided for a field in the uploaded file.
{1}	The data type for a field in the uploaded file.

Error code	Error type	Transaction log description
0	File processing success	File processed without errors or alarms, {0} rows accepted
1	File processing error	Unexpected file processing error
2	File processing error	Unexpected file processing error
3	File processing error	File name provided does not comply with COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV naming convention
4	File processing error	The transaction name {0} within the file name provided is not of a known type
5	File processing error	The transaction fields do not match those associated to the transaction name
8	File processing error	Invalid data provided {0} for type {1}
9	File processing error	Empty file submitted
89	File processing error	Rows with duplicate key information are present in the file
20	Date	The GasDate {0} provided is not a valid date
21	Date	The GasDate {0:yyyy-MM-dd HH:mm:ss} provided must be a current or future date
22	Date	The EffectiveDate {0} provided is not a valid date.
23	Date	Effective Date {1:yyyy-MM-dd HH:mm:ss} for facility {0} is in the past.
24	Date	The TerminationDate {0} provided is not a valid date.
25	Date	The TerminationDate {0:yyyy-MM-dd HH:mm:ss} provided must be a current or future date
26	Date	Gas Date {1:yyyy-MM-dd HH:mm:ss} for facility {0} is not a historical date
27	Date	The TerminationDate {0:yyyy-MM-dd HH:mm:ss} must be later than the EffectiveDate
28	Date	ToGasDate must be equal to or greater than FromGasDate
29	Date	Effective Date {1:yyyy-MM-dd} for connection point {0} is in the past
30	Date	Month {0} provided is not valid. Must be between 1 and 12
31	Date	Year {0} provided is not valid
32	Date	Gas Date {0:yyyy-MM-dd HH:mm:ss} is not a historical date
33	Date	FromGasDate must be equal to or greater than current gas day.
34	Date	FromGasDate must not overlap the date range of any other row for the same FacilityId and Outlook Type.

Error code	Error type	Transaction log description
35	Date	ToGasDate must not overlap the date range of any other row for the same FacilityId and Outlook Type.
36	Date	FromGasDate and ToGasDate can only be a maximum of one calendar month apart.
37	Date	Gas Date {0:yyyy-MM-dd} can be for either of D, D + 1 or D + 2.
105	Date	Gas Date is older than a month.
40	Identifier	Facility Id {0} does not exist in the database.
41	Identifier	Participant is not the registered operator of Facility {0}.
42	Identifier	Zone ID {0} does not exist in the database.
43	Identifier	Zone ID {1} is not associated with Facility Id {0}.
44	Identifier	The OfferId provided does not exist in the database.
45	Identifier	The UserId provided does not exist on the database.
46	Identifier	The UserId provided is not associated with the file provider.
47	Identifier	The EventId provided does not exist on the database.
48	Identifier	The file provider is not authorised to upload transactions of this type.
49	Identifier	ConnectionPointId {0} does not exist in the database.
50	Identifier	Participant is not the registered operator of connection point {0}.
51	Identifier	Participant is not permitted to submit data for {0} transactions.
52	Identifier	Zone does not exist in the database for Facility {0}.
53	Identifier	Facility Id {0} is not a valid storage facility.
54	Identifier	Facility Id {0} is not a valid pipeline.
60	Type	Capacity type {1} for facility {0} is not valid.
61	Type	Demand type {1} for facility {0} is not valid.
62	Type	Nomination type {1} for facility {0} is not valid.
63	Type	Outlook type {1} for facility {0} is not valid.
64	Type	Flow type {1} for facility {0} is not valid.
65	Type	Offer type {1} for facility {0} is not valid.
66	Type	Status type {1} for facility {0} is not valid.
67	Type	Event type {1} for facility {0} is not valid.
68	Type	Flag type {1} for facility {0} is not valid.
69	Type	Quality type {1} for facility {0} is not valid.
70	Type	Outlook type {0} is not valid for a pipeline. Valid values are TRANC and REVC.
71	Type	Outlook type {0} is not valid for a storage facility. Valid values are PRODC, WDLC, INJC.
72	Type	Outlook type {0} is not valid for a production facility. Valid value is PRODC.

Error code	Error type	Transaction log description
73	Type	BuySell value {0} is not valid
74	Type	Nomination type {0} is invalid for a Declared Transmission System facility. Valid values are D+0, D+1, D+2, D+3, D+4, D+5 or D+6.
75	Type	Nomination type {0} is invalid for a non-Declared Transmission System facility. Valid values are FCNOM, FIRMN or FIRMR.
76	Type	Flow Direction {0} is not valid
77	Type	Transmission Direction {0} is not valid

Glossary