Annexure A
to Bulletin Board Procedures

National Gas Market

Bulletin Board Participant Build Pack

This document is provided for the purposes of review, comment and consultation only.

Legal obligations on parties with respect to operation of the Bulletin Board are expected to be in place by July 2008.

Rules covering the publication of information by the Bulletin Board operator and the provision of information to the Bulletin Board Operator are to be given force through provisions in the National Gas Law and National Gas Rules, which are currently being prepared and are expected to be given effect prior to July2008, following a period of further consultation.

The information in this document is therefore subject to the final form of the National Gas Law and National Gas Rules and the Bulletin Board Procedures.

Version: 1.1

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Documentation Revision History

Version	Date	Author	Comments
0.1	25 Sep 2007	Richard Hill	Initial draft
0.2	26 Oct 2007	Richard Hill	New Rules and Procedures section added. AEST statement added in 5.3.4. Changed Historical Flow references to Actual Flow. INT925 added and minor modifications to report names in 3.4.
0.3	22 Nov 2007	Richard Hill	Comments field added to Standing Capacity transaction (in 4.3.1). Changes in body text from Plant Operators to Pipeline Operators (various). New error added (no. 26 in 4.5.1) and date related error codes updated for various transactions. New error code (no. 0 in 4.5.1) to represent succesful transactions. Archived Report details added (in 5.5). High and Low validation of NominationQuantity modified to utilise CapacityQuantity rather than DemandQuantity. Validation restricted to Demand Regions, excluding Demand Hubs (in 4.3.5). Comma made optional as an end of line field delimeter (in 4.1.4). New error code (no. 6 in 4.5.1) added for detection of erroneous characters. Validation and error code 6 added for invalid character types (in 4.1.2). Validation and error code 6 added for trailing and leading spaces (in 4.1.9). Validation and error code 6 added for trailing and leading zeros (in 4.1.12). Validation and error code 6 added for detection of tabs (in 4.1.10).
1.0	28 Feb 2008	Richard Hill	Updated to provide conformity with the Bulletin Board Procedures. Changes largely relate to the use of: • Demand Zone in place of Demand Hub and Region • Production Zone in place of Production Hub • "the gas day" in place of "the current gas day". Shippers Allocated Aggregated Deliveries transaction added.
1.1	18 April 2008	Demi Chau	Updated to reflect draft BB Procedures (April 2008 Consultation version).

Distribution History

Version	Person	Organisation	Title	Date
0.2	Prospective BB Participants	Prospective BB Participants		15 Nov 2007
1.0	Prospective BB Participants	MCE Gas Market Reform Distbn list		1 Mar 2008

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1 Introduction

1.1 Purpose

The purpose of this document is to specify the data formats and the rules of information exchange between The Bulletin Board Operator and BB Participants in the context of the National Gas Market Bulletin Board.

1.2 Audience

The primary audience for this document are business users and IT developers from BB Participant organisations who will interface and use the National Gas Market Bulletin Board, and the Bulletin Board Operator.

This document assumes the audience has a basic understanding of Unified Modeling Language (UML) and understands UML concepts and syntax.

1.3 Scope

This document details the upload file formats required by the National Gas Market Bulletin Board.

This document details the naming conventions and generic structure of the reports published on the National Gas Market Bulletin Board. More detailed information regarding these reports can be found in Ref.[2].

1.4 Related Documents

Ref.	Document Name	Version	Comments
1	National Gas Market Bulletin Board – Report List		

1.5 Definitions, Acronyms and Abbreviations

Term	Description
AEST	Australian Eastern Standard Time
ASCII	American Standard Code for Information Interchange. A standard coding scheme that assigns numeric values to letters, numbers, punctuation marks, and control characters, to achieve compatibility among different computers and peripherals
BB	The National Gas Market Bulletin Board
BBO	The National Gas Market Bulletin Board Operator
BBWG	The National Gas Market Bulletin Board Working Group
CSV	Comma-Separated Values, a comma delimited text
Default flow	The direction that gas normally flows (eg. greater than 183 days per calendar year) through a pipeline. Those flows in the opposite direction, also known as Reverse flows, will be shown as negative values.
Demand Zone	A region where the natural gas load is delivered by one or more BB pipelines.
FTP	File Transfer Protocol – a protocol that allows users to copy files between any system they can reach on the network
GUI	Graphical User Interface
M	Mandatory, in the context of this document, indicates that the field's value must be provided
NR	Not required, in the context of this document, indicates that the value will be ignored by the parsing application even if it is provided
O	Optional, in the context of this document, indicates that the field's value needs not to be provided, but will be processed if it was
Production Zone	A region in which natural gas is produced from one or more facilities and is injected into one or more BB pipelines that transport the gas to other Production or Demand Zones.
TJ	1000 GigaJoules, 10^{12} Joules, Joule is a unit of energy
UML	Unified Modeling Language

1.6 Overview and Structure

This document comprises the following sections:

- Introduction – outlines the purpose of this BB Participant Build Pack, the intended audience, and scope.
- Interfaces – contains general requirements and external interface specifications for the BB Project with respect to CSV file uploads.
- Reports – general requirements and high-level specifications for BB reports.
- Appendices.

2 Rules and Procedures

This document details the National Gas Market Bulletin Board interface requirements (between the BB Participants and BB Operator) as required by the Bulletin Board Rules (section 19.1) and Procedures.

2.1 Data Provision

The following matrix details the data provision responsibilities of all parties as defined within Division 5 of the Bulletin Board Rules.

Transaction \ BB Participant	Facility Operators	Users	Pipeline Operators	Producers	NGERAC	Responsible Minister
Standing Capacity	●		●			
Capacity Outlook	●		●			
Linepack Adequacy			●			
Delivery Nomination		o	o			
Supply and Capacity Offer (optional)		●	●	●		
Actual flow	●		●			
Emergency	⊙		⊙	⊙	●	●
Standing Demand						●
Contacts	●	●	●	●		
Shippers Allocated Aggregated Deliveries			●			

Legend

- ● Required to provide data to BBO
- o Users required to provide data to Pipeline Operator who is responsible for providing aggregated data to BBO
- ⊙ Authorised representative may request emergency activation or provide status updates

2.2 Inconsistencies

Where inconsistencies exist between this document and the Bulletin Board Rules or Procedures, then the requirements or definitions as defined in the Bulletin Board Rules or Procedures shall take precedence.

2.3 Update Process

This document forms Annexure A to the BB Procedures and changes are subject to the BB rules. Once this document has been formally approved, subsequent changes shall follow the process as defined in rule 20 of the Bulletin Board Rules relating to the process for non-material amendments.

3 Interfaces

3.1 Overview

With the exception of supply / capacity offers and information provided specifically in relation to an emergency, provision of information and data required for the BB is mandatory under legislation (National Gas Law) and is specified in detail in the BB rules (within the National Gas Rules) and the BB Procedures.

3.2 Process

The BB is based upon the exchange of standardised CSV files. With the exception of the upload of Emergency details, it does not provide for the manual submission of transactions via a GUI. However, the BB will provide BB Participants with a variety of submission options which includes the following steps:

- A BB Participant prepares a data file in CSV format utilising any available third-party tool, for example Microsoft® Excel[1], or any text editor.
- Each file can contain multiple records but may only contain data pertaining to the transaction type specified in the <transaction name> component of the filename.
- After logging in to their secure area, the BB Participant uploads the file by:
  - The BB Participant's automated system/s connect to the defined upload directory under their Secure section of the BB and upload the generated CSV file/s.
    OR
  - The BB Participant manually connects to the defined upload directory under their Secure section of the BB and uploads the CSV file/s.
    OR
  - The BB Participant selects the web-upload file function from the appropriate screen on the BB (refer Ref.[4]), which results in a "file open" dialogue being presented.
  - Using the "file open" dialogue, the required CSV file (that has already been prepared) is located and selected by the BB Participant.
  - Using the web browser interface, the BB Participant submits the selected file by clicking on the upload button (using HTTP) to the defined upload directory under their Secure section of the BB.
- The BB system will parse and validate the submitted data in accordance with Ref.[3]. The BB Participant will be advised of the success or failure (including details of any error found within the submitted file/s) of the transaction via the BB Participant's Transaction Log report.

[1] When a text file with .CSV extension is opened in Microsoft Excel, Excel changes the date format to dd-MM-YY, that would make it incompatible with the date format specification as defined in this document, i.e. dd MMM YYYY.

A high-level sequence diagram (shown in Figure 1) illustrates the process options available to a BB Participant for uploading data to the BB.

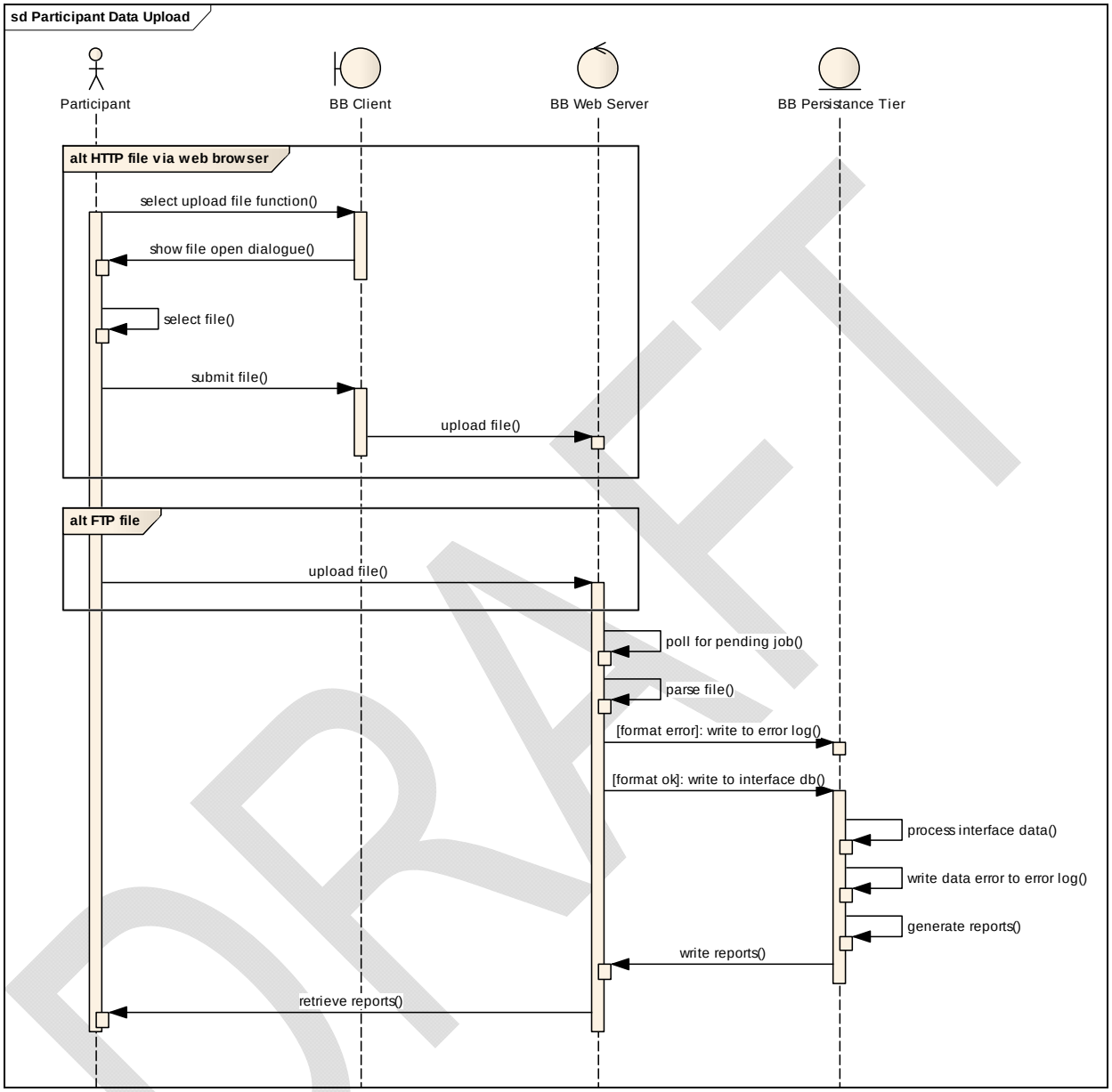


Figure 1 – BB Participant file upload overview sequence diagram

In accordance with Ref.[4], the administrative transactions performed by the BBO will be facilitated through the use of a web browser interface. Note that these transactions will not utilise the exchange of CSV files for inputs. A high-level sequence diagram (shown in Figure 2) illustrates the process for uploading Administration data to the BB by the BBO.

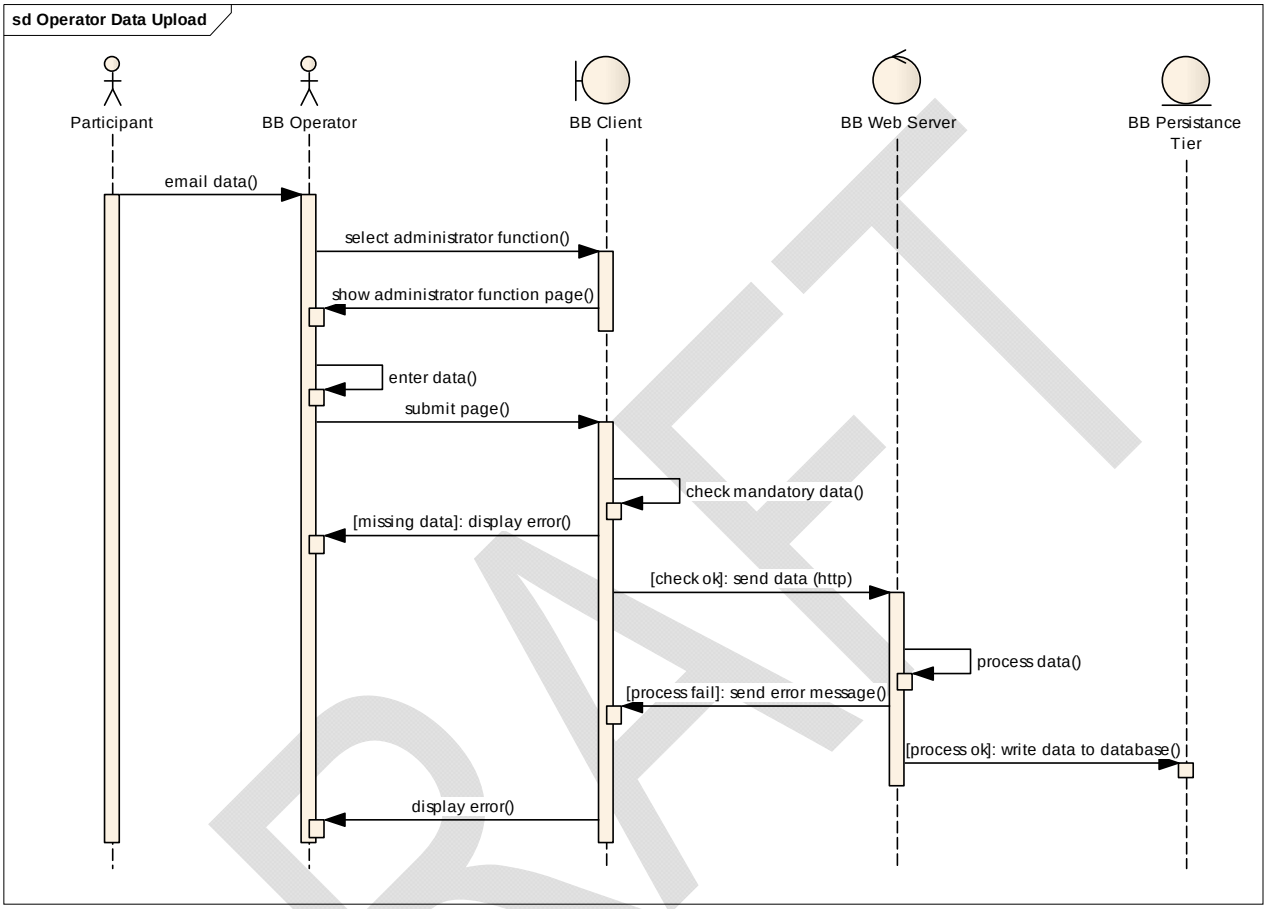


Figure 2 – BB Operator data upload overview sequence diagram

In accordance with Ref.[4], the upload of Emergency details will be facilitated through the use of a web browser interface. Note that these transactions will not utilise the exchange of CSV files for inputs. A high-level sequence diagram (shown in Figure 3) illustrates the process for NGERAC or the relevant Jurisdictions to initiate an Emergency and for BB Participants to log on to the restricted emergency information area of the BB.

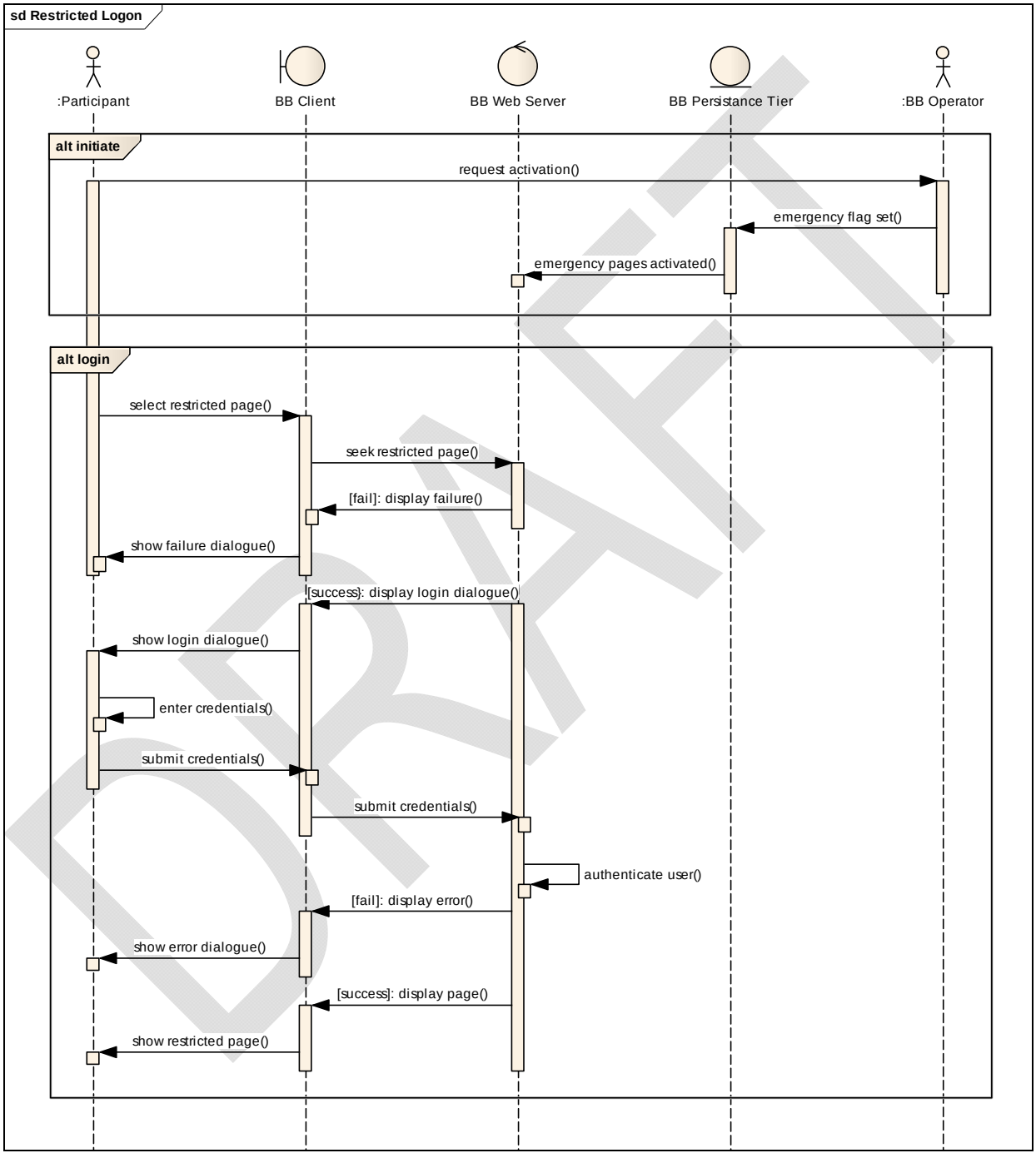


Figure 3 – BB Participant emergency declaration and login overview sequence diagram

A high-level sequence diagram (shown in Figure 4) illustrates the process for BB Participants to submit transactions and access data on the restricted emergency information area of the BB.

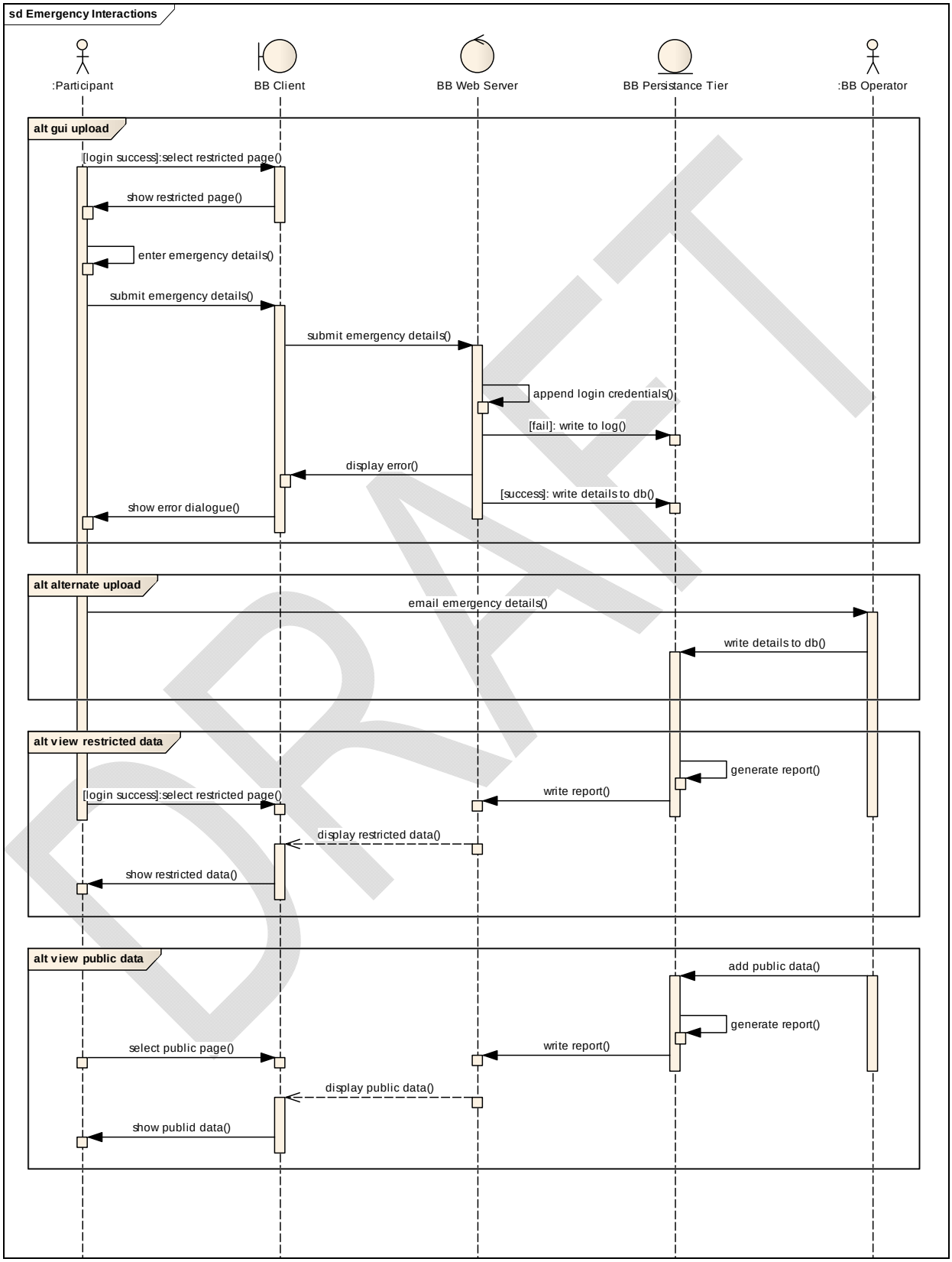


Figure 4 – BB Participant emergency upload and retrieval overview sequence diagram

3.3 Transactions

As outlined in the diagrams above, the BB transactions fall into two categories:

- BB Participant transactions based upon the exchange of standardised CSV files; and
- Administrative transactions performed by the BBO based upon a web browser interface.

These transactions are detailed in section 4, however, an overview is provided in the following tables.

The individual transactions based upon the exchange of standardised CSV files are:

Transaction Name	Description
StandingCapacity	Nameplate rating information (in the form of MDQ) of natural gas production and storage facilities and natural gas transmission pipelines
CapacityOutlook	A three day capacity outlook (in the form of MDQ) for each included production and storage facility
LinepackAdequacy	Represents the actual or expected ability of each transmission pipeline to meet the nominated deliveries over the outlook period. It will take the form of "traffic light" reporting system. (For the Victorian PTS this is related to the rate of LNG scheduled)
DeliveryNomination	Delivery / demand nomination data (inclusive of Gas-fired power generation) aggregated and posted at the demand zone level
CapacityOffer	A voluntary activity that provides an avenue for parties to offer or request any spare pipeline capacity and / or gas supply offers to the market. Details of the offers and company details will be shown.
Actualflow	Represents actual daily metered data for each production facility, gas storage facility and pipeline gas deliveries (or injections in Victoria)
Emergency	An optional transaction that provides an avenue for the update of emergency information data for the emergency page and report, which are only accessable to authorised registered users
StandingDemand	Forecast winter and summer peak day standing data by Demand Zone or Jurisdiction.
ShipperUG	The aggretated allocated delivered quantities for each shipper during the previous invoice period

The individual interfaces that comprise the Administration web upload functionality are:

Transaction	Description
BBContacts	Contact details of Registered BB Participant employees.
BBParticipants	Details of registered organisations on the BB.
EmergencyFlag	Notification of a gas supply emergency incident that has been escalated sufficiently that NGERAC or a jurisdiction elects to activate the emergency functions of the BB to assist with information sharing during the emergency.
Topology	Modifications / additions to the existing topology covered by the BB.

3.4 Reports

Once the files have been uploaded, the BBO will process the data in accordance with Ref.[3]. This data forms the basis of the information reported on the BB as detailed in Ref.[2]. More information about the reporting interface is provided in section 5. An overview of the reports is provided in the following table.

Report Id	Report Name	Description
INT901	BB Facilities List	This report displays the list of all BB facilities (production, storage and pipelines) within the Bulletin Board system. It is triggered when a record is inserted, updated or deleted.
INT902	Zones List	This report displays a list of all zones within the Bulletin Board system. It is triggered when a record is inserted, updated or deleted.
INT911	Standing Capacity	This report displays the standing capacity of BB facilities (production, storage and pipelines) within the Bulletin Board system. It is triggered when a new record is added.
INT912	Standing Peak Day Demand Forecasts	This report displays the standing demand peak day forecasts for each of the zones and jurisdictions. It is triggered when a new record is added.
INT921	Linepack Capacity Adequacy	This region specific report displays the linepack adequacy for each of the BB pipelines for the next 3 days. The report is generated hourly if there is a change in data.
INT922	Capacity Outlook	This region specific report displays the capacity outlook for each of the BB facilities (production, storage and pipelines) within the Bulletin Board system for the next 3 days. The report is generated hourly if there is a change in data.
INT923	Forecast Pipeline Flows	This region specific report displays the forecast pipeline flows for each of the BB pipelines for up to the next 7 days. For the Victorian PTS, scheduled injections for the next 3 days is used. The report is generated hourly if there is a change in data.
INT924	Actual Flows 7 Day	This region specific report displays the actual / historical flows for each BB facility (production, storage and pipeline) within the Bulletin Board system for a rolling 7 days. The report is generated daily.
INT925	Actual Flows Prev Month	This region specific report displays the actual / historical flows for each BB facility (production, storage and pipeline) within the Bulletin Board system. This report is generated 7 days after the completion of each month and covers the previously completed month.
INT931	Registered BB Contacts	This region specific report displays all users registered with the Bulletin Board Operator. The report is generated daily.
INT933	Registered BB Participants	This report displays details of all companies registered with the Bulletin Board Operator. The report is generated daily.
INT941	Supply and Capacity Notifications	This region specific report displays all current supply or capacity offer details. It is triggered when a record is inserted, updated or deleted.
INT942	Emergency Status	This public report displays the current gas market emergency status. It is triggered when emergency status records are added or updated by the BBO. Data for this report is added by the BBO based on authorised statements provided by authorised Govternment representatives or NGERAC.
INT943	Emergency Information	This restricted report displays the recent emergency information provided by authorised users. It is triggered when the emergency page is activated by NGERAC or a jurisdiction or when a new record is added.
INT944	Transaction Log	This BB Participant specific report documents transaction details of files submitted by BB Participants that have been processed by the BB Operator. Succesful transactions are logged together with files that have failed validation.
INT945	Map Data	The bulletin board system contains an interactive Adobe Flash® map with current gas day pipeline capacity and pipeline flow data by zone. This report is

		to be used as an input for the map, not for direct use by end users

4 Transactions

4.1 General Requirements

4.1.1 File format

Interface files for the Bulletin Board will be in comma separated values (CSV) format. A CSV file contains the values in a table as a series of ASCII text lines organised so that each column value is separated by a comma from the next column's value and each row starts a new line. Each file can contain multiple records but may only contain data pertaining to the transaction type specified in the <transaction name> component of the filename

4.1.2 Character Set

Any uploaded file must be in 7-bit ASCII format. Neither non-printable characters or Unicode formats should be used. Error code 6 (Unexpected character detected) applies to validation of this requirement.

4.1.3 Line delimiters

Lines in the uploaded file should be delimited by a combination of Carriage Return (CR, ASCII code decimal 13) and Line Feed characters (LF, ASCII code decimal 10). This combination is chosen to cater for the “lowest common denominator” in producing CSV files, the Microsoft® Excel™ application that uses this behaviour as default.

Empty lines, i.e. lines containing just CR and LF, are not allowed

4.1.4 Field delimiters

Fields in a row must be delimited by commas (ASCII code decimal 44). If a comma must occur inside a literal, then the entire literal must be surrounded by double quotes as per 4.1.8.

The last field in the row may be followed the field delimiter (comma), however, it must be followed by a line delimiter (CR+LF)[2].

4.1.5 Header

The very first line in a CSV file must contain a set of column designators that can be used for further processing. The column designators make CSV files more human readable and facilitate tracking of import problems. Only one header per CSV file is allowed.

4.1.6 Footer

No footer is required for a CSV file. However, the application that parses CSV must be able to handle End-Of-File mark (EOF, ASCII decimal code 26) at the end of the file, if present.

4.1.7 Optional fields

If a field is declared as optional its value needs not to be specified, however the field delimiter must be present.

2 Note: this is in line with Uncontrolled Withdrawal File format (1998) that requires every field, including the last field in a row, to be comma-delimited.

4.1.8 Treatment of literals

The CSV import application must be able to parse literals irrespectively whether they are surrounded by double-quotes, single-quotes, or not.

A CSV parser will interpret the following CSV file row examples analogously:

Rule	Example	Treatment
Commas can only be used in the literal if surrounded by double quotes.	123,"This is a sample field with a , inside it",456,	✓
	123,This is a sample field with a , inside it,456,	×
	123,'This is a sample field with a , inside it',456,	×
Double quotes should wrap the entire literal. They should not be used as part of field contents.	123,"This is a sample field with a , inside it",456,	✓
	123,"This is a sample field with a " inside it",456,	×
Single quotes are not a special character and will parse literally. So whilst single quotes can wrap the entire literal (as shown in the last example), they perform no function and will parse as written.	123, This is a sample field with a ' inside it,456,	✓
	123,'This is a sample field with a , inside it',456,	×
	123,'This is how this sample field will appear',456,	✓

4.1.9 Leading and trailing spaces

In the case of numeric values the use of a leading, embedded or trailing space is inappropriate. Spaces should not be used where a value has a Numeric characteristic.

Where the value has a "text" characteristic that by its nature it can have a space or spaces as part of the structure, only embedded spaces are permitted. Leading and trailing space-characters immediately adjacent to the comma field separators should not be included in the CSV file. Therefore "John Citizen"... resolves to ---,John Citizen,--- or ---,"John Citizen",---.

Error code 6 (Unexpected character detected) applies to validation of this requirement.

4.1.10 Tab characters

Tab characters shall not be used in CSV files. Error code 6 (Unexpected character detected) applies to validation of this requirement.

4.1.11 Positive and negative numeric values

Positive numbers in CSV file shall be unsigned. Negative numbers shall be prefixed with a negative sign.

4.1.12 Leading and trailing zeroes

There shall be no leading zeroes in numeric values unless a specific data format requires this. Error code 6 (Unexpected character detected) applies to validation of this requirement.

4.1.13 Format

The numeric format is defined as ***numeric*** [(*precision* [, *scale*])]. The *precision* (referred to as "length") and *scale* (referred to as "decimal places) determine the range of values that can be stored in a numeric field:

- The precision specifies the maximum number of decimal digits that can be stored in the column. It includes *all* digits, both to the right and to the left of the decimal point. Precisions can range from 1 digit to 38 digits or the default precision of 18 digits can be used.
- The scale specifies the maximum number of digits that can be stored to the right of the decimal point. The scale must be less than or equal to the precision. You can specify a scale ranging from 0 digits to 38 digits or use the default scale of 0 digits.

- The number of digits to the left of the decimal point cannot exceed *precision – scale*

An *Integer* can be represented as a numeric value with the *scale* of 0, i.e. Numeric(11,0)

Below are examples of **valid** values for a numeric type defined as Numeric(5,3)

```
12.345
12.345
-12.345
12.345
12.100
12.000
```

Here are some examples of **invalid** values for the type defined as Numeric(5,3):

```
1,200
12-
12.345678
123456.78
```

4.1.14 File name and file extension

The file name must be constructed of the following elements separated by underscores:

1. The CSV file originator identifier.
2. The name of the transaction to which the CSV file is supplied, with no white spaces.
3. Date/time stamp in the format CCYYMMDDHHmmSS when the file has been generated, 24-hour format, local time.
4. The file extension of "CSV", separated from the file name with a period "."

Here's an example of a CSV file name:

```
COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV
123_LINEPACKADEQUACY_20070503131500.CSV
```

4.1.15 Identifiers (Id's)

Plant and Zone identifiers used within the Transactions and Reports subscribe to the following format:

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	Unique identifying Number	1 to 9999 including leading zeros

For example, Id 520345 relates to an element (Facility or Zone) within NSW / ACT with a unique identifier of 0345 which is related to the gas industry.

4.2 Data dictionary

Field type	Description	
ActualQuantity	The actual or actual flow quantity expressed in TJ	
CapacityQuantity	Standing capacity quantity expressed in TJ	
CapacityType	Value	Description
	HCAP	Holding capacity in storage
	MDQ	Daily maximum firm capacity (name plate) under the expected operating conditions adjusted for any plant that is 'mothballed' , decommissioned or down-rated and/or cannot be recalled within 1 week, planned maintenance excepted. Reflects and long terms changes (ie. >12 months)
	RMDQ	Reverse direction daily maximum capacity (name plate) under normal operating conditions (if reverse flows occur)
	WMDQ	Withdrawal into UGS or liquefaction of LNG. Daily maximum daily capacity (name plate) under normal operating conditions
CompanyId	Unique Company identifier	
DemandQuantity	Standing Forecast Demand quantity expressed in TJ	
DemandType	Value	Description
	PSUMM	1 in 2 summer (November to March) peak day demand (by Zone)
	PWINT	1 in 2 winter (May to September) peak day demand (by Zone)
Description	Free text field used to provide additional information	
EffectiveDate	Value	Description
	yyyy-mm-dd	Gas day date that corresponding record takes effect. Any time component supplied will be ignored.
EmergencyId	Unique emergency identifier	
EmergStatus	Free text field used to describe the status of the emergency	
EventId	A unique Emergency event record identifier	
EventType	Free text field (20 characters long) used to succinctly classify the details contained in the accompanying Information field eg. “Load Shedding” or “NEM Impact” or “Unused capacity” etc.	
Flag	Value	Description
	RED	Involuntary load shedding happening or likely. Additionally in Victoria, where LNG is scheduled at a rate >100 tonnes/h to meet system security requirements
	AMBER	Voluntary / contractual load shedding. Additionally in Victoria, where LNG is scheduled at a rate >0 and <=100 tonnes/h to meet system security requirements
	GREEN	Adequate linepack / capacity available to meet expected demand

Field type	Description	
FlowType	Value	Description
	OPFLW	Operational daily flow. (NOT settlement quality data)
GasDate	Value	Description
	yyyy-mm-dd	Date of gas day. Any time component supplied will be ignored. The gas day is that applicable under the pipeline contract or market rules as the case may be
HighRange	A percentage value that is applied to the Facility Standing Quantities which is used for validation purposes for corresponding daily quantities. The default value is 120% but can be modified on advice from NGERAC or the respective Facility Operator. *Even though an OutlookQuantity of 105TJ exceeds the CapacityQuantity of 100TJ, it is still valid where the HighRange is set to 120%. Eg. 105TJ <= (100TJ x 120%)*	
Information	Free text field used to provide additional information	
LowRange	A percentage value that is applied to the Facility Standing Quantities which is used for validation purposes for corresponding daily quantities. The default value is 20% but can be modified on advice from NGERAC or the respective Facility Operator. *A NominationQuantity of 15TJ fails validation where the DemandQuantity is set to 100TJ and LowRange is set to 20%. Eg. 15TJ <= (100TJ x 20%)*	
MDQ	Maximum Daily Quantity expressed in TJ	
MHQ	Maximum Hourly Quantity expressed in TJ	
NominationQuantity	Delivery Nomination quantity expressed in TJ	
NominationType	Value	Description
	FIRMN	Firm nomination for the following gas day
	FIRMR	Firm renomination, an update within the gas day
	FCNOM	Forecast nomination for the (contracted) outlook period
	D+0	The forecast for the gas day. Victorian market only
	D+1	The next day's forecast. Victorian market only
	D+2	2 day ahead forecast. Victorian market only
OfferId	A unique Supply Capacity Offer identifier	
OfferType	Value	Description
	TRANC	Transmission Capacity
	GAS	Gas as a daily quantity
OutlookQuantity	Capacity Outlook quantity expressed in TJ	
OutlookType	Value	Description
	PRODC	Production capacity
	TRANC	Transmission capacity
	REVC	Reverse direction transmission capacity
PlantId	A unique Plant identifier. Refer to section 4.1.15 for details.	
PlantType	Value	Description
	PIPE	Pipeline – a physical pipeline linking a production or demand zone to another production or demand zone which normally covers the whole pipeline system including laterals
	PROD	Production – a facility where gas is processed and injected into a pipeline

Field type	Description	
	STOR	Storage – a facility where gas is withdrawn from a pipeline and held in storage for subsequent reinjection
Quality	Value	Description
	OK	Data quality satisfactory
	OOR	Data Out of Range
	M	Missing or incomplete data
	S1	Data substituted with previous day's values
	S2	Data substituted with values from 2 days prior
RefCodeId	Unique reference code identifier	
RefCode	Unique code as defined within this data dictionary	
RefCodeDesc	Description of the reference code	
Service	Free text field used to provide additional information	
Status	Value	Description
	C	Closed
	O	Open
TerminationDate	Value	Description
	yyyy-mm-dd	Gas day that corresponding record ceases to take effect. TerminationDates are inclusive. Any time component supplied will be ignored.
TG	Value	Description
	567.8	The total gas delivered from all BB pipelines operated by the Pipeline Operator, in the preceding invoice period.
UG	Value	Description
	123.4	The total gas delivery allocated to the Shipper from all BB pipelines operated by the Pipeline Operator, which provided it with a pipeline service in the previous invoice period
Units	Value	Description
	TJ	Terajoules. This is the only energy unit used throughout the BB and will always utilise a precision of 1 decimal place
UserId	Unique user identifier	
ZoneId	A unique Zone identifier. Refer ZoneType for inclusions.	
ZoneType	Value	Description
	JURI	Jurisdiction – an area typically aligned to state or territory boundaries
	DHUB	Demand Hub – a demand zone (usually greater city area) supplied by multiple pipelines
	DREG	Demand Region – a demand zone supplied by a BB pipeline inclusive of any off-takes and demand hubs
	PHUB	Production Hub – a production zone supplying more than 1 BB pipeline
	PREG	Production Region – a production zone supplying only 1 BB pipeline

4.3 BB Participant Transactions

4.3.1 Standing Capacity

4.3.1.1 Details

The Standing Capacity transaction is used to provide the nameplate capacity data for the Standing Capacity Data report. It is also an NGERAC requirement that Facility Operators provide this 'nameplate' capacity information annually or when there is a material change to the capacity of the plant that is expected to remain in force for 12 months or longer (ie. excludes short term maintenance). With respect to production capacity, Standing Capacity should take long term field performance trends into account.

Where multiple Capacity Types apply to individual plant (eg. bidirectional pipelines or interconnects will have a corresponding MDQ and RMDQ whereas storage facilities will have corresponding MDQ, HCAP and WMDQ), then all the relevant nameplate capacity details are required to be provided.

4.3.1.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
File	CSV	STANDINGCAPACITY	Plant Operator	BBO	

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
PlantId	int	M	1234
CapacityType	char(5)	M	HCAP; MDQ; RMDQ; WMDQ
CapacityQuantity	numeric(18,1)	M	1234.5
EffectiveDate	datetime	M	2007-01-23
Comments	varchar(256)	O	Free text field to provide additional information

4.3.1.3 Transaction Validation

File / Field name	Validation	Error code
File name	File name must conform to the standard naming convention (eg. COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV)	3
File name	The TRANSACTIONNAME within file name must be of a known type, in this case, it should be STANDINGCAPACITY.	4
Mandatory fields	All mandatory fields for the STANDINGCAPACITY transaction must be provided	5
PlantId	Must be a valid PlantId on the database	40
PlantId	The provider of the file (COMPID) must be the assigned operator of the plant in question	41
CapacityType	Must be a valid CapacityType on the database	60
CapacityQuantity	Must be 0 <= *CapacityQuantity*	80
CapacityQuantity	Must be *CapacityQuantity* < 2000 except where PlantType (corresponding to specified PlantId) is 'STOR' in which case no validation is performed	81
EffectiveDate	Must be a valid date	22
EffectiveDate	Must be a current or future date	23

4.3.2 Standing Demand

4.3.2.1 Details

The Standing Demand transaction is primarily used to provide the gas peak day demand data for the Standing Demand Forecast Data report. It is also an NGERAC requirement that Juristictions provide this information annually.

Each Juristiction is expected to provide a 1 in 2 Peak Summer's day and Winter's day demand forecast. For the purpose of this report, the summer period is considered to be from November to March (inclusive) and the winter period is considered to be from May to September (inclusive).

4.3.2.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
File	CSV	STANDINGDEMAND	Jurisdiction	BBO	Forecast peak day demand summer and winter by demand zones / jurisdiction

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
ZoneId	int	M	5678
DemandType	char(5)	M	PSUMM; PWINT
DemandQuantity	numeric(18,1)	M	1234.5

4.3.2.3 Transaction Validation

File / Field name	Validation	Error code
File name	File name must conform to the standard naming convention (eg. COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV)	3
File name	TRANSACTIONNAME within file name must be of a known type, in this case, it should be STANDINGDEMAND	4
Mandatory fields	All mandatory fields for the STANDINGDEMAND transaction must be provided	5
ZoneId	Must be a valid ZoneId on the database	42
ZoneId	The provider of the file (COMPID) must be one of the assigned operators of plant that is associated to the Zone in question	43
DemandType	Must be a valid DemandType on the database	61
DemandQuantity	Must be 0 <= *DemandQuantity*	82
DemandQuantity	Must be *DemandQuantity* < 2000	83

4.3.3 Linepack Adequacy Flag

4.3.3.1 Details

The Linepack Adequacy transaction is primarily used to provide the data for the Linepack Adequacy Data report. It is a requirement that Pipeline Operators update this information during a gas day if there is a change in status otherwise the flag will remain unchanged.

4.3.3.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
File	CSV	LINEPACKADEQUACY	Pipeline Operator	BBO	

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
PlantId	int	M	1234
GasDate	datetime	M	2007-01-23
Flag	char(5)	M	RED; AMBER; GREEN
Description	varchar(256)	O	Free text field to provide additional information

4.3.3.3 Transaction Validation

File / Field name	Validation	Error code
File name	File name must conform to the standard naming convention (eg. COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV)	3
File name	TRANSACTIONNAME within file name must be of a known type, in this case, it should be LINEPACKADEQUACY.	4
Mandatory fields	All mandatory fields for the LINEPACKADEQUACY transaction must be provided	5
GasDate	Must be a valid date	20
GasDate	Must be a current or future date	21
PlantId	Must be a valid PlantId on the database	40
PlantId	The provider of the file (COMPID) must be the assigned operator of the plant in question	41
Flag	Must be a valid flag on the database	68

4.3.4 Capacity Outlook

4.3.4.1 Details

The Capacity Outlook transaction is primarily used to provide the 3 day capacity outlook data for the Capacity Outlook 3 Day report. It is a requirement that Facility Operators provide this information daily for the gas day and the next 2 gas days.

Where multiple OutlookTypes apply to individual plant (eg. bidirectional pipelines or interconnects will have a corresponding TRANC and REVC), then all details are required to be provided.

4.3.4.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
File	CSV	CAPACITYOUTLOOK	Plant/ Pipeline Operator	BBO	

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
PlantId	int	M	1234
GasDate	datetime	M	2007-01-23
OutlookType	char(5)	M	PRODC; TRANC; REVC
OutlookQuantity	numeric(18,1)	M	1234.5
Description	varchar(256)	O	Free text field to provide additional information
Quality	char(5)	M	OK; OOR; M; S1; S2

4.3.4.3 Transaction Validation

File / Field name	Validation	Error code
File name	File name must conform to the standard naming convention (eg. COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV)	3
File name	TRANSACTIONNAME within file name must be of a known type, in this case, it should be CAPACITYOUTLOOK	4
Mandatory fields	All mandatory fields for the CAPACITYOUTLOOK transaction must be provided	5
GasDate	Must be a valid date	20
GasDate	Must be a current or future date	21
PlantId	Must be a valid PlantId on the database	40
PlantId	The provider of the file (COMPID) must be the assigned operator of the plant in question	41
OutlookType	Must be a valid OutlookType on the database	63
OutlookQuantity	(LowRange x CapacityQuantity) <= *OutlookQuantity* In the event of validation failure, the *value* is displayed but tagged as OOR	84
OutlookQuantity	*OutlookQuantity* <= (HighRange x CapacityQuantity) In the event of validation failure, the *value* is displayed but tagged as OOR	85

File / Field name	Validation	Error code
Quality	Must be a valid Quality type on the database	69

4.3.5 Delivery Nomination

4.3.5.1 Details

The Delivery Nomination transaction is primarily used to provide the data for the Forecast Pipeline Flows report. It is a requirement that Pipeline Operators provide:

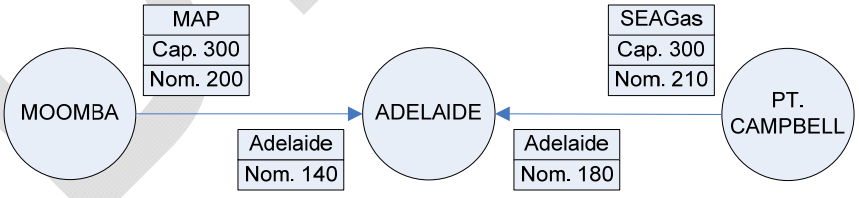
Data	Period	Frequency	Relevant code
Forecast deliveries by zone for the outlook period for each BB pipeline	As determined by the relevant contracts or market arrangements[1]	As determined by the relevant contracts or market arrangements[1]	FCNOM
Firm delivery nomination by zone for the gas day	The gas day	Daily	FIRMN
Renominations by zone within the gas day	Within the gas day	Within day	FIRMR

1 There is no limit to the end of the outlook period, however, typically it is expected to be a 7 day period. (in which case this forecast data would be upload weekly). The Victorian market operator will provide scheduled injections on its BB pipelines (including LNG injections) as a proxy for delivery nominations. The outlook period for the Victorian market is 3 days, being the gas day and the next 2 gas days.

Typically, NominationQuantity values are associated with a Demand Zone, however in some cases, such quantities can relate to deliveries into Production Zones. Where the forecast applies to a bidirectional pipeline or interconnect, the NominationQuantity reported would be positive for flow in the default direction and negative by exception.

The following example illustrates a scenario where multiple Production Zones deliver gas to a common Demand Zone or hub. Using the conventions established in this example, it should be possible to interperet the data required to be provided for any BB scenario.

The region serviced by the MAP pipeline and it's laterals is shown as Nom. 200 and is inclusive of the corresponding Adelaide hub value shown as Nom. 140. Similarly, the region serviced by the SEAGas pipeline and it's laterals is shown as Nom. 210 and is inclusive of the corresponding Adelaide hub value shown as Nom. 180. (By inference, the total forecast for the Adelaide hub is the aggregation of the 140 and 180 nominations). An associated PlantId is required to be provided with each of these records so that it is possible to determine the orientation / association of each of the forecasts (eg. so the system can differentiate between the 2 Adelaide forecast / nominations, and associate the 140 forecast / nomination with Moomba and the 180 forecast / nomination with Port Campbell respectively).



4.3.5.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
File	CSV	DELIVERYNOMINATION	Pipeline Operator	BBO	

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
PlantId	int	M	1234
ZoneId	int	M	5678
GasDate	datetime	M	2007-01-23
NominationType	char(5)	M	D+0; D+1; D+2 for Victorian market only. FIRMN; FIRMR; FCNOM for all other markets.
NominationQuantity	numeric(18,1)	M	1234.5
Description	varchar(256)	O	Free text field to provide additional information
Quality	char(5)	M	OK; OOR; M; S1; S2

4.3.5.3 Transaction Validation

File / Field name	Validation	Error code
File name	File name must conform to the standard naming convention (eg. COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV)	3
File name	TRANSACTIONNAME within file name must be of a known type, in this case, it should be DELIVERYNOMINATION	4
Mandatory fields	All mandatory fields for the DELIVERYNOMINATION transaction must be provided	5
GasDate	Must be a valid date	20
GasDate	Must be a current or future date	21
PlantId	Must be a valid PlantId on the database	40
PlantId	The provider of the file (COMPID) must be the assigned operator of the plant in question	41
ZoneId	Must be a valid ZoneId on the database	42
ZoneId	The provider of the file (COMPID) must be one of the assigned operators of plant that is associated to the Zone in question	43
NominationType	Must be a valid NominationType on the database	62
NominationQuantity	(LowRange x CapacityQuantity) <= *NominationQuantity* where the CapacityQuantity applies to the pipeline corresponding to the Demand Zone. In the event of validation failure, the *value* is displayed but tagged as OOR	86
NominationQuantity	*NominationQuantity* <= (HighRange x CapacityQuantity) where the CapacityQuantity applies to the pipeline corresponding to the Demand Zone. In the event of validation failure, the *value* is displayed but tagged as OOR	87
Quality	Must be a valid Quality type on the database	69

4.3.6 Actual flow

4.3.6.1 Details

The Actual flow transaction is primarily used to provide the data for the Actual flow reports. It is a requirement that the Plant Operators provide this information for all plant (BB pipelines and BB production and BB storage facilities) within the Bulletin Board system. Data should be provided daily for the previous gas day and no more than one day in arrears.

Where the flow applies to a bidirectional pipeline or interconnect, the ActualQuantity provided should be positive for flow in the default direction and negative by exception.

4.3.6.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
File	CSV	ACTUALFLOW	Plant/Pipeline Operator	BBO	

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
PlantId	int	M	1234
ZoneId	int	M	5678
GasDate	datetime	M	2007-01-23
FlowType	char(5)	M	OPFLW
ActualQuantity	numeric(18,1)	M	1234.5
Quality	char(5)	M	OK; OOR; M; S1; S2

4.3.6.3 Transaction Validation

File / Field name	Validation	Error code
File name	File name must conform to the standard naming convention (eg. COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV)	3
File name	TRANSACTIONNAME within file name must be of a known type, in this case, it should be ACTUALFLOW	4
Mandatory fields	All mandatory fields for the ACTUALFLOW transaction must be provided	5
GasDate	Must be a valid date	20
GasDate	Must be an historical date	26
PlantId	Must be a valid PlantId on the database	40
PlantId	The provider of the file (COMPID) must be the assigned operator of the plant in question	41
FlowType	Must be a valid FlowType on the database	64
Quality	Must be a valid Quality type on the database	69

4.3.7 Supply and Capacity Offers

4.3.7.1 Details

The Capacity Offer transaction is primarily used to provide the data for the Supply Capacity Offer report. This optional interface provides an opportunity for BB Participants to advise the market that they are offering or they are seeking spare capacity or spare supply at a plant on pipeline or to or in a zone .

4.3.7.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
File	CSV	CAPACITYOFFER	Facility Operator or Shipper	BBO	

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
OfferId	int	O	Null for a new offer, else, relevant OfferId
PlantId	int	M	1234
OfferType	char(5)	M	GAS; TRANC
MDQ	numeric(18,1)	M	1234.5
MHQ	numeric(18,1)	M	678.9
Service	varchar(256)	O	Free text field to provide additional information
EffectiveDate	datetime	M	2007-01-23
TerminationDate	datetime	M	2007-03-21
Status	char(5)	M	C; O
UserId	int	M	64

4.3.7.3 Transaction Validation

File / Field name	Validation	Error code
File name	File name must conform to the standard naming convention (eg. COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV)	3
File name	TRANSACTIONNAME within file name must be of a known type, in this case, it should be CAPACITYOFFER	4
Mandatory fields	All mandatory fields for the CAPACITYOFFER transaction must be provided	5
PlantId	Must be a valid PlantId on the database	40
PlantId	The provider of the file (COMPID) must be the assigned operator of the plant in question	41
OfferId	If supplied, the OfferId must exist on the database	44
OfferType	Must be a valid OfferType on the database	65
EffectiveDate	Must be a valid date	22
EffectiveDate	Must be a current or future date	23
TerminationDate	Must be a valid date	24

TerminationDate	Must be a current or future date	25
TerminationDate	Must be later than the EffectiveDate	27
Status	Must be a valid Status type on the database	66
UserId	Must be a valid UserId on the database	45
UserId	The UserId must be associated with the provider of the file (COMPID)	46
MHQ	The MHQ value must be less than or equal to the MDQ value	88

4.3.8 Emergency

4.3.8.1 Details

In accordance with the process documented in Figure 4, on advice from NGERAC or the relevant Jurisdiction, the BB Operator will enable the restricted Emergency section of the site. This will enable BB Participants to submit Emergency transactions as follows.

The Emergency transaction is primarily used to provide the emergency information update data for the restricted emergency page and report, which are only accessable to authorised registered users. This optional interface provides an opportunity for NGERAC or a jurisdiction to advise the market of incidents or emergencies that are occurring across the system.

4.3.8.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
GUI	HTTP	N/A	NGERAC or Jurisdiction	BBO	GUI submission only, no CSV transaction provided

Figure 5 illustrates the fields associated with the transaction which are defined in the table below:

EventId	int	O	Null for a new record, else, relevant NgeracId
UserId	int	NR	Uses logon credentials not user input
EventType	varchar(20)	M	Succinct classification of the details in Information
Information	varchar(256)	M	Free text field to provide additional information

Figure 5 – Emergency Information update screen

4.3.8.3 Transaction Validation

File / Field name	Validation	Error code

4.3.9 Shipper's Allocated Aggregated Deliveries

4.3.9.1 Details

In accordance with Rule 51(2), each Pipeline Operator must provide the BBO with the aggretated allocated delivered quantities for each shipper during the previous invoice period. The Shipper's Allocated Aggregated Deliveries transaction is used for this purpose.

The BBO should be consulted where the Pipeline Operator is unsure of the Company_Id that applies to the Shipper/s within this report.

4.3.9.2 Transaction Definition

File	CSV	SHIPPERUG	Pipeline Operator	BBO	Email submission only, no CSV transaction provided

File header fields are to be set as per the following table:

Plant_Id	int	M	Pipeline identifier eg.1234
Company_Id	int	M	Shipper identifier eg. 5678
Start_Date	date	M	Invoice start date (inclusive) eg. 2007-07-01
End_Date	date	M	Invoice end date (inclusive) eg. 2008-06-30
UG	numeric(18,1)	M	Shipper's Gas allocation eg. 123.4
TG	numeric(18,1)	M	Total Gas delivered by Pipeline Operator eg. 567.8

4.4 Administrator Transactions

4.4.1 Plant

4.4.1.1 Details

The Plant GUI facilitates the addition and modification of plant which comprises the topology of the BB system. This administrator interface is only accessed by the BBO.

4.4.1.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
GUI	HTTP	PLANT	BBO		Initially set up by BBO, subsequent revisions updates as advised by BB Participants

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
PlantId	int	M	Applicable PlantId, refer section 4.1.15 for details
PlantName	varchar(100)	M	Text field
PlantType	char(5)	M	PIPE; PROD; STOR; FLOW (interconnect?0
ZoneId	int	M	123 This will be a Demand Zone for a pipeline
CompanyId	int	M	123
LowRange	int	M	20
HighRange	int	M	120
ExcludedFlag	char(1)	M	Y; N

4.4.1.3 Transaction Validation

File / Field name	Validation	Error code

4.4.2 Zone

4.4.2.1 Details

The Zone GUI facilitates the addition and modification of zones which comprises the topology of the BB system. This administrator interface is only accessed by the BBO.

4.4.2.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
GUI	HTTP	ZONE	BBO		Initially set up by BBO, subsequent revisions updates in consultation with BB Participants

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
ZoneId	int	M	Applicable ZoneId, refer section 4.1.15 for details
ZoneName	varchar(100)	M	Text field
ZoneType	char(5)	M	JURI; DHUB; DREG; PHUB; PREG
LowRange	int	M	20
HighRange	int	M	120

4.4.2.3 Transaction Validation

File / Field name	Validation	Error code

4.4.3 Reference Code

4.4.3.1 Details

The RefCode GUI facilitates the addition and modification of reference codes which support the BB system. This administrator interface is only accessed by the BBO.

4.4.3.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
GUI	HTTP	REFCODE	BBO		

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
RefCodeId	int	O	Null for a new record, else, relevant RefCodeId
RefCode	char(5)	M	Text field
RefCodeDesc	varchar(255)	M	Text field

4.4.3.3 Transaction Validation

File / Field name	Validation	Error code

4.4.4 Emergency Activation

4.4.4.1 Details

In accordance with the process documented in Figure 4, on advice from NGERAC or the relevant Jurisdiction, the BB Operator will enable the restricted Emergency section of the site. This is achieved by setting the 'Activated' flag = 'Y', together with entering details of the authorised company and person requesting its activation. This will enable BB Participants to submit Emergency transactions as detailed in section 4.3.8.

4.4.4.2 Transaction Definition

Interface type	Data type	Transaction name	From	To	Comments
GUI	HTTP	EMERGENCY	BBO		

File header fields are to be set as per the following table:

Field name	Field type	M/O/NR	Field value / example
EmergencyId	int	O	System supplied unique identifier eg. 99
CompanyId		M	123
PersonId	int	M	456
EmergStatus	varchar(255)	M	Text field
Activated	char(1)	M	Y; N

4.4.4.3 Transaction Validation

File / Field name	Validation	Error code

4.5 Error Reporting

4.5.1 Fault Codes

Error Code	Error Description
File processing	
0	File processed successfully
1	Unexpected file processing error
2	Unexpected data processing error
3	File name provided does not comply with COMPID_TRANSACTIONNAME_CCYYMMDDHHMMSS.CSV naming convention
4	The transaction name within the file name provided is not of a known type
5	The transaction fields do not match those associated to the transaction name
6	Unexpected character detected
7	Duplicate filename detected
Date related errors	
20	The GasDate provided is not a valid date
21	The GasDate provided must be a current or future date
22	The EffectiveDate provided is not a valid date
23	The EffectiveDate provided must be a current or future date
24	The TerminationDate provided is not a valid date
25	The TerminationDate provided must be a current or future date
26	The GasDate provided must be an historical date
27	The TerminationDate must be later than the EffectiveDate
Identifier errors	
40	The PlantId provided does not exist on the database
41	The file provider is not the assigned operator of the specified plant
42	The ZoneId provided does not exist on the database
43	The file provider is not one of the assigned operators of plant associated to the specified Zone
44	The OfferId provided does not exist on the database
45	The UserId provided does not exist on the database
46	The UserId provided is not associated with the file provider
47	The EventId provided does not exist on the database
Type errors	
60	The CapacityType provided does not exist on the database
61	The DemandType provided does not exist on the database
62	The NominationType provided does not exist on the database
63	The OutlookType provided does not exist on the database
64	The FlowType provided does not exist on the database

Error Code	Error Description
65	The OfferType provided does not exist on the database
66	The Status type provided does not exist on the database
67	The EventType provided does not exist on the database
68	The Flag type provided does not exist on the database
69	The Quality type provided does not exist on the database
Quantity validation errors	
80	The specified CapacityQuantity is less than 0TJ
81	The specified CapacityQuantity is greater than 2000TJ
82	The specified DemandQuantity is less than 0TJ
83	The specified DemandQuantity is greater than 2000TJ
84	The specified OutlookQuantity is less than the permissible LowRange
85	The specified OutlookQuantity is greater than the permissible HighRange
86	The specified NominationQuantity is less than the permissible LowRange
87	The specified NominationQuantity is greater than the permissible HighRange
88	The specified MHQ value is greater than the MDQ value
General errors	
100	
101	
102	

5 Reports

5.1 Overview

The BBO will generate numerous reports and will make them available to BB Participants via the BB. The BB controls access rights to reports via two categories of users:

- Relevant reports will be made available for general access within a "Public" area.
- The BBO will provide a User Id and a Password to registered user's so that reports containing confidential information can be viewed within the Restricted area.

There are two report types that are provided via the BB:

- CSV reports. Most reports in the system are created as CSV reports. These reports can be downloaded from the BB, and then later used to facilitate data analysis using Microsoft® Excel™ spreadsheets, or other tools.
- HTML reports. These reports will be generated using HTML format, and can be viewed via Internet browsers like Microsoft® Internet Explorer™.

An overview of the BB reports is provided in section 3.4. Details of the BB reports can be found in Ref.[2].

5.2 Browser Dependence

The Bulletin Board will be developed (and tested) using Microsoft® Internet Explorer™ as this is the predominant Internet Browser in use and is freely available. While best endeavours will be made, the BBO makes no guarantee regarding the presentation or operation of the BB using any browser other than Internet Explorer™.

5.3 CSV Reports

5.3.1 File naming

CSV report names will comply to the naming convention as follows:

intAAA_vB_N_N_N_rR~yyyymmddhhmmss.csv

int999a_v1_important_gas_report_r1~20070101063054.csv

Component	Example	Description
Interface Id	intAAA	Unique report / interface identifier
Interface version	vB	A number representing the version of the report
Interface Name	N_N_N	Name of report. Words separated by underscores
Region specifier	rR	A number representing the region to which the interface data applies. If the interface is not region specific, this component is omitted
Date	yyyymmddhhmmss	Report generation date. Date specified in reverse format to aid chronologic sorting
File type	csv	File extension

5.3.2 Report structure

A CSV BB report will be composed of:

- Report headers / column headers (refer section 5.3.3), and
- Report body (refer section 5.3.4).

5.3.3 Report header

Column headings are to be named using mixed-case characters with no spaces. For example, PlantName.

Similar column names are to be used for all similar data quantities within the report, i.e. if a report has several energy columns then column headings should be named in similar manner. For example, XxxEnergy, YyyEnergy and ZzzEnergy.

5.3.4 Report body

Gas date columns must refer to the Gas Day, not to a calendar date. Date formats are as per the Data Dictionary, refer to Section 4.2 of this document.

The last 2 columns of all tabular BB reports will be called LastUpdate which specifies the last date and time that the corresponding record was modified and ReportDateTime which specifies the date and time that the report was generated. All times displayed within reports will be Australian Eastern Standard Time (AEST).

5.4 HTML Report Template

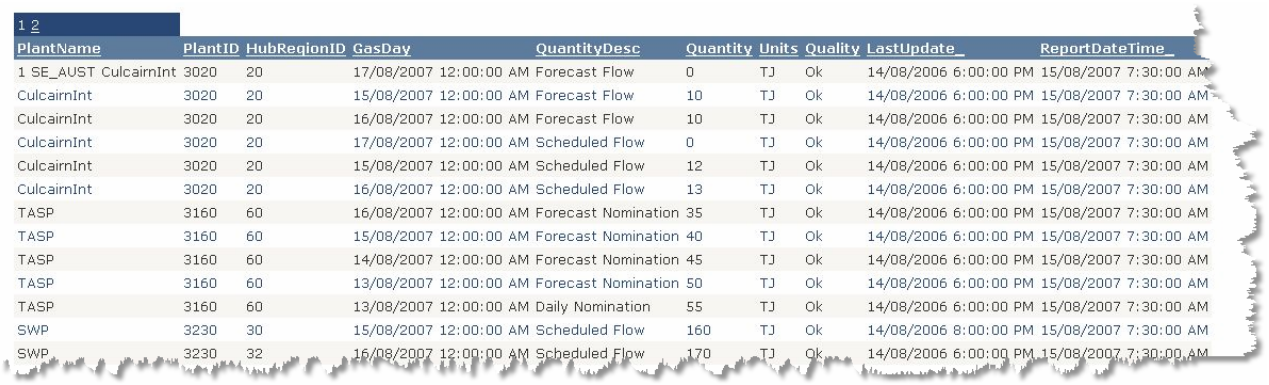
HTML reports will use common styling elements to ensure consistency in the presentation.

5.4.1 Common header

The common header for HTML reports comprises the report's ("breadcrumb") path and title. A filter is provided that allows the user to manipulate the view of the data displayed on the screen. A sample screenshot of a BB report is shown below.

5.4.2 Report body

The common body of an HTML report comprises a page number (currently set to 20 rows of data per page), the report column header and the report data. Individual reports will have specific display requirements. An example of a report body is shown below:



1 2

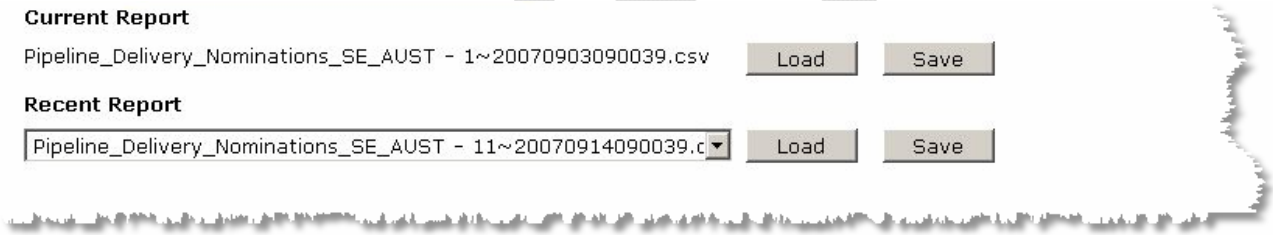
PlantName	PlantID	HubRegionID	GasDay	QuantityDesc	Quantity	Units	Quality	LastUpdate_	ReportDateTime_
1 SE_AUST CulcairnInt	3020	20	17/08/2007 12:00:00 AM	Forecast Flow	0	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
CulcairnInt	3020	20	15/08/2007 12:00:00 AM	Forecast Flow	10	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
CulcairnInt	3020	20	16/08/2007 12:00:00 AM	Forecast Flow	10	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
CulcairnInt	3020	20	17/08/2007 12:00:00 AM	Scheduled Flow	0	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
CulcairnInt	3020	20	15/08/2007 12:00:00 AM	Scheduled Flow	12	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
CulcairnInt	3020	20	16/08/2007 12:00:00 AM	Scheduled Flow	13	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
TASP	3160	60	16/08/2007 12:00:00 AM	Forecast Nomination	35	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
TASP	3160	60	15/08/2007 12:00:00 AM	Forecast Nomination	40	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
TASP	3160	60	14/08/2007 12:00:00 AM	Forecast Nomination	45	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
TASP	3160	60	13/08/2007 12:00:00 AM	Forecast Nomination	50	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
TASP	3160	60	13/08/2007 12:00:00 AM	Daily Nomination	55	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM
SWP	3230	30	15/08/2007 12:00:00 AM	Scheduled Flow	160	TJ	Ok	14/08/2006 8:00:00 PM	15/08/2007 7:30:00 AM
SWP	3230	32	16/08/2007 12:00:00 AM	Scheduled Flow	170	TJ	Ok	14/08/2006 6:00:00 PM	15/08/2007 7:30:00 AM

5.4.3 Common footer

The common footer for a HTML report comprises:

- the Current Report which is the latest generated report and a button to refresh or Load this report onto the screen and another corresponding button to Save same; and
- the Recent Report combo box which will include all previous instances of the report as reside on the system at any given time. Corresponding to the combo box is a button to refresh or Load the selected report onto the screen and another corresponding button to Save same.

A screenshot sample for the common footer is shown below:



5.5 Archived Reports

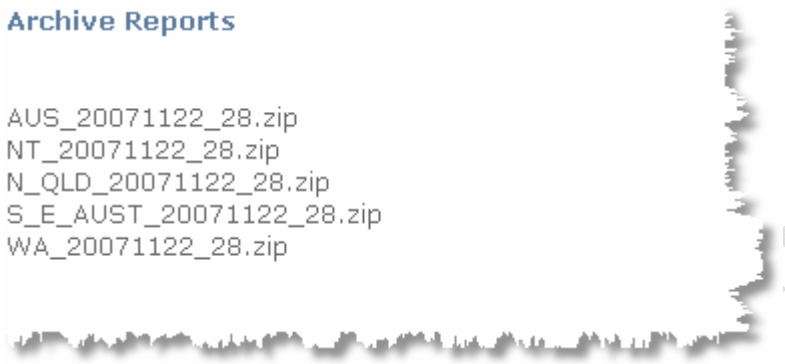
5.5.1 Archive Process

Periodically, available reports residing in the directories will be archived. This will involve zipping any available file older than 2 weeks into an archive file and thus reducing available files to those generated in the last 2 weeks. After an additional period (normally 1 month), the archive file is placed in permanent storage and is removed from its respective directory on the Bulletin Board.

5.5.2 File naming

Archived reports are zipped into archive files with the naming convention as follows:
Identifier_yyyymmdd_nn.zip
eg. S_E_AUST_20071122_28.zip
GASCO_20071122_28.zip

Component	Example	Description
Identifier	Company/Region	Company or Location to which the zipped files apply
Date	yyyymmdd	Date of most recent report included in the zip file
Period	nn	Number of days covered by the zip file eg. most recent report date – oldest report date



6 Interface Changes

6.1 Changes for version 1.0

Change	Section
Comments field added to the Standing Capacity transaction.	4.3.1
Data providers changed within various transactions from Plant Operators to Pipeline Operators. Note that summary and tabular details correctly identified Pipeline Operators as the data providers.	4.3.3, 4.3.5 and 4.3.7
New error code (no. 26) added relating to historical gas dates.	4.5.1
Date related error codes updated for various transactions.	4.3.1, 4.3.3, 4.3.4, 4.3.5, 4.3.6 and 4.3.7
New error code (no. 0) added to represent successful transactions.	4.5.1
Archived Report details added.	5.5
High and Low validation of NominationQuantity's modified to utilise the CapacityQuantity value of the Demand Zone's corresponding pipeline. Validation no longer performed on Demand Zone NominationQuantity's as such quantities may be supplied from multiple sources.	4.3.5