

BB DATA SUBMISSION PROCEDURES VERSION 2.0

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VERSION: 2.0

EFFECTIVE DATE: TBD

STATUS: DRAFT

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VERSION RELEASE HISTORY

| Version | Effective Date | Summary of Changes |
|---------------------|---------------------|--|
| 1 | 30 September 2018 | First issue |
| 2.0 | TBD | Updated for the National Gas (Capacity Trading and Auctions) Amendment Rule 2018 |



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1. OVERVIEW

1.1 Purpose

These BB Data Submission Procedures specify the requirements for *BB reporting entities* to submit forecast and actual data to AEMO for the Natural Gas Services Bulletin Board. 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 | Abbreviation explanation |
|--------------|--|
| 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. |
| 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 | Definition |
|-------------------------------------|--|
| 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 | BB facility within this document includes a BB facility as defined under Part 18 of the National Gas Rules and transitional compression facilities . |
| BB reporting entity | BB reporting entity within this document includes BB reporting entity as defined under Part 18 of the National Gas Rules and a 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 National Gas Law. |
| Connection Point | A <i>receipt point</i> or <i>delivery point</i> or, in relation to a transitional compression facility, 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. |

For the purposes of these consultation draft Procedures, terms in italics have the meanings set out opposite them in the following table. Where applicable, a reference to a section of the National Gas Law refers to that section as will be amended or inserted by the National Gas (South Australia) (Capacity Trading and Auctions) Amendment Bill 2018 (SA).

| Term | Definition |
|---|--|
| auction facility | As defined in the Capacity Transfer and Auction Procedures |
| Capacity Transfer and Auction Procedures | As defined in the National Gas (South Australia) (Capacity Trading and Auctions) Amendment Bill 2018 (SA) |
| compression delivery point | A compression service point used for delivery of compressed natural gas |
| compression receipt point | A compression service point used for receipt of natural gas for compression |
| compression service facility | As defined in the National Gas (South Australia) (Capacity Trading and Auctions) Amendment Bill 2018 (SA) . |
| compression service point | A point, or combination of points (sometimes known as a notional point) at which a transportation service provider receives (takes delivery of) or may receive natural gas, or delivers or may deliver natural gas, for the provision of a service provided by means of a compression service facility . |
| primary compression capacity | Firm capacity on a transitional compression facility that is sold by a transportation service provider to a transportation facility user , given the buyer the right to an agreed quantity of capacity of that transitional compression facility for an agreed period. |
| transitional compression facility | As defined in the Capacity Transfer and Auction Procedures |
| transportation facility user | As defined in the National Gas (South Australia) (Capacity Trading and Auctions) Amendment Bill 2018 (SA) . |
| transportation service provider | As defined in the National Gas (South Australia) (Capacity Trading and Auctions) Amendment Bill 2018 (SA) . |
| uncontracted primary compression capacity | primary compression capacity that a transportation service provider for a transitional compression facility has available for sale or that it will have available for sale. |



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. ~~Refer to section 5.1.~~
- CSV file transfer using FTP: CSV file upload using FTP. ~~Refer to section 5.2.~~
- RESTful web services: HTTP POST request using a RESTful interface. ~~Refer to section 5.3.~~

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.

AEMO will only offer FTP as a means for to submit transactions until September 30th 2019. Support for this submission method will not be extending past this date. *BB reporting entities* looking to automate submissions should transition to the HTTPS JSON content transfer mechanism.



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.

Table 1 Transaction data responsibilities

| BB Participant | Description | Reporting frequency | Production Facility Operators | Storage Facility Operators | Pipeline Operators | Transitional Compression Facility | Submission cut-off times |
|--|---|---------------------|-------------------------------|----------------------------|--------------------|-----------------------------------|---|
| 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, the <i>BB facility</i> operator's daily gas flow data for injections and withdrawals 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, 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. |
| Gate Station Nameplate Rating 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 BB pipeline or transitional compression facility. | Annually | | | ● | ● | 31 March annually and whenever the standing capacity changes. |
| Linepack Capacity Adequacy | Provides on each gas day D, the <i>BB pipeline or transitional compression facility</i> 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 <i>BB pipeline, BB production or BB storage facility</i> in the next 12 months. | Adhoc | ● | ● | ● | | Whenever the Medium Term Capacity changes. |



| | | | | | | | |
|--|---|----------|---|---|---|---|---|
| <u>Nameplate Rating</u> | Provides 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> . | Annually | ● | ● | ● | ● | 31 March annually and whenever the standing capacity changes. |
| <u>Nomination and Forecasts</u> | <ul style="list-style-type: none"> For <i>BB pipelines</i> 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 <i>BB facility</i> 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. | Daily | ● | ● | ● | ● | 9:00 pm on gas day D. |
| <u>Secondary Pipeline Capacity Bid and Offer Summary</u> | Provides information on spare capacity for <i>BB pipelines</i> . This is limited to <i>BB pipelines</i> where the <i>BB pipeline</i> operator owns, controls or operates a secondary <i>BB pipeline</i> capacity trading platform. | Weekly | | | | ● | 7:00 pm every Monday. |
| <u>Secondary Pipeline Capacity Trade Summary</u> | Provides information on secondary pipeline capacity trades that have occurred. This is limited to <i>BB pipelines</i> where the pipeline operator owns, controls or operates a secondary pipeline capacity trading platform. | Weekly | | | | ● | 7:00 pm every Monday. |
| <u>Uncontracted Capacity Outlook</u> | <ul style="list-style-type: none"> Uncontracted primary pipeline capacity on <i>BB pipelines</i> for the next 12 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 each of the next 12 months. Uncontracted primary compression capacity on transitional compression facilities for each of the next 12 months. | Monthly | | ● | ● | ● | 7:00 pm on the last gas day of each month. |

Legend

- Obligation under the *Rules* to provide data to AEMO.

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 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 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 identifiers “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 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 can be defined as supporting unidirectional or bidirectional gas flows.~~
- 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. TRANSACTIONS

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

4.1 Short Term Capacity Outlook

| | |
|--------------------------------|---|
| Purpose | Provide 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. |
| Submission cut-off time | Whenever there is a material change. |
| Rollover | Submitted values roll forward in the following manner: <ul style="list-style-type: none"> 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 | <i>BB pipelines, BB production facilities, and BB storage facilities and transitional compression facilities.</i> |
| Exemptions | No exemptions will be given for this submission. |
| Notes | <ul style="list-style-type: none"> 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 | Description | Mandatory |
|----------------------|---|--|
| Facility Id | A unique AEMO defined Facility identifier. | Yes |
| Gas Date | 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 |
| Capacity Type | Capacity type may be: <ul style="list-style-type: none"> Storage: Holding capacity in storage, or MDQ: Daily maximum firm capacity under the expected operating conditions. | Yes |
| Outlook Quantity | Capacity Outlook quantity. | Yes |
| Flow Direction | 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: <ul style="list-style-type: none"> 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>. <u>Compressed: The action performed by the transitional compression facility</u> | Conditional This field is mandatory for <i>BB storage facilities</i> with MDQ Capacity Type value. Otherwise leave this blank. |
| Capacity Description | 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</i> . Otherwise leave this blank. |

| Data | Description | Mandatory |
|-------------------|--|--|
| Receipt Location | 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. |
| Delivery Location | 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. |
| Description | Free text facility use is restricted to a description for reasons or 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. | No |

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.](#)
- *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*, ~~or~~ *BB storage facilities* [or transitional compression facilities](#) operated by the *BB reporting entity*.

4.2 Daily Production and Flow

| | |
|--------------------------------|---|
| Purpose | Provide on each gas day D, the <i>BB facility</i> operator's daily gas flow data for receipts and deliveries. |
| Submission cut-off time | 1:00 pm on gas day D. |
| Rollover | No rollover. |
| Required by | <i>BB pipelines</i> , <i>BB production facilities</i> , and <i>BB storage facilities</i> and transitional compression facilities . |
| 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 | <ul style="list-style-type: none"> • 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

| Data | Description | Mandatory |
|---------------------|--|--|
| Gas Date | 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 |
| Actual Quantity | 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 transitional compression facility. | Conditional This field is mandatory where Quality is OK |
| Facility Id | A unique AEMO defined Facility identifier. | Yes |
| Connection Point Id | A unique AEMO defined connection point identifier. | Conditional This information is mandatory for <i>BB pipelines</i> . Otherwise leave this blank. |
| Flow Direction | Flow Direction can be: <ul style="list-style-type: none"> 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>. <u>N/A</u>: Zero gas flows have been measured for the gas date or data is unavailable. Compressed: The action performed by the transitional compression facility | Yes |
| Quality | Indicates whether meter data for the gas date is available. Quality can be: <ul style="list-style-type: none"> 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. | Yes |

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'.
- ~~Where a connection point has flows in both directions during a gas day, the gas flows will be reported separately (i.e. there will be two submissions for the connection point for the gas day).~~
- [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 the *BB reporting entity*.

4.3 Daily Storage

| | |
|--------------------------------|---|
| Purpose | Provide for each gas day, the actual quantity of natural gas held in each <i>BB storage facilities</i> at the end of gas day D-1. |
| Submission cut-off time | 1:00 pm on gas day D. |
| Rollover | No Rollover. |
| Required by | <i>BB storage facilities</i> . |
| Exemptions | No exemptions are given for this submission. |

4.3.1 Data elements

| Data | Description | Mandatory |
|-----------------|---|-----------|
| Facility Id | A unique AEMO defined Facility identifier. | Yes |
| Gas Date | 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 |
| Actual Quantity | The actual quantity of gas held in a <i>BB storage facility</i> . | Yes |

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 the *BB reporting entity*.

4.4 ~~Gate Station~~ [Connection Point](#) Nameplate Rating

| | |
|--------------------------------|--|
| Purpose | Provide nameplate ratings: <ul style="list-style-type: none"> • 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>. • For each gate station connection point connected to each of its pipelines 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. • For each connection point on a <i>BB pipeline</i> or a <i>transitional compression facility</i>. |
| Submission cut-off time | 31 March annually and whenever the standing capacity changes. |
| Rollover | No rollover. |
| Required by | <i>BB pipelines</i> . |
| Exemptions | No exemptions are given for this submission. |

4.4.1 Data elements

| Data | Description | Mandatory |
|---------------------|---|-----------|
| Connection Point Id | A unique AEMO defined connection point identifier. | Yes |
| Capacity Quantity | Standing capacity quantity. | Yes |
| Effective Date | Gas day date that corresponding record takes effect. Any time component supplied will be ignored. | Yes |

| Data | Description | Mandatory |
|-------------|---|-----------|
| 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 |

4.4.2 Requirements

- Capacity Quantity values must be submitted in TJs accurate to three decimal places.
- ~~For the purposes of this nameplate rating report, Gate Stations are assumed to only have a delivery capacity.~~
- Submitted connection points must be registered against the Facility Id during the connection point registration process.

4.5 Linepack Capacity Adequacy

| | |
|--------------------------------|---|
| Purpose | Provide on any gas day D, the <i>BB pipeline</i> and transitional compression facility operator's Linepack Capacity Adequacy (LCA) flag for gas days D to D+2. |
| Submission cut-off time | Whenever there is a change. |
| Rollover | Submitted values roll forward in the following manner: <ul style="list-style-type: none"> The last 3-day LCA Outlook provided for that <i>BB pipeline</i> or transitional compression facility 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 | <i>BB pipelines</i> and transitional compression facilities . |
| Exemptions | No exemptions are given for this submission. |
| Notes | <ul style="list-style-type: none"> Submissions can contain values for gas days from D onwards. 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

| Data | Description | Mandatory |
|-------------|--|-----------|
| Facility Id | A unique AEMO defined Facility identifier. | Yes |
| Gas Date | 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 |
| Flag | <i>LCA flag</i> for a <i>BB pipeline</i> or transitional compression facility categorised as red, amber, or green. | Yes |
| Description | 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 |

4.6 Medium Term Capacity Outlook

4.6.1 Transaction definition

| | |
|--------------------------------|---|
| Purpose | Provide details of any activity expected to affect the daily capacity of a <i>BB pipeline</i> , <i>BB production</i> , or <i>BB storage facility</i> in the next 12 months. |
| Submission cut-off time | Not applicable as this report is ad hoc. |
| Rollover | No rollover. |

| | |
|--------------------|--|
| Required by | <i>BB pipelines, BB production facilities, or BB storage facilities.</i> |
| Exemptions | No exemptions are given for this submission. |
| Notes | <ul style="list-style-type: none"> Where a <i>BB reporting entity</i> 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 |

4.6.2 Data elements

| Data | Description | Mandatory |
|------------------|--|--|
| Facility Id | A unique AEMO defined Facility identifier. | Yes |
| From Gas Date | 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. |
| To Gas Date | 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. |
| Capacity Type | Capacity type can be either: <ul style="list-style-type: none"> 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. |
| Outlook Quantity | Capacity Outlook quantity. | 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. |

| Data | Description | Mandatory |
|----------------------|---|--|
| Flow Direction | 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: <ul style="list-style-type: none"> 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. |
| Capacity Description | 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 pipeline</i> submissions with a MDQ Capacity Type. Otherwise leave this blank. |
| Receipt Location | 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. |
| Delivery Location | 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. |
| Description | Free text facility use is restricted to a description for reasons or comments directly related to the outlook 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. | Conditional This field can be left blank if all other fields (excluding Facility Id) are also left blank. |

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 the *BB reporting entity*.

4.7 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 cut-off time | 31 March annually and whenever the standing capacity changes. |
| Rollover | No rollover. |
| Required by | <i>BB pipelines</i> , <i>BB production facilities</i> , or <i>BB storage facilities</i> or transitional compression facilities . |
| Exemptions | No exemptions are given for this submission. |

4.7.1 Data elements

| Data | Description | Mandatory |
|----------------------|--|---|
| Facility Id | A unique AEMO defined Facility identifier. | Yes |
| Capacity Type | <ul style="list-style-type: none"> • Capacity type can be either: • Storage: Holding capacity in storage, or • <u>MDQ</u>: 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 facility on a given day, without breaching operational limits. | Yes |
| Capacity Quantity | Standing capacity quantity. | Yes |
| Flow Direction | 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: <ul style="list-style-type: none"> • 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. |
| Capacity Description | 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. 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. | Conditional This information is mandatory for BB pipelines and transitional compression facilities . Otherwise leave this blank. |
| Receipt Location | 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. |

| Data | Description | Mandatory |
|-------------------|---|--|
| Delivery Location | 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. |
| Effective Date | Gas day date that corresponding record takes effect. Any time component supplied will be ignored. | Yes |
| 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. | Yes |

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*, ~~or~~ *BB storage facilities* [or transitional compression facility](#) operated by the *BB reporting entity*.

4.8 Nominations and Forecasts

| | |
|--------------------------------|---|
| Purpose | <ul style="list-style-type: none"> • 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 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 | <i>BB pipelines</i> , <i>BB production facilities</i> , and <i>BB storage facilities</i> and transitional compression facilities . |
| 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 | <ul style="list-style-type: none"> • 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

| Data | Description | Mandatory |
|---------------------|---|---|
| Gas Date | 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 |
| Facility ID | A unique AEMO defined Facility identifier. | Yes |
| Connection Point ID | A unique AEMO defined connection point identifier. | Conditional This information is mandatory for <i>BB pipelines</i> . Otherwise leave this blank. |
| Flow Direction | Flow Direction can be: <ul style="list-style-type: none"> • Receipt: The flow of gas <u>into</u> the <i>BB facility</i>, or • <u>Delivery</u>: The flow of gas <u>out</u> of the <i>BB facility</i>. • <u>Compressed</u>: The action performed by the <i>transitional compression facility</i> | Yes |
| Nomination Quantity | Delivery Nomination quantity, <u>or</u> <u>Gas compression Nomination quantity</u> . | Yes |

4.8.2 Requirements

- Nomination Quantity values greater than zero must be submitted in TJs accurate to three decimal places.
- ~~Where a connection point supports bidirectional flows, Nomination Quantities must be provided separately for receipts and deliveries.~~
- 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*, ~~or~~ *BB storage facilities* or *transitional compression facilities* operated by the *BB reporting entity*.

4.9 Secondary Pipeline Capacity Bid and Offer Summary

| | |
|--------------------------------|---|
| Purpose | Provide information on secondary pipeline capacity available for sale on <i>BB pipelines</i> . This is limited to pipelines where the pipeline operator owns, controls, or operates a secondary pipeline capacity trading platform. |
| Submission cut-off time | Every Monday at 7:00 pm. |
| Rollover | No rollover. |
| Required by | <i>BB pipelines</i> . |
| Exemptions | No exemptions are given for this submission. |

| | |
|--------------|---|
| Notes | On submission of Secondary Pipeline Capacity Bid and Offer Summary data, all bid and offer summary data previously submitted by the operator shall be cleared and replaced with the contents of the new submission. |
|--------------|---|

4.9.1 Data elements

| Data | Description | Mandatory |
|--------------------|--|-----------|
| Facility Id | A unique AEMO defined Facility identifier. | Yes |
| Buy Sell | Buy: The shipper is in a position to buy spare <i>BB pipeline</i> capacity. Sell: The shipper is in a position to sell their spare <i>BB pipeline</i> capacity. | Yes |
| Available Quantity | Available quantity of spare pipeline capacity. | Yes |
| Price | The price of spare pipeline capacity. | No |
| From Gas Date | Date of gas day. Any time component supplied is ignored. The gas day is applicable under the pipeline contract or market rules. | Yes |
| To Gas Date | Date of gas day. Any time component supplied is ignored. The gas day is that applicable under the pipeline contract or market rules. | Yes |
| Receipt Location | Connection Point Id of the location where gas is injected into the pipeline. | Yes |
| Delivery Location | Connection Point Id of the location where gas is withdrawn from the pipeline. | Yes |
| Contact Details | Details of the relevant shipper contact person such as name and phone number. | Yes |

4.9.2 Requirements

- Available Quantity shall be submitted in TJs accurate to three decimal places.
- Price shall be submitted in \$/GJ.
- Submitted connection points must be registered against the Facility Id during the connection point registration process.
- Submissions must only contain *BB pipelines* operated by the *BB reporting entity*.

4.10 Secondary Pipeline Capacity Trade Summary

| | |
|--------------------------------|---|
| Purpose | Provide information on secondary pipeline capacity trades that have occurred. This is limited to <i>BB pipelines</i> where the pipeline operator owns, controls, or operates a secondary pipeline capacity trading platform |
| Submission cut-off time | Every Monday at 7:00 pm. |
| Rollover | No rollover. |
| Required by | <i>BB pipelines</i> . |
| Exemptions | No exemptions are given for this submission. |
| Notes | On submission of Secondary Pipeline Capacity Trader Summary data, all bid and offer summary data previously submitted by the operator shall be replaced with the new submission data. |

4.10.1 Data elements

| Data | Description | Mandatory |
|-------------------|---|-----------|
| Facility Id | A unique AEMO defined Facility identifier. | Yes |
| Gas Date | 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 |
| Receipt Location | Connection Point Id of the location where gas is injected into the pipeline. | Yes |
| Delivery Location | Connection Point Id of the location where gas is withdrawn from the pipeline. | Yes |

| Data | Description | Mandatory |
|--------------------------------|--|-----------|
| Nameplate Capacity | Nameplate capacity of the <i>BB facility</i> . | Yes |
| Daily Nominations | Daily aggregate quantity of gas nominated for delivery from the <i>BB pipeline</i> . | Yes |
| Daily Utilisation | Percentage of the <i>BB pipeline</i> capacity that is utilised per day. | Yes |
| Available Capacity | Operational pipeline capacity minus nominations each day. | Yes |
| Capacity On Offer | Sum of total capacity offered for sale. | Yes |
| Daily Capacity Traded | Sum of total daily sold <i>BB pipeline</i> capacity. | Yes |
| Daily Capacity | Operational capacity of the <i>BB pipeline</i> . | No |
| Contracted Capacity | Firm contracted pipeline capacity. | No |
| Average Annual Capacity Traded | Sum of total annual sold pipeline capacity divided by number of days, year to date. | No |

4.10.2 Requirements

- Capacity data shall 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.
- Submissions must only contain *BB pipelines* operated by the *BB reporting entity*.

4.11 Uncontracted Capacity Outlook

| | |
|--------------------------------|--|
| Purpose | Provides information on: <ul style="list-style-type: none"> • Uncontracted primary pipeline capacity on <i>BB pipelines</i> for the next 12 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 transitional compression facilities 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: <ul style="list-style-type: none"> • 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 | <i>BB pipelines</i> , and <i>BB storage facilities</i> and transitional compression facilities . |
| Exemptions | No exemptions are given for this submission. |

4.11.1 Data elements

| Data | Description | Mandatory |
|---------------|--|-----------|
| Facility Id | A unique AEMO defined Facility identifier. | Yes |
| Outlook Month | The outlook month. | Yes |
| Outlook Year | The outlook year. | Yes |

| Data | Description | Mandatory |
|----------------------|--|---|
| Capacity Type | Capacity type can be either: <ul style="list-style-type: none"> 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 facility on a given day, without breaching operational limits. | Yes |
| Outlook Quantity | Capacity Outlook quantity. | Yes |
| Flow Direction | 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: <ul style="list-style-type: none"> Receipt: The flow of gas into the <i>BB storage facility</i>, or Delivery: The flow of gas out of the <i>BB storage facility</i>. Compressed: The action performed by the transitional compression facility. | Conditional This field is mandatory for BB storage facilities. Otherwise leave this blank. |
| Capacity Description | 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 BB pipelines and transitional compression facilities . Otherwise leave this blank. |
| Receipt Location | 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. |
| Delivery Location | 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. |
| 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 |

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*, ~~or~~ *BB storage facilities* or *transitional compression facilities* operated by the *BB Reporting Entity*.

~~5. DATA SUBMISSION METHODS~~

~~This section describes the submission and validation process for uploading CSV content using the BB website, FTP, or JSON content through the RESTful interface.~~

~~AEMO will only offer FTP as a means for to submit transactions until September 30th 2010. Support for this submission method will not be extending past this date. BB reporting entities looking to automate submissions should transition to the HTTPS JSON content transfer mechanism.~~

~~5.1 BB website file upload~~

~~Submitting transaction data as a CSV file using the upload submissions feature available to Authorised users through the BB website URLs:~~

- ~~• Pre-production server: <http://preprod.gbb.aemo.com.au/>~~
- ~~• Production server: <http://gbb.aemo.com.au/>~~

~~5.1.1 System requirements~~

~~Use of the BB website CSV upload submission interface 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).~~

~~5.1.2 Uploading a CSV file using the BB website upload submission interface~~

~~[Mechanism will be detailed upon GBB redesign]~~

~~5.2 CSV file transfer using FTP~~

~~5.2.1 System requirements~~

~~Use of the FTP data submission interface requires:~~

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

~~5.2.2 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. Refer to Transactions for transaction specifications and requirements.~~

~~When a text file with .CSV extension is opened in Microsoft Excel, the date format changes to dd-MM-YY that is incompatible with the AEMO date format specification YYYY-MM-dd.~~

- ~~2. Each CSV file can contain multiple records but only data pertaining to the transaction type specified in the <TRANSACTIONNAME> component of the filename.~~
- ~~3. 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>~~

~~AEMO recommends the use of PASSIVE mode for FTP connections.~~

~~Once connected, you are directed to the default directory.~~

- ~~4. 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~~
- ~~5. 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.~~

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

~~5.2.3 Transaction acknowledgement~~

~~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.~~

~~5.3 RESTful web services~~

~~Transaction data is submitted in a RESTful style by a HTTP POST request to BB submission URLs.~~

~~5.3.1 System requirements~~

~~Use of the RESTful interface through HTTPS requires:~~

- ~~Access to MarketNet.~~
- ~~An application to Base64 encode your User Rights Management (URM) username and password for authorisation.~~
- ~~SSL authentication using digital certificates:~~
 - ~~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.~~

~~4.1.1. HTTP POST request format~~

~~A HTTP POST request consists of:~~

- ~~HTTP 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.

Table 1 — HTTPS request header attributes

| Header parameter | Description | Allowed values / Example |
|---------------------------|--|--|
| Content-Type | HTTPS request format. | Content-type: application/json |
| Accept | HTTPS response format. | Accept: application/json |
| Content-Length | Content length of file. The value is populated when the request is sent. | Content-length: nnn |
| x-initiatingParticipantID | The participant ID | x-initiatingParticipantID: 123456 |
| x-market | The market type that the request applies. | x-market: GBB |
| Authorization | 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. | Authorization: Basic QFhQVC0wMDAwMzoyZWZWRmOGJhYS0wY2I0LTQwZjJctOTIyMS0yODUxNmM4N2MxNjQ= (For URM username "@XPT-00003" and password "2edf8baa-0cb4-40f7-9221-28516c87e164") |

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

```

Content-type: application/json
Accept: application/json
Content-length: nnn
Authorization: Basic QFhQVC0wMDAwMzoyZWZWRmOGJhYS0wY2I0LTQwZjJctOTIyMS0yODUxNmM4N2MxNjQ=
x-initiatingParticipantID: 123456
x-market: GBB

{
  "CompanyId": 94,
  "ItemList": [
    {
      "GasDate": "2018-12-01T00:00:00",
      "FacilityId": 530038,
      "ActualQuantity": 200.861
    }
  ]
}

```

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

1.1.2. HTTP 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 BB are shown in the following table.

The server returns a Content-Type of application/json, and a JSON formatted string consisting of two fields: status and error. The content of these fields is described in Table 3.

Table 2 — Response fields

| Field | Data Type | Description |
|-------|-----------|--|
| Data | Object | This data object contains all the results of the submission. The properties of the data object is 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  
      }  
    ]  
  }  
}
```