

National Gas Market Development Plan
Bulletin Board Business and Data Requirements

Final Report
Gas Market Leaders Group

September 2007

Purpose of this Report

The GMLG's decisions and responses to submissions received in the open consultation on the Bulletin Board Business and Data requirements have been finalised and are presented in this report.

During January to June 2007, the Bulletin Board Working Group (BBWG) developed the draft business and data requirements for the proposed Bulletin Board, based on the objectives and requirements specified in the National Gas Market Development Plan report to the MCE from the Gas Market Leaders Group (GMLG) in June 2006.

An open consultation process was then conducted during June and July 2007 and submissions were received from stakeholders covering issues in the following areas:

- Data requirements for the Bulletin Board – what data is to be provided and published, when it is required, from whom, and what are the basic data validation requirements;
- Legal issues and legislative requirements – addressing the legal framework to support the BB, and liability issues for data providers and the BB operator;
- IT system options and issues – processes and format for data provision and publication, validation and security, access controls etc; and
- A development/implementation project plan.

The BBWG gave due consideration to the feedback provided during the consultation process in preparing a report to the GMLG. In general, there was broad support for the Bulletin Board concept and on most issues the BBWG reached consensus and presented firm recommendations to the GMLG. The GMLG endorsed all the recommendations put by the BBWG at its meeting on 17 August 2007.

However, there were some issues related to the publication of data on the BB where there were conflicting views expressed in submissions from stakeholders and consensus was not reached by the BBWG. In these cases, the BBWG report to the GMLG presented the arguments for and against inclusion of the particular information, taking account of comments received in the submissions. This was done in the context of the MCE's augmented principles for the development of the national gas market and direction from the GMLG.

The GMLG considered these matters and made its final decisions at its meeting on 17 August thus finalising the Bulletin Board Business and Data Requirements. This has enabled the project plans for subsequent phases of the BB project to be fully developed.

The key issues raised in the submissions and the responses from the GMLG are found within the relevant sections throughout this report.

Consultation

The open consultation process was conducted in the period 8 June to 13 July 2007. A consultation paper covering the proposed Bulletin Board business and data requirements, legal issues and IT options was posted on the MCE/GMLG website on 8 June. In addition, open forums with presentations on the proposal and issues raised in the consultation paper were conducted in all mainland state capital cities through June 2007. Interested parties across Australia were asked to make submissions on the proposal and issues.

Submissions were received from the 16 entities listed below. These submissions have been posted on the MCE/GMLG website.

1. Queensland Gas Company QGC
2. Energy Retailers Association of Australia ERAA
3. Energy Australia EA
4. APA Group
5. Energy Supply Association of Australia ESAA
6. Australian Pipeline Industry Association APIA
7. WorleyParsons Asset Management WAM
8. Dampier Bunbury NG Pipeline
9. AGL Energy
10. Australian Petroleum Production & Exploration Association APPEA
11. TRUenergy
12. Alinta
13. WA Office of Energy OOE
14. EWN Publishing (Gas Week)
15. Major Energy Users MEU
16. Energy Users Association of Australia EUAA

A summary of the issues raised in the submissions and draft Working Group responses to these issues was prepared by the BB Working Group and used when making its recommendations to the GMLG.

Outcomes from GMLG Meeting on 17 August 2007

The following is an extract from the Gas Market Leaders Group, Synopsis of Ninth Meeting – 17 August 2007 covering the decisions made in regard to the Bulletin Board Business and Data Requirements after taking account of the submissions received in the open consultation process and recommendations of the BBWG:

*Gas Market Leaders Group
Synopsis of Ninth Meeting – 17 August 2007*

The ninth meeting of the Gas Market Leaders Group (GMLG) was held in Melbourne on 17 August 2007. Major issues considered at the meeting were as follows.

Bulletin Board (BB)

The GMLG considered a report on the BB business and data requirements, which incorporated the outcomes of the associated public consultation process. The Bulletin Board Working Group (BBWG) noted 16 written submissions were received and that there is broad support for the BB concept.

The BBWG was able to reach consensus and provide the GMLG with firm recommendations on all issues except on how pipeline information should be aggregated and on the publication of historical flow data. After considerable discussion, the GMLG agreed:

- a. pipeline delivery nominations will be posted at the individual pipeline level;*
- b. pipeline delivery flow data will be provided by pipeline operators and posted on the BB at the individual pipeline level; and*
- c. production and/or storage flow data will be provided by production and storage operators and posted at individual production facility level as well as aggregated to the supply hub.*

Further details of the BBWG's recommendations endorsed by the GMLG, the GMLG's consideration of matters for resolution and its endorsement of the next steps in the BB project are provided, as follows.

The following recommendations of the BBWG have been endorsed by the GMLG:

Inclusions and Exclusions

1. The BB will apply to the main gas transmission pipelines and related facilities in the S E Australian interconnected systems and Southern Queensland. This includes all major pipelines in S.A, NSW, Victoria and Tasmania as well as those major pipelines in Southern Queensland that are interconnected to the Wallumbilla hub.
2. Jurisdictions and stakeholders should be consulted further in respect to non-interconnected major pipelines in W.A., N.T. and Northern Queensland. Consideration of the appropriate use of the BB for their purposes is required with possible variations to the standard BB information on separate BB pages.
3. All pipeline, production and storage facilities will be included in the BB, unless they meet the criteria for exclusion and the facility owners seek exclusion.
4. The general exemption criteria for small or dedicated pipelines, laterals or spurs and the related facilities which are subject to further consultation during rule development are:
 - the relevant pipeline has peak flows of less than 20TJ/day;
 - dedicated laterals and spurs;
 - gathering lines.

An initial list of included pipelines will be agreed by the GMLG, following consultation with jurisdictions and stakeholders, prior to BB implementation.

Design of the Bulletin Board

5. The Bulletin Board system will be a simple and low cost web-based system that uses FTP/email and csv files for inputs/downloads.
6. The BB system will have secure access and data security mechanisms to ensure that commercially sensitive data is only accessible by those parties entitled to access that data or information under the rules.
7. Provision will be made in the BB IT design to enable low cost expansion to include other jurisdictions or pipelines in the future.

Legal Framework

8. VENCORP is appointed as the interim BB Operator until an Australian Energy Market Operator (AEMO) is in place.
9. The proposed statutory framework establishing powers to establish and enforce a BB and requirements to comply with a BB should be contained in the National Gas Law, with Rules to be developed by the GMLG for adoption under that Law at the commencement of operation of the BB.
10. 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 will be mandatory under legislation (National Gas Law) and will be specified in detail in the rules (National Gas Rules).
11. The BB enabling legislation should provide that participants will not breach confidentiality agreements by complying with the Law and Rules.

12. The Bulletin Board enabling legislation should provide that participants and the BB Operator are exempt from liability, except in cases of bad faith or negligence, to any person, and liability for bad faith or negligence should be capped.
13. The BB will include click wrap agreements and appropriate waivers and exclusions on use of the BB which each user will be required to accept in order to enter the BB, to provide further protection to participants.

Cost Recovery

14. The annual BB operating costs (estimated by MMA as ~\$100k p.a) will be recovered on a fee for service basis applied to registered users of the BB. The allocation methodology will be developed during rule development.
15. Pipeline operators can recover their "BB services" costs related to aggregating and providing shipper nominations data to the BB (this will not include the costs of providing other pipeline BB data mandated under the rules such as pipeline capacity and linepack/capacity adequacy indicators). The BB operator will consult with the pipeline operators in determining an annual amount payable to each pipeline operator providing this service. The BB Operator will recover this additional cost within its annual fees to shippers. Pipeline operators will provide the BBO with shippers' details and changes as they occur from time to time.

General BB Data Requirements

16. The data requirements in Tables 1A to 1D, as amended in this Report to reflect changes suggested in the consultation process, are endorsed, subject to decisions from the GMLG in respect to the Issues for Decision in item 20 below.
17. Pipeline operators will provide the aggregate of their shippers' delivery nominations for the next gas day and any forward nominations provided for under their contracts.
18. All general BB data will be archived and provision will be made to enable users to access this data. A user pay fee would apply.

NGERAC and Emergency Use

19. Provisions will be made for NGERAC or general emergency use as follows:
 - a. There will be separate pages provided for emergency information with secure access for NGERAC members, the jurisdictions and registered BB users (including the relevant producers, storage providers, pipeline operators and shippers).
 - b. The BB will continue to operate normally during emergencies so that use can be made of normal BB data elements (production, capacity, delivery nominations, and linepack/capacity adequacy indicators) and there will be no redundant data entry or duplication of elements of the IT system.
 - c. Provision will be made for additional emergency information from the affected facility owner, jurisdictions, pipeline operators, producers and storage providers and emergency status statements from NGERAC or a jurisdiction.
 - d. There will be an appropriate system polling frequency e.g. hourly to enable reasonably timely updates. (This does not mean that hourly updates are required by users. Updates should only occur if material changes occur or new information becomes available.)
 - e. Use of the BB for NGERAC emergency purposes will not be mandatory but will be specified in NGERAC's procedures.

- f. The BB emergency support function to be provided by the BB Operator will be specified in the rules.
- g. Use of the emergency function of the BB will be triggered on request from a jurisdiction or NGERAC and activated by the BB Operator.
- h. The proposed emergency BB data elements include emergency incident and status advice, unused production/storage capacity, load shedding, linepack and the NEM outlook as shown in Table 1E.
- i. Provisions for public emergency statements will be made on the general BB and there will be an indication if the secure emergency pages of the BB have been activated
- j. Emergency information will be time-stamped and have the source identified and will remain visible on the system if/when updates occur.
- k. Emergency information recorded during an event will be archived.

The following Issues and Options were considered by the GMLG:

20. Decisions from the GMLG are required in respect to
- the level of aggregation of pipeline delivery nominations posted on the BB and
 - publication of historical flow data for both pipelines and for production/storage facilities and the level of aggregation of that data posted on the BB.

The options for decision are listed below:

- i. In respect to pipeline delivery nominations the data will be:
 - a. aggregated and posted at the hub/state level; OR
 - b. posted at the individual pipeline level
- ii. In respect to historical pipeline delivery flow data:
 - a. None is required for the BB; OR
 - b. data will be provided by pipeline operators and will be aggregated and posted on the Bulletin Board at the Hub/ State/Jurisdictional level; OR
 - c. data will be provided by pipeline operators and posted on the BB at the individual pipeline level.
- iii. In respect to production and/or storage historical flow data
 - a. None is required for the BB; OR
 - b. data will be provided by production and storage operators and will be posted as an aggregated net¹ figure at the supply hub level; OR
 - c. data will be provided by production and storage operators and will be posted at the individual production facility level as well as aggregated to the supply hub.

Historical flow data, if required, will be operational flow data provided one day in arrears or, where this is not practicable, two days in arrears and will be flagged on the BB as not being of market settlement quality.

¹ Net production/storage takes account of any gas that may be withdrawn into storage within a supply hub

Decisions by the GMLG:

In regard to the questions in item 20, after due consideration the GMLG made the following decisions:

- In respect to pipeline delivery nominations the data will be aggregated and provided by the pipeline operator and will be posted on the Bulletin Board at the individual pipeline level i.e. option 20(i)(b) will apply.
- In respect to historical pipeline delivery flow data, the data will be provided by pipeline operators and posted on the BB at the individual pipeline level. i.e. option 20(ii)(c) will apply.
- In respect to production and/or storage historical flow data, the data will be provided by production and storage operators and will be posted at the individual production facility level as well as aggregated to the supply hub i.e. 20(iii)(c) will apply.

The GMLG has endorsed the 'Next Steps' as follows:

21. VENCORP is to initiate the BB IT project as follows:
 - a. Review/update the project plan based on approved Business Requirements
 - b. Review the timetable/budget
 - c. Development of the initial IT functional specification
 - d. Development of the reporting process for the BB/STTM Steering Committee and GMLG
 - e. Planning of stakeholder consultation on the IT system
22. The Legal Working Group and BBWG will liaise with the Commonwealth and jurisdictions to commence the following:
 - a. Development of project plans
 - b. Drafting instructions for the BB enabling legislation for NGL
 - c. Drafting of the BB rules or NGR
 - d. Development of the reporting process for the BB/STTM Steering Committee and GMLG.

Context for GMLG Decisions

The context for the GMLG's decisions is provided by relevant extracts from the GMLG's National Gas Market Development Plan (June 2006) and the GMLG's Augmented MCE principles for Gas Market Development as follows:

Relevant Extracts from GMLG's National Gas Market Development Plan (June 2006) in respect to decisions

Background (p1)

Under the terms of reference of the GMLG, the Plan was to: "deliver on the MCE's objectives for a competitive, reliable and secure natural gas market delivering increased transparency, promoting further efficient investment in gas infrastructure and providing efficient management of supply and demand interruptions, as set out in the MCE's Expanded Gas Program".

GMLG Bulletin Board – Objective (p18)

The objective of a BB service would be to facilitate trade in gas over the relevant pipeline system through the provision of system and market information, which would be readily available to all users, potential users and other interested parties.

GMLG's "Augmented MCE principles for Gas Market Development"

- * Information on market and system operations and capabilities at all stages of the gas supply chain (subject to recognition of existing contractual confidentiality) should be publicly available and frequently updated.*
- * Gas market structure to facilitate a competitive market in all sectors.*
- * Gas market participants should be able to freely trade between pipelines, regions and basins.*
- * There should be regulatory certainty and consistency across all jurisdictions.*
- * Market design and institutional requirements responsive to and reflective of the needs of the market and market participants:*
 - minimise the need for government intervention in the operation of the market;*
 - minimise cost and complexity;*
 - respect existing commercial arrangements;*
 - take account of the physical characteristics of the networks;*
 - take account of the interface with the National Electricity Market;*
 - complement the work of the National Gas Emergency Response Advisory Committee (NGERAC); and*
 - recognise the ongoing importance of bilateral contractual arrangements which underpin gas market development.*

To assist the GMLG in its deliberations on the items for decision, cases for and against the publication of pipeline nominations by individual pipeline and for and against publication of historical flow data by pipeline/facility were considered. These were prepared by the relevant members of the BBWG. The cases presented take account of views expressed in submissions received in the consultation process and discussions with the relevant industry associations.

In general, pipeline operators (VENCorp excepted) are not in favour of publication of delivery nominations data at the individual pipeline level. They are also opposed to publication of historical flow data at the hub level and more so at the individual pipeline level. Similarly producers and storage operators with the exception of TRUenergy are not in favour of publication of historical production or storage flows at the individual facility level or supply hub level.

On the other hand, shippers, end-users and data users are in favour of publication of delivery nominations by individual pipeline and publication of historical flow data at the hub level and preferably at the individual pipeline or facility level.

It should be noted that publication of pipeline delivery nominations or historical pipeline flows at the individual pipeline level would enable estimation of supply hub production levels and, arguably, could obviate the need for publication of some or all of the production/storage historical flow data.

The cases for and against publication of aggregate shipper delivery nominations by individual pipeline, and publication of historical flows at individual pipeline and/or hub level are as follows:

Case for

Ready access to information is the key to enhancing competition in the energy market and also to ensuring secure supply in the longer term. This observation is clearly expected to apply to the Bulletin Board as stated in the MCE Principles for Gas Market Development:

"Information on market and system operations and capabilities at all stages of the gas supply chain (subject to recognition of existing contractual confidentialities) should be publicly available and frequently updated".

In particular, publication of historical flows aggregated to Hub/State levels will facilitate better planning and forecasting by all parties and promote improvements in competition because:

- a. the dependence of demand on weather and other factors can be analysed enabling improved day to day forecasting and/or emergency planning;
- b. the overall demand can be compared with the available production and pipeline capacity to provide investment signals;
- c. the overall demand can be compared with the available production and pipeline capacity to provide all stakeholders with common knowledge about the extent of any unused capacity (not uncontracted capacity) in the system. This is relevant when negotiating supply or capacity contracts;
- d. the level of overall demand can inform retailers, producers, regulators and stakeholders with knowledge about the size and nature of the gas market which may reveal opportunities that can attract or enhance competition; and
- e. the improved competition that results from greater transparency will provide better/clearer signals needed for new investment in pipelines and production facilities.

The more information that is provided the more transparent is the market. In turn, this lessens the market power, transmission monopoly power and advantages in contract negotiations currently held by those holding the information.

If it is accepted that hub/state historical deliveries should be published then there is no reason why this information should not be published on the BB at the individual pipeline level.

In the Victoria PTS market, the gas flows in major pipelines supply sources are already available to market participants, for example the flows on Iona via the SWP, Longford flows and the amount of LNG used on a day.

/Cont..d

During winter 2007 which has had unprecedented high demand this knowledge of flows (and LNG inventory) has resulted in improved competition and system security through increases in the flexibility of supply into the systems such as profiled injections at Iona and through demand side response from dual fuel gas fired generators.

Both NSW/ACT and SA are essentially two pipeline transmission systems. Clearly, each pipeline can readily determine the flow from the other flows by subtracting their own flows from hub/state. As pipeline operators and large shippers can readily calculate or estimate individual pipeline flows then all stakeholders including small shippers and end-users should have equal access to that information.

Individual pipeline flows would provide an assessment of the net injections of the producers at supply hubs without recourse to individual production facility data, and would provide an indication to producers tied to a specific pipeline, of the potential for expanding production facilities without incurring additional pipeline costs.

Accepting that historical flow data on an individual pipeline basis should be provided, then delivery nominations should also be published on an individual pipeline basis as well. This will inform shippers and potential shippers of unused capacity should they be contemplating additional supplies. Provision of this data will not impact on pipeline operation but it does provide pipeline operators with the potential of selling additional capacity.

The case for the provision of individual production/storage facility historical flow data is similar to that for pipelines. If there are only two producers in a supply hub, each will know the others' flows if the supply hub aggregate is known but other stakeholders will not have that information. In respect to contracting future supplies, the knowledge of daily production compared to capacity is relevant to all concerned. Similar arguments that apply to pipelines in relation to price signals and emergency planning also apply to producers and storage providers.

Case Against

Planning for Emergencies

The ability for NGERAC (or AEMO) or a Jurisdiction to plan for emergencies or manage or coordinate emergencies is not assisted by publishing individual pipeline or production data on a daily basis. Data aggregated to the hub level is adequate for this purpose.

Emergencies are infrequent and can be relatively isolated to one jurisdiction. During an Emergency, aggregate pipeline nominations data are relevant for the affected facility and possibly for the immediately surrounding pipelines and production facilities. Daily publication of individual production and pipeline facility aggregate nominations are unwarranted.

It is questionable that an affected pipeline or production facility could give prudent and accurate forecast nominations when dealing with an emergency. Some pipeline operators and producers question whether suitable legal protection can be put in place to cover those providing operational data where errors can be potentially significant.

With regards to the publication of historic flows by production or pipeline facility, hub or state, such information is of no value because this does not address future deliveries to the end market impacted by the emergency.

/Cont..d

Trade and Competition

Information disclosure of delivery nominations aggregated to Hub / State level is sufficient to facilitate trading. Publication of Hub/State level nominations enables all stakeholders attending to end-market-use on a given day to know the size of the market. However, there is no advantage in providing individual pipeline nominations, in fact there may be disadvantages.

While provision of individual pipeline nominations will indicate the difference between total capacity and total nominated / delivered flows, this does not facilitate trading or competition because the quantities of the commodity available for trade at a hub are not identified. The total available for trade on a day which is the amount that a stakeholder (e.g. Retailer, Shipper, Generator and Major User) is willing to buy and sell from their respective portfolios, remains unknown. The difference identified on a Pipeline basis is either uncontracted capacity or unused contracted capacity netted against overrun (if any) and so is not an indicator of gas available to trade.

The hubs of Adelaide and Sydney/ACT are both served by two competing major pipelines (legs). Publication of individual nominations consistent with a capacity constraint on one pipeline could enable profiteering by significant increases in short term cost of capacity or supply from one or more stakeholders in the other pipeline. This could impact those shippers who do not have the benefit of balancing a portfolio between the respective legs.

Publication of historical deliveries at the individual pipeline level is not relevant to trading and will not assist competition because, as above, the commodity quantity available for trade is not identified. Trading is about future transactions and historical flows at any level of aggregation have no bearing on future trades.

Historical data is operational and is not of settlements quality and may occasionally contain errors that may not be understood by users. Publication of this data would just add unnecessary administrative burden without adding value.

The arguments for pipelines above also apply to production/storage. Further, production by facility or at a supply hub level do not equate to end-market-use because of the dynamics of pipeline gas flows and changing linepack impacted by any park and loan activity, and, in some instances, withdrawals into Storage. Supply hubs typically supply to two or more demand hubs so individual production is of no relevance to demand in any particular end Market.

As noted above, the publication of individual pipeline or production data will impose additional administrative costs on participants for no perceived benefit, and in the case of individual historical data, there are risks of breaches of confidentiality and liability as the adequacy of protections provided under the NG Law is uncertain.

Table of Contents

1.	Bulletin Board – Description and Objectives	15
	Figure 1. Schematic for south eastern Australia interconnected pipelines	16
2.	Bulletin Board Operation	17
3.	Inclusions and Exemptions	18
4.	Data Requirements	20
4.1	Production.....	20
4.2	Storage -Liquefied Natural Gas (LNG) and Underground Gas Storage (UGS).....	20
4.3	Pipeline Capacity	21
4.4	Linepack/Capacity Adequacy Indicator	21
4.5	Delivery Nominations	22
4.6	Capacity offers	24
4.7	Supply offers	24
4.8	Actual Demand Data (Historical data).....	24
4.9	Actual Production and Storage (Historical Flow data).....	25
4.10	BB Participant contact details	25
4.11	Bulletin Board updates	25
4.12	Bulletin Board Emergency Use Indicator	26
Table 1A.	Bulletin Board Data Requirements – Production and Storage.....	28
Table 1B.	Bulletin Board Data Requirements –Pipeline Capacity and Linepack/Capacity Adequacy.....	29
Table 1C.	Bulletin Board Data Requirements – Forecast and Actual Gas Demand	30
Table 1D.	Bulletin Board Data Requirements – Capac & Supply Offers, BB Contact Details, Emergency Use ...	31
5.	Data Validation	32
5.1	Validation within a range.....	32
5.2	Validation tests for completeness	32
5.3	Monitoring and Auditing	32
6.	Use of Bulletin Board in Emergencies	33
Table 1E.	Bulletin Board Data Requirements - NGERAC and Emergency Use	35
7.	Funding of Bulletin Board Operation	36
8.	Bulletin Board IT options and Issues	37
8.1	Proposed IT System (utilising FTP)	37
8.3	Higher Cost alternative IT System utilising GUIs	37
8.4	Handling of Time Zones.....	38
8.5	Access to Historical Data	39
9.	Legal Issues	40
9.1	Regulatory Framework	40
9.1.1.	Implementing the BB through a voluntary framework.....	40

9.1.2 Statutory Framework 40

Appendices

Appendix 1: BBWG Terms of Reference..... 47
 BBWG Membership 48
 Appendix 2: Extract from National Gas Market Development Plan – Bulletin Board..... 49
 Appendix 3. Bulletin Board IT Proposal and Issues 53
 1. Data delivery & Data Synchronicity..... 53
 2. Data handling & Constraints 54
 3. Data Access..... 56
 4. Data submission options..... 57
 5. Simple representation of the proposed system..... 60
 Appendix 4. Summary of issues raised in submissions and BBWG responses 61
 Appendix 5. Project Time -Line 73

1. Bulletin Board – Description and Objectives

Under the GMLG's National Gas Market Development Plan, the proposed Bulletin Board (BB) will be a single electronic communications system (website) covering all major gas production fields, major demand centres and transmission pipeline systems, including the interconnected systems of South Australia, Victoria, Southern Queensland, Tasmania, NSW and the ACT, and including, where practicable, a linked but separate page(s) or separately grouped reports/tables for non-interconnected pipeline systems operating in Northern Queensland, Western Australia and the Northern Territory.

The objective of the BB is to facilitate trade in gas over the relevant pipeline system through the provision of system and market information which is readily available to all users, potential users and other interested parties.

In addition, the BB will support the work of the National Gas Emergency Response Advisory Committee (NGERAC). NGERAC was formed in late 2005 and is a joint government and industry committee established under the National Gas Emergency Response Protocol. The BB will gather information required by NGERAC, and NGERAC will have access to the BB.

An extract from the GMLG's National Gas Market Development Plan with further detailed description of the BB is provided as Appendix 2.

A schematic for the interconnected gas transmission systems in South Australia, NSW/ACT, Victoria and Tasmania is shown in Figure 1 and indicates what the BB will provide in terms of information to the market. Some of the data requirements, such as production and pipeline capacity, are relatively static in nature and will not be expected to change often, whereas pipeline delivery nominations would be updated daily.

The value of the BB to the broader market will be when outages or maintenance occurs at production points or on pipelines. The BB would then show updated daily delivery nominations, actual or expected changes in the supply capacity to the demand hubs and potentially, in the event of significant outages or system incidents, a flag indicating likely interruption of customer supplies.

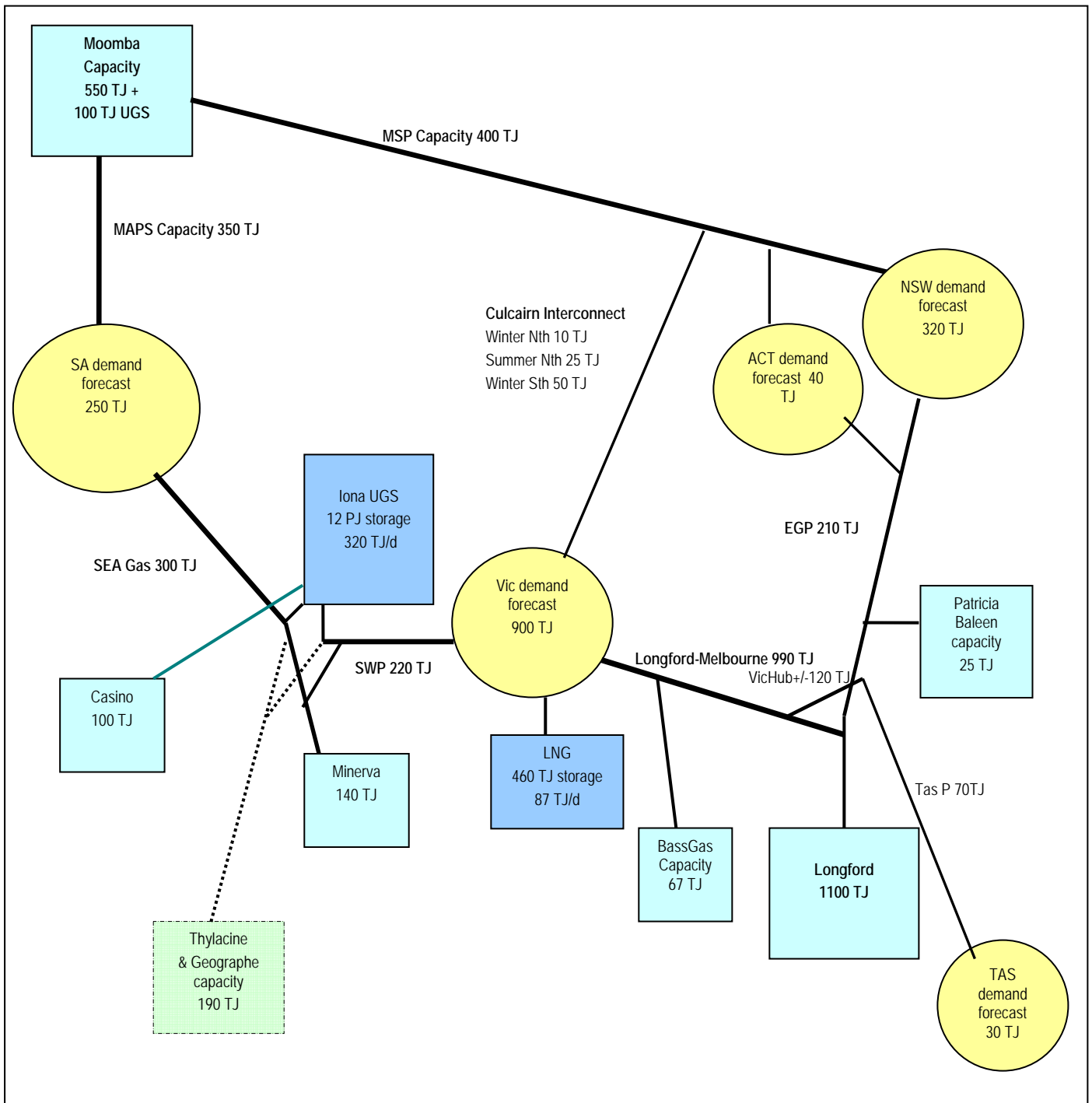
It is intended that the BB will cover all states and jurisdictions. States and jurisdictions other than those depicted in the Figure 1 schematic and southern Queensland (interconnected to the Wallumbilla hub) will decide whether their pipelines and related demand centres are treated separately or aggregated. A simple approach is preferred for separate, independent pipelines and their related loads.

Figure 1. Schematic for south eastern Australia interconnected pipelines

The capacities and demand shown for the S.E Australian interconnected transmission systems are illustrative only. For simplicity, pipelines from other jurisdictions are not depicted but that is not to say they will not be included in the BB.

The pipelines in southern Queensland that are interconnected to the Wallumbilla hub are to be included from the outset. It is noted that there is a proposal for this system to be interconnected to the Moomba hub, the MAP and the MSP in the medium term.

Subject to further consultation in respect to significant unconnected pipelines in W.A., Northern Queensland and N.T, provision will be made to enable all pipelines and connected production/storage facilities in all jurisdictions to be included in the BB with a limited number of exemptions as explained in section 3.



2. Bulletin Board Operation

In its National Gas Market Development Plan, the GMLG proposed that the BB be operated and maintained by a newly established National Gas Market Operator (NGMO). In response to the GMLG's recommendations in this regard, the MCE resolved to investigate appropriate governance arrangements for a NGMO.

Subsequently, in April 2007, in responding to the report by the Energy Reform Implementation Group (ERIG), COAG has resolved to progress establishment of an Australian *Energy* Market Operator (AEMO) to manage both the national electricity and gas markets. COAG has set a timetable to establish AEMO by 2009. It is not considered desirable to postpone establishment of a BB until such time as the AEMO is established to assume this role. Therefore, to facilitate early implementation of the BB, while leveraging off existing systems and interfaces in order to minimise overall industry costs, the GMLG has decided that VENCORP should develop and operate the Bulletin Board, on a cost recovery basis and under the leadership of the GMLG, until such time as the AEMO is established.

The GMLG has previously endorsed the BBWG's unanimous recommendation that VENCORP be appointed to develop and operate the BB prior to establishment of the AEMO, for the following reasons:

- VENCORP developed, maintains and operates the most significant existing gas market information bulletin board (MIBB²) in Australia;
- VENCORP has in-house IT resources who were involved in development of the MIBB and other gas market systems, and who maintain these systems on a 24x365 basis;
- Pending establishment of the AEMO, VENCORP will necessarily continue to operate the Victorian gas market and the MIBB regardless of who develops and operates the BB. As both the Victorian gas market and principal transmission system (PTS) operator, VENCORP would be the primary provider of data for the BB in respect of the Victorian PTS. Hence, if another party is required to develop and operate the BB this will likely involve additional system interfaces and associated overheads that will need to be funded by industry participants;
- Through its existing roles in Victoria and Queensland, most major national gas retailers/traders already have connectivity with VENCORP IT infrastructure;
- VENCORP is able to develop/operate the BB on a transparent, not-for-profit (cost recovery) basis;
- VENCORP's in-house IT resources can be made available, without necessitating completion of a contract and at no additional cost, to assist the BBWG during Phase 1 of its work plan in developing its business/functional specification of the BB. This would be considered part of VENCORP's ongoing contribution/input to the GMLG WG process, whereas the actual IT development phase of the project would need to be funded. If VENCORP was to be required, subsequently, to submit a competitive quote or tender for BB development then it would likely be conflicted out of this early participation;
- VENCORP would be well placed to enter a contract directly with the Commonwealth for development/operation of the BB subject to oversight by the GMLG or its BB/STTM Steering Committee.

² While it is considered that there will be the ability to leverage off VENCORP's MIBB and other existing market systems in development of the BB, the BBWG recognises that some of the requirements for the proposed BB are quite different.

Consultation Process – Bulletin Board Operator

There was general consensus on the appointment of VENCORP as the interim BB operator. Some respondents suggested that GMC and REMCO should assist VENCORP in operating decisions for the BB.

One respondent considered that as VENCORP is a pipeline operator, there could be an opportunity for VENCORP to favour Victorian pipelines through use of information obtained by it from the operation of the BB.

There was also a comment implying that the type of pipeline 'carriage' was relevant to BB operation.

The following are clarifications:

Provision will be made in the legislation and rules that require the BB Operator, regardless of who it is, to operate in an independent manner, strictly adhering to market rules and operating procedures.

The pipeline 'carriage' arrangements in a jurisdiction have no relationship to BB operations.

The BB is a basic information sharing market system and does not involve the operation of pipelines.

The BB operating rules will be developed with input from representatives from jurisdictions and relevant gas industry sectors.

3. Inclusions and Exemptions

Legislation and Market Rules specifying and mandating provision of the required data and information from industry sectors will be put in place prior to commencement of Bulletin Board operation (See section 9). These will generally apply to all gas transmission pipelines and associated production and storage facilities, but with a limited number of exemptions.

The proposal is that all major pipelines and connected production and storage facilities that either interconnect or supply major demand centres will be included in the BB. Ancillary to the rules that will need to be developed (and incorporated in the National Gas Rules) to govern operation of the BB, will be a list defining those pipelines to be included upon commencement of the BB, to be approved by the GMLG. Finalisation of this list, along with development of the rules generally, will be the subject of further industry and public consultation prior to implementation. There will be opportunity for further consultation on the criteria for exemptions when drafting the required legislation and rules and will providing for consultation. The general criteria for exemption will be:

- the relevant pipeline with peak flows of less than 20TJ/day;
- dedicated laterals and spurs;
- gathering lines.

Consultation Process – Inclusions and Exclusions

There was general support in the submissions for the use of the proposed inclusion/exclusion criteria as a guideline, however, there was a general view that flexibility and consultation should occur in respect of smaller pipelines and major pipelines that are non-interconnected when preparing an initial list of pipelines that will be included. Production and storage facilities connected to the initial list of pipelines will generally be included.

A significant majority of submissions agreed that the default position should be to include all pipelines and facilities unless a satisfactory case for exemption was demonstrated against published guidelines.

/Cont..d

Differing views were expressed in relation to pipelines in Western Australia, Northern Territory and Northern Queensland, with some respondents arguing the cost of compliance would outweigh any benefits on these pipelines, and others arguing the transparency of information would provide sufficient benefit to warrant the cost. Further consultation is required.

It was noted that Coal Seam Methane producer sites are small in size but that a number of these can contribute to sizable aggregate flows into a pipeline that exceeds the flow threshold for inclusion.

Recommendations - Inclusions and Exclusions:

The BB will include the main gas transmission pipelines and related facilities in the S.E. Australian interconnected systems and Southern Queensland. This includes all major pipelines in S.A, NSW, Victoria and Tasmania as well as those major pipelines in Southern Queensland that are interconnected to the Wallumbilla hub.

Jurisdictions and stakeholders should be consulted further in respect to the inclusion of non-interconnected major pipelines in W.A., N.T. and Northern Queensland. Consideration of the appropriate use of the BB for their purposes is required and variations to the standard BB information on separate BB pages may be more appropriate.

All pipeline, production and storage facilities will be included in the BB, unless they meet the criteria for exclusion and the facility owners seek exclusion.

The general exemption criteria for small or dedicated pipelines, laterals or spurs and the related facilities which are subject to further consultation during rule development are:

- the relevant pipeline has peak flows of less than 20TJ/day;
- dedicated laterals and spurs;
- gathering lines.

An initial list of included pipelines will be agreed by the GMLG, following consultation with jurisdictions and stakeholders and prior to BB implementation.

4. Data Requirements

The normal Bulletin Board data requirements are detailed in Tables 1A to 1D. An additional table (Table 1E) has now been included covering NGERAC and emergency use of the BB after consultation with NGERAC.

Consultation Process – Data Requirements

There was general and conditional support in the submissions for the data specified in Tables 1A to 1D shown at the end of Section 4 with the exception of the following:

- (i) the level of aggregation of the pipeline delivery nominations published; and
- (ii) the publication of historical flow data (production/storage and/or pipeline net deliveries) and the level of aggregation of that data.

Note: The Tables have been modified from those in the consultation paper mainly to reflect decisions made by the GMLG.

4.1 Production

Gas production facilities supplying the market will be shown on the BB. Nameplate production capacities (in the form of MDQ) will be provided to the BB operator directly by the producers. Nameplate ratings are nominal capacity measures that are not expected to vary materially from day to day or even one year to the next but may do so due to plant retirement, augmentation etc. These changes will be reflected on the BB.

The BB will also have a three day capacity outlook for each production facility, also to be provided by producers to the BB operator. These outlooks are not expected to vary from day to day excepting for change due to planned maintenance or plant failure during the course of the year. It is important to note that producers do not need to provide daily production figures but only maximum daily capacity available to the market from the facility.

Market Consultation - Production

There was general support in the submissions including those from producers for the publication of production capacity data as proposed with the only caution being that a 3 day outlook may be too short.

Production capacity is generally a fixed 'nameplate' level and only changes in the event of planned or unplanned outages such as for plant maintenance. Facility operators may inform users of planned outages utilising the free text provisions on the BB.

4.2 Storage -Liquefied Natural Gas (LNG) and Underground Gas Storage (UGS)

Storage information will be provided to the BB in a similar vein to that of Production figures above. This means that total nameplate capacity will be published and where any constraints exist around that capacity, i.e. reduction or increase, this will be noted on the BB. A three day supply outlook is required and, as with production facilities, this will reflect changes to nameplate capacity available to the market.

Currently, the only relevant *independent* storage facilities³ (UGS and LNG) on the interconnected SE Australian system are located in Victoria. All information required for the BB is already publicly available to the market via VENCORP reports and processes. Any new facilities will need to provide the same information.

The information for the BB will be provided by the storage operator.

³ The Moomba production facility includes some storage capacity, but it is intended that the BB provide a representation of the aggregated overall Moomba production capacity.

Consultation Process – Storage Capacity

There was general support in the submissions including that from a storage operator (TRUEnergy, for the publication of storage capacity data (other than storage inventory) as proposed.

4.3 Pipeline Capacity

Pipelines are required to show the total capacity of each of their pipelines, similar to the nameplate rating for production and storage facilities. In the absence of retirements or augmentations, these figures would not be expected to change or need to be updated on a regular basis. However, the occurrence and impacts of short term maintenance or plant reconfiguration will need to be advised and published on the BB.

Consultation Process – Pipeline Capacity

There was general support in the submissions including those from pipeline operators for the publication of pipeline capacity data subject to clear definition of 'nameplate rating' and recognising that forecast capacity should not be expected to take account of normal variations in operating conditions.

One submission indicated that the term 'name plate' rating (which refers to the nominal capacity of a pipeline or facility under defined operating** conditions) needs to be clearly defined. This applies to production and storage facilities as well as pipelines.

**In respect to pipelines, the operating conditions should reflect profiles and distributions of load on the pipeline at peak periods.

4.4 Linepack/Capacity Adequacy Indicator

This was referred to as 'loss of reserve' in the consultation. As the LOR term is not commonly understood in gas systems and may have different meanings in different markets it was agreed by the BBWG to retitle this as the pipeline "Linepack/Capacity Adequacy" indicator (LCA).

On the BB this indicator will take the form of "traffic light" reporting system. The LCA represents the actual or expected ability of each pipeline based on its linepack and capacity to meet the nominated deliveries over the outlook period. Generally, three coloured "flags" are proposed to indicate what the status of pipeline is:

- business as usual – green flag ,
- voluntary load shedding likely / happening – amber flag and
- involuntary load shedding likely / happening – red flag.

Pipeline operators will be required to update these flags and in most cases these will provide an indication on the adequacy of the pipeline's linepack/capacity to meet demand.

In Victoria, where there is relatively little linepack available to manage supply shortfalls, the triggers for these flags will depend on whether LNG is scheduled to manage low system pressures and whether the vaporisation rate provides for some redundancy in the LNG facility as follows:

- business as usual, no LNG scheduled – green flag;
- LNG scheduled to manage low pressures– amber flag; and
- LNG scheduled at high rate >100tonnes/h and involuntary load shedding likely / happening – red flag.

These flags will provide the market with signals to investigate further or act to mitigate the impact on the market. This could be entering new contracts at different supply nodes or shifting gas between hubs.

Consultation - Linepack/Capacity Adequacy Indicators

There was general support in the submissions for the proposed traffic light reporting of 'Linepack/Capacity' adequacy by pipeline operators for their respective pipelines.

One respondent considered that flags may not provide sufficient information and not provide enough lead time and suggested the inclusion of additional information, specifically, the linepack for each pipeline to provide stakeholders with an independent view of the status of a pipeline at the start of each day.

Following the consultation the BBWG has considered that the term 'Loss of Reserve' (LOR) may be a misleading term and not be understood. The indicator has been retitled by the BBWG as a "Linepack/Capacity Adequacy" indicator but the concept remains the same.

The following points are to clarify issues or questions raised in submissions:

In the contract carriage market (i.e. outside the Vic PTS system), pipeline operators would take account of park and loan services provided to customers in determining this indicator.

The traffic light indicators are to be provided in good faith based on the pipeline operator's judgement and, in this regard, the pipeline operator will be appropriately protected under the BB legislation.

If one pipeline operator issues a red or amber indicator for their pipeline, that indicator can be taken as a potential impact on the delivery Hub and therefore a separate indicator for the Hub is considered unnecessary. The criteria used by the pipeline operator in making an assessment will be made clear in the BB on-line documentation and other supporting documentation.

There will also be provision for free text for the pipeline operator to indicate the nature of the conditions resulting in an amber or red traffic light indicator.

The BBWG agreed early in its deliberations that the inclusion of linepack for each pipeline is not seen as relevant for day to day BB market use. However, NGERAC has confirmed that it will seek linepack information in the event of major emergencies (refer section 6).

4.5 Delivery Nominations

The initially agreed intent of the GMLG was for the BB to show daily forecast gas demand, with a three day horizon, for each State (and hub separately if defined under an STTM)⁴. It was subsequently proposed by the BBWG that shippers' delivery nominations to pipeline operators when aggregated would produce a proxy for forecast demand.

The BBWG has had considerable debate over whether shippers/major end-users or pipeline operators should be the provider of daily demand forecast data.

Case for Shippers to provide demand data

- Shippers are best placed to know about their customers' demand;
- The nominations received from Shippers can often vary significantly from actual demand, especially nominations received 2 or more days ahead. There are perceived issues of rigour and reliability relating to shippers' nominations; and

⁴ Refer to GMLG's National Market Development Plan, June 2006, section 3.

- There may be liability issues or, at the very least, negative perceptions of pipeline operators if the demand data was inaccurate.

Case for Pipeline operators to provide aggregate of shippers' delivery nominations

- Accepting that individual shippers or end-users are best placed to provide their own individual demand forecasts or delivery nominations, pipeline operators are best placed to provide the aggregate data to the BB, as they receive and aggregate their shippers' nominations as part of their day to day business.
- Acknowledging the inaccuracy of some "before the day" nominations, the only commercial incentive to provide accurate nominations (in the absence of a STTM) is under the shipper-pipeline operator contracts.
- Using the nominations given to pipeline operators would ensure that BB data provided is on a consistent basis.
- Compared to the number of pipeline operators, a greater number of smaller shippers/large end users would have to establish BB interfaces with "write access" to provide data inputs to the BB, such that it would be more efficient for the pipeline operators to do this.

The BBWG on balance proposes that pipeline operators be required to forward the daily aggregated nominated deliveries on their pipelines, along with whatever forward nominations their shippers are obliged (either contractually, under market rules, or otherwise) to provide. It is understood that pipeline contracts typically require up to 7 days of (indicative) nominations to be provided once a week, with day-ahead nominations each day. The data published on the BB would then still need to be aggregated for all pipelines in each Jurisdiction, or Hub, to the extent possible allowed by any misalignment of the individual pipeline forecast periods. It will need to be made clear that these figures do not represent pipeline operators' forecasts of demand but simply an aggregation of nominations provided by their respective shippers. As such, they should, however, be reflective of shippers' forecasts of gas requirements.

Gas-fired power generation will be included in the aggregate demand forecasts and not identified by specific generators.

Consultation – Pipeline Delivery Nominations

While it is generally agreed that shippers are best placed to understand customer demand, the majority opinion was that pipeline operators should provide aggregated shipper delivery nominations (as proxy for demand) based on efficiency and cost savings grounds and recognising that shippers have a commercial interest in providing reasonably accurate day-head nominations to pipeline operators. The proposal that pipeline operators provide their aggregate delivery nominations, noting that nominations were not intended to be a demand forecast, was well supported in the submissions, pipeline operators excepted.

Recommendation endorsed by GMLG: Pipeline operators will provide aggregate shipper delivery nominations (to hub/state) and forward nominations for their respective pipelines as provided for in their contracts.

In addition to the publication of nominated deliveries aggregated for each jurisdiction or Hub, the GMLG requested that the consultation process seek feedback on the desirability and value of publication of nominations for each pipeline individually.

Consultation - Level of Aggregation of Nominations

There was a divergence of view in regard to the level of aggregation of delivery nominations that should be published.

Pipeline operators, VENCORP excepted, were opposed to delivery nominations being published for individual pipelines while shippers and end-users were generally supportive.

The GMLG has been asked to decide on the following options taking account of the cases for and against, provided by the BBWG representatives of the relevant industry groups:

- a. The delivery nomination data provided will be aggregated and posted at the hub/state level; **OR**
- b. The delivery/demand nomination data will be aggregated and posted at the individual pipeline level.

The cases for and against publication of nominations at the individual pipeline level are provided on pp8-10

The GMLG's decision is that delivery/demand nomination data will be aggregated and posted by hub at the individual pipeline level.

4.6 Capacity offers

The inclusion of this component on the BB will provide an avenue for parties to offer any spare pipeline capacity to the market. Details of the offers and company details will be shown on the BB so that full contracts can be negotiated should a party be interested in a particular offer. This is a voluntary activity on the BB.

4.7 Supply offers

As with the Capacity Offers, this section allows voluntary listing of gas supply offers to the market. It will provide an avenue for all parties to buy or sell gas in the market with a common place to list this information.

Consultation – Supply/Capacity Offers

There was general support for provisions for the posting of supply and/or capacity offers on the BB on a voluntary basis as proposed.

One or more submissions noted that there are provisions in the National Third Party Access Code for the publication of spare capacity on pipelines.

It should be noted that the BB is not intended to provide a facility specifically for participants to comply with their Gas Code requirements. The voluntary posting of a supply or capacity offer is intended to meet a different need i.e. to facilitate trade.

4.8 Actual Demand Data (Historical data)

The original concept of the BB as described in the GMLG's Gas Market Development Plan did not discuss whether or not actual operational data, such as actual daily demand, should be published after the event. For example, as well as providing an indication of the next day's demand through the publication of the aggregated pipeline delivery nominations, the BB could also publish the previous day's aggregated actual demand or pipeline deliveries, probably derived from pipeline operational data.

Further, actual demand data (aggregate daily gas deliveries) could be published in aggregate for the hub/state and/or by each individual pipeline as listed in Table 1C. It is noted that this data would be operational metering data provided a day (or two) in arrears and, therefore, would not be of settlements quality.

4.9 Actual Production and Storage (Historical Flow data)

In addition to the actual demand information in 4.8, actual daily production or storage usage information may be of further value. This could be aggregated by supply hub where multiple facilities in the same area flow gas into a major pipeline (eg Otway Basin fields and Iona UGS into SEA Gas) or posted by each individual production or storage facility. Given the demand information under 4.8, linepack changes excepted, the aggregate line flows from each supply hub to major pipelines could be estimated. See Table 1A.

Consultation Process – Production and Storage Historical Flow Data

There was a divergence of views in regard to the publication of historical flow data and the level of aggregation of that data.

The consultation process noted that this operational data was not settlements quality and may contain errors which could be significant on occasions.

Producers and pipeline operators (VENCorp excluded) were generally opposed to publication of historical data and more so if this were at the individual pipeline/facility level.

End users, shippers and data users were in favour of publication of historical flow data at the hub and also at individual pipeline/facility level.

It should be noted that individual pipeline flow data would enable estimates of aggregate production at the supply hub level and arguably could obviate the need for publication of this production data if it were required at the supply hub level.

The GMLG's decision is that historical flow data will be published at the individual pipeline/facility level

4.10 BB Participant contact details

Contact details of all participants will be published on the BB.

Consultation - Contact Details

No issues raised

4.11 Bulletin Board updates

Generally the Bulletin Board will be updated on a daily basis, however, provision will be made for more frequent updates if/when required. For example, if the BB was to be used to provide information during an emergency more frequent updates would occur (see Section 6).

In any event, timestamps for each BB update will be provided.

Consultation - Time zones and Polling Frequency

The following are clarifications:

Use of time zones is not required for daily updates of delivery nominations, historical flows if required and less frequent updates of other data such as capacity.

However, all BB updates will be time-stamped on a consistent basis e.g. EST. Appropriate polling frequencies will apply during emergency use e.g. perhaps hourly. The IT developer advised that the polling frequency whether daily or hourly is not a cost issue.

4.12 Bulletin Board Emergency Use Indicator

The BB will provide a flag or indicator if a gas supply incident has been escalated to a multi-jurisdictional issue through NGERAC or if a jurisdiction elects to utilise the BB to assist during a local emergency. The original proposal in the consultation paper for an “NGERAC convened” flag has been superseded by this.

Consultation - Bulletin Board Emergency Use Indicator

Further consultation has occurred with NGERAC in respect to BB emergency use provisions.

NGERAC agreed that a flag indicating when BB emergency use is active would be appropriate and preferable to an ‘NGERAC convened flag’. NGERAC also requested provisions for a public statement on an emergency on the normal BB (i.e. accessible by the public).

Further information on Emergency use of the BB is in Section 6.

Recommendation agreed by NGERAC and endorsed by GMLG:

That a BB Emergency use indicator be provided rather than an ‘NGERAC convened’ flag and in addition, provision for public statement on an emergency by NGERAC or a jurisdiction be made on the public section of the BB.

Consultation – RECOMMENDATIONS AND ISSUES FOR DECISION ON SECTION 4 DATA REQUIREMENTS

Recommendations

The data requirements in Tables 1A to 1D following, which have been amended to reflect responses to the consultation process, are endorsed.

Pipeline operators will provide the aggregate of their shippers' delivery nominations for the next gas day and any forward nominations provided for under their contracts

All general BB data will be archived and provision will be made to enable users to access this data. A user pays fee would apply.

Issues for Decision by the GMLG

The GMLG has been asked to decide whether historical flow data should be published on the BB and, if so, what level of aggregation would apply. The options for decision are listed below:

1. In respect to pipeline delivery nominations the data will be:
 - a. aggregated and posted at the hub/state level; **OR**
 - b. posted at the individual pipeline level

2. In respect to historical pipeline delivery flow data:
 - a. None is required for the BB; **OR**
 - b. data will be provided by pipeline operators and will be aggregated and posted on the Bulletin Board at the Hub/ State/Jurisdictional level; **OR**
 - c. data will be provided by pipeline operators and posted on the BB at the individual pipeline level.

3. In respect to production and/or storage historical flow data
 - a. None is required for the BB; **OR**
 - b. data will be provided by production and storage operators and will be aggregated and posted at a net (injections less any withdrawals) level at the supply hub level; **OR**
 - c. data will be provided by production and storage operators and will be posted at the individual production facility level as well as aggregated to the supply hub.

The GMLG decision is that options 1b.,2c. and 3c. above will apply i.e. data will be published on the BB at the individual pipeline/facility level by hub

Historical flow data will be operational flow data provided one day in arrears or, where this is not practicable, two days in arrears and will be flagged on the BB as not being of market settlements quality.

The arguments for and against publication of historical flow data and at the individual pipeline/facility level are provided on pp8-10

Table 1A. Bulletin Board Data Requirements – Production and Storage

Item	Data to be published (TJ or TJ/d)	Note	Provider	Provided/updated	Triggers for updating	Units	Format	Validation
Production	Production MDQ ("nameplate rating")	NGERAC Standing Data	PR	Once off. Annual confirmation	Longer term change usually due to augmentations, plant retirement, plant mothballing, rating change	TJ	9,999	no
	Daily production capacity 3d outlook	also provision for free text comments	PR	As required	Material changes – usually due to shorter term planned/unplanned outages	TJ	9,999	yes
Storage	Holding Capacity ("nameplate rating")	NGERAC Standing Data	SO	Once off. Annual confirmation	Longer term change usually due to augmentations, plant retirement, plant mothballing, rating change	TJ	99,999	no
LNG or UGS	Supply MDQ ("nameplate rating")	NGERAC Standing Data	SO	Once off. Annual confirmation	"	TJ	9,999	no
	Refill MDQ ("nameplate rating")	NGERAC Standing Data	SO	Once off. Annual confirmation	" "	TJ	9,999	no
	Daily supply capacity 3d outlook	Excepting nameplate ratings, storage will be treated as production. Provision for free text comments	SO	As required, 6pm d-1, local time	Material changes – usually due to shorter term planned/unplanned outages	TJ	9,999	yes
Actual Daily Production	Actual gas production/storage incl any withdrawals for previous gas days	GMLG Decision: Daily metered flows from each individual production/storage facility will be published by individual facility	PR, SO	one day or two in arrears as required	Daily,	TJ	9,999	yes

Data Providers: PR Producer, SO Storage Operator, PO Pipeline Operator, SH Shippers (Retailers and few major Users), JU Jurisdiction nominee, BBO Bulletin Board Operator. **Yellow:** Agreed NGERAC Standing Data, **Green:** Additional data endorsed or as decided by GMLG

Table 1B. Bulletin Board Data Requirements –Pipeline Capacity and Linepack/Capacity Adequacy

Item	Data to be published (TJ or TJ/d)	Note	Provider	Provided/updated	Triggers for updating	Units	Format	Validation
Pipeline Capacity	Pipeline Capacity ("nameplate rating")	NGERAC Standing Data, where bidirectional, for both directions, daily capacity	PO	Once off. Annual confirmation	Longer term change usually due to augmentations, plant retirement, plant mothballing, rating change	TJ	9,999	no
	3d Forecast Daily transportation capacity	For each major NG pipeline and interconnecting pipelines. Provision for free text comments	PO	As required, 6pm d-1	Material changes – usually due to shorter term planned/unplanned outages	TJ	9,999	yes
Linepack/ Capacity Adequacy of pipeline	G, A, R indicator/flag for next 3 days	G = business as usual, A = Voluntary load shedding likely/ happening, R = Involuntary load shedding likely/happening. (Vic PTS: A = LNG scheduled, R = Level 5 emergency status declared). Provision for free text comments	PO	Changes during events, or as required by 6pm d-1, local time	Change to Flag	Flag	G, A, R	select from list

Data Providers: PR Producer, SO Storage Operator, PO Pipeline Operator, SH Shippers (Retailers and few major Users), JU Jurisdiction nominee, BBO Bulletin Board Operator. **Yellow:** NGERAC Standing Data, **Green:** Additional data endorsed or as decided by GMLG

Table 1C. Bulletin Board Data Requirements – Forecast and Actual Gas Demand

Item	Data to be published (TJ or TJ/d)	Note	Provider	Provided/updated	Triggers for updating	Units	Format	Validation
Forecast Demand and Delivery nominations	Forecast Winter and Summer Peak Day	NGERAC Standing Data by Hub/State	JU	Annually by 1 Dec	Material Change to 1 Dec forecast	TJ	9,999	no
	aggregate delivery nominations from pipeline for next gas day. May be summed to Hub/State	Provision for free text comments.	PO	Next gas day delivery noms provided each night by 6pm local time	Daily	TJ	9,999	yes
	Aggregate forward daily nominations (up to 7 days) may be summed to Hub/State	GMLG Decision: Delivery nominations will be aggregated by each pipeline operator to demand hub level and published by individual pipeline	PO	Period specified in contract on set day as per contract/market arr. Typically weekly. By 6pm local time	New nomination due	TJ	9,999	yes
Actual Pipeline Gas Deliveries	Actual deliveries for previous gas days by pipeline to Hub	GMLG Decision: Daily metered deliveries (actual flows) by pipeline to each hub will be published by individual pipeline. It will be indicated that this is operational data only.	PO	one day or two in arrears as required	Daily	TJ	9,999	yes

Data Providers: PR Producer, SO Storage Operator, PO Pipeline Operator, SH Shippers (Retailers and few major Users), JU Jurisdiction nominee, BBO Bulletin Board Operator. **Yellow:** NGERAC Standing Data, **Green:** Additional data endorsed or as decided by GMLG

Table 1D. Bulletin Board Data Requirements – Capacity & Supply Offers, BB Participant Contact Details, Emergency Use

Item	Data to be published (TJ or TJ/d)	Note	Provider	Provided/updated	Triggers for updating	Units	Format	Validation
Capacity Offers	Capacity , invitation to treat	Hub, Pipeline, Posted Date-Time, Start Date, EndDate, MDQ, MHQ, Service Desc, Price, Open/Closed Status, Company & Contact details. Voluntary. Delivery point in Service Desc if req	SH, PO	as required	Change to offers. New Offers. Expired offers			mandatory fields completed
Supply Offers	Supply, invitation to treat	Hub, Pipeline, Posted Date-Time, Start Date, EndDate, MDQ, MHQ, Service Desc, Price, Open/Closed Status, Company & Contact details. Voluntary, includes Storage/Production facility, Delivery point in Service Desc if req	SH, PO, PR	as required	Change to offers. New Offers. Expired offers			mandatory fields completed
Participant Contact details	Company name, title, name, address, phone, fax, email	One company may have several contacts for different purposes	All	Confirm annually or as changes occur	Change			no
BB Emergency Use	BB Emergency Use Flag	This supersedes the 'NGERAC convened' flag originally proposed.	NGERAC , JU	As required	Request from NGERAC chair or Jurisdiction	Flag	Ticker tape	On/Off only
Emergency Status Report	Approved statement to public	Produced by NGERAC or JU and authorised	NGERAC , JU	As required	Material Change to status	Flag	Free Text	

5. Data Validation

Much of the Bulletin Board data is standing data, and will not change very often, and would not require any automated or semi-automated validation checks. Such validation checks on input data would however, be required for demand, production and capacity data that is updated on a daily or ad-hoc basis. Of these, forecast or nominated demand is by far the most dynamic, changing daily and possibly within day.

5.1 Validation within a range

Values must be within an acceptable range expressed in terms of the relevant NGERAC standing data Name Plate Rating (NPR)

The table below provides examples for upper and lower bounds.

Item	Validation Rule	Low x	high y
Daily Delivery Nominations (aggregate validated against pipeline capacity and/or State peak demand)	> x% NPR and < y% NPR	20%	110%
Production capacity (Producers and Storage)	> x% NPR and < y% NPR	20%	110%
Pipeline capacity	> x% NPR and < y% NPR	50%	110%

A notice will automatically be sent to the relevant Participant when the data is out of range. A flag can indicate if one or more of the pipeline aggregate demands is/are out of range

The BB Operator may alter the ranges based on information from Participants or on operational experience and will consult with the relevant stakeholders before implementation of the Bulletin Board and periodically thereafter.

Suitable substitution processes will be implemented with appropriate flags to indicate the nature of any substitution.

5.2 Validation tests for completeness

A flag will indicate a warning if one or more data inputs is missing or has not been appropriately updated, indicating that aggregate figures may be inaccurate.

A confirmation notice will automatically be sent to the relevant Participant when the BB processes the input data and at a later time if the Participant has not responded within a set time.

5.3 Monitoring and Auditing

The BB Operator will undertake periodic audits to assess the timeliness and reasonableness of BB data provided.

Consultation – Data Validation

There was general support for basic data validation functionality and monitoring of BB data by the BBO

Recommendation.

That the proposal for basic data validation be implemented in the BB system. Further consultation with relevant stakeholders will occur on appropriate upper and lower bounds and where substitution is appropriate.

6. Use of Bulletin Board in Emergencies

The Bulletin Board will potentially play a primary role in the event of gas emergencies by enabling participants to post updated supply, capacity and demand forecast information, accompanied by commentary using free text, to the Bulletin Board on a more frequent basis than normal e.g. every few hours, or whenever there is a significant change in circumstances or new information available. This would assist NGERAC and industry in the emergency analysis and management process and could also reduce the level of phone traffic.

For example, if the emergency related to production, gas producer(s) could provide the forecast supply outlook during the emergency and through the recovery phase. The pipeline operator(s) could provide similar information on capacity if the emergency pertained to failure of or damage to the pipeline. At the same time, other pipeline operators, producers or shippers could provide information on spare capacity or spare supply they have available to alleviate the situation.

NGERAC and/or individual jurisdictions could establish pro-forma templates of data requirements to be populated in the event of an emergency or incident affecting gas supplies. For example, NGERAC's Communications Protocols contemplate the provision of the following information in respect of such an incident:

- a) its location in the gas system;
- b) the time the event occurred;
- c) likely effect on the quantity of natural gas available;
- d) as soon as is available, an indication of the assessed impacts of the incident in relation to level of gas reserves, in accordance with the traffic light reporting system in section 4.4;
- e) the estimated time to restore normal supplies.

Such standing templates could be provided on the Bulletin Board to be populated by producers, storage providers and pipeline operators upon notification that NGERAC had been convened in response to a gas supply emergency, or that an emergency had been declared in an individual jurisdiction.

In developing such templates, consideration would need to be given as to how much of this information should be made publicly available on the Bulletin Board and what should be restricted to NGERAC or the managing jurisdiction/industry participants only. Any decision to restrict the publication of information should only be made in the public interest, to avoid unnecessary panic or confusion, or inappropriate reporting in the media. This may apply in the initial response phase of an emergency, when data can tend to be unreliable and subject to frequent change.

It may also be necessary to modify the normal information provision requirements of the Bulletin Board at such times – for example, depending upon the nature and timing of an incident, it may not be practical or meaningful for pipeline operators to provide updated nominated deliveries in accordance with the usual daily cycle.

Nevertheless, it will be important to ensure that the Bulletin Board provides all affected and interested parties with as much information as possible, to assist them in making informed decisions in response to the situation. At least, the BB should be used to publish regular text comment updates on the status of emergency situations. These updates could be provided by NGERAC, the affected jurisdictional contact officer or pipeline operator(s), and uploaded by the BBO itself. At the conclusion of any NGERAC meeting convened in the event of an emergency there could be an agreed statement, or status report, that is provided to the BBO for publication. Again, it may be useful for NGERAC to consider developing a standard format for this.

Consultation – NGERAC and Emergency Use

Issues of confidentiality of information and resourcing to meet BB needs during an emergency were raised in the general consultation.

Further consultation has been undertaken with NGERAC and the jurisdictions in regard to the appropriate use of the BB during emergencies. There was broad support for the provision of the emergency information as set out in Table 1E which has been developed through an iterative process with NGERAC.

Access to the emergency pages on the BB will be limited to registered BB users (Producers/Storage operators, pipeline operators, shippers and NGERAC members.)

Provisions will also be made on the general BB (which is accessible to the public) to indicate if/when the emergency pages of the BB are active and for an emergency status report by NGERAC or the relevant jurisdiction.

The BB will act as a central repository for emergency information to support the emergency process. BB emergency use will be activated by either a jurisdiction or NGERAC.

The use of the BB for emergency use including the specific nature of the information to be provided will be specified in NGERAC procedures. It is not intended that the rules mandate the use of the BB during emergencies, however, the function of the BBO (AEMO) in respect to BB emergency use will be specified and, if appropriate, reference will be made to relevant NGERAC procedure(s).

It was agreed that the NGERAC convened flag should be replaced by a more general BB 'emergency use' flag to indicate when the BB emergency pages are active. Provision for public statement is to be made on the normal part of the BB (accessible by public).

Recommendation – NGERAC and Emergency Use

Provisions should be made for NGERAC or general emergency use as follows:

- a. There will be separate pages provided for emergency information with secure access for NGERAC members, the jurisdictions and registered BB users (including the relevant producers, storage providers and shippers).
- b. The BB will continue to operate normally during emergencies so that use can be made of normal BB data elements (production, capacity, delivery nominations, and linepack/capacity adequacy indicators) and there will be no redundant data entry or duplication of elements of the IT system.
- c. Provision will be made for additional emergency information from the affected facility owner, jurisdictions, pipeline operators, producers and storage providers, jurisdictions and emergency status statements from NGERAC or a jurisdiction.,.
- d. There will be an appropriate system polling frequency e.g. hourly or less to enable reasonably timely updates. (This does not mean that hourly updates are required by users. Update should only occur if there are material changes or new information becomes available.)
- e. Use of the BB for NGERAC emergency purposes will not be mandatory but will be specified in NGERAC's procedures.
- f. The BB emergency support function to be provided by the BB Operator will be specified in the rules.
- g. Use of emergency function of the BB will be triggered on request from a jurisdiction or NGERAC and activated by the BB Operator.

/Cont..d

- h. Provisions for public emergency statements will be made on the general BB and there will be an indication if the secure emergency pages of the BB have been activated
- i. Emergency information will be time-stamped and have the source identified and will remain visible on the system if/when updates occur.
- j. Emergency information recorded during an event will be archived.

The GMLG has endorsed NGERAC’s emergency use BB requirements in Table 1E.

Table 1E. Bulletin Board Data Requirements - NGERAC and Emergency Use

Item	Data	Items covered to be specified in NGERAC procedures. These are indicative only	Provider
Emergency Incident	Description , impact, Restoration plan	What happened, where, when. Impact on plant, personnel, public, plant, production/capacity. Production/capacity outlook. Potl downstream impacts - nature, severity, timing (perspective of plant operator). Restoration plan- timing, impact, uncertainty.	Impacted Plant or Pipeline Operator
Unused production / Storage capacity	Unused capacity available in TJ/d	Any unused supply/production and conditions on its use that could assist if arrangements could be made. Includes non-firm gas.	PR/SO
Pipeline Linepack	Useable linepack in TJ	Useable linepack in TJ at beginning of gas day or at a relevant time specified by the pipeline operator. From all impacted pipelines incl those supplying impacted regions. Any plan/projection for use of that linepack.	PO
Load Shedding or Curtailment	Load reduction measures and impact	Measures taken or planned. Indicative yield projection in TJ by day. Provided after JU(s) consult with or receive advice from relevant stakeholders	JU
NEM Impact	NEM S-D assessment	S-D outlook, potl impact, risks, actions taken, contingency plans	NEMMCO
Emergency Status Report	Summary of position, outlook, measures taken, plans	Global view prepared after consultation with relevant stakeholders, with appropriate authorisation.	NGERAC or relevant JU

Notes

Access to BB Emergency pages will be limited to registered users of the BB and NGERAC representatives (Includes pipeline operators, producers, storage providers, shippers)

Activation of BB pages will be on request from the NGERAC Chair or relevant Jurisdiction

Data posted asap, before Jurisdiction or NGERAC convenes, updated prior to and after such meetings or teleconfs and/or as material changes occur, minimum daily update/review.

All information will be in free text format, timestamped, identified by provider and will address data items specified in NGERAC procedures

All information published during and event will remain visible and in sequence. The information will be archived at the conclusion of an emergency event on request by NGERAC or the relevant jurisdiction.

7. Funding of Bulletin Board Operation

The costs for establishing and operating the BB are to be shared between government and industry. The initial establishment of the BB itself is being funded by Government up to an approved level of \$500,000. Industry is meeting its own costs incurred in participating in the design and development of the BB, and industry participants interfacing with the Bulletin Board will incur and bear their own setup costs and ongoing operational costs.

The ongoing costs involved in the operation and maintenance of the BB will ultimately be funded by the AEMO, with these costs recovered through fees imposed on industry participants. Until establishment of the AEMO, the interim BB operator (VENCORP) will similarly need to recover costs through fees imposed on industry participants.

It is generally accepted that individual parties would be required to meet their own costs for access to the BB or in meeting BB obligations. However, where services are provided by one party on behalf of another it may be expected that the service provider is able to charge a fee for service. For example, with the proposed approach under which pipeline operators will be required to aggregate and pass on shippers' nominated deliveries to the BB operator, handle any queries from the BB operator in respect of any data gaps or anomalies, and manage any residual commercial risks associated with this activity, pipeline operators have indicated that they would expect a mechanism to be established to enable them to recover their associated costs for this service. Options for such cost recovery could include the pipeline operators being paid for the data provision service by the BB operator, with these costs recovered through fees imposed on industry participants; or the pipeline operators negotiating with and charging individual shippers directly.

Consultation – BB Operations Funding

Some argued that end-users as the main beneficiaries should fund the BB and cost should reflect the degree of participation by different jurisdictions. Others made the case that all users should fund the BB.

It is noted that the AEMO will ultimately take on the BBO role and the fees will then be provided for within the AEMO fee structure.

Recommendations

The annual BB operating costs are low (estimated by MMA as ~\$100k p.a) so a simple arrangement should apply e.g. could be recovered on a fee for service basis applied to registered users of the BB. The allocation methodology will be developed during rule development.

Pipeline operators can recover their "BB services" costs related to aggregating and providing shipper nominations data to the BB (this must not include the costs of providing other pipeline BB data mandated under the rules such as pipeline capacity and loss of reserve indicators).

The BB operator will consult with the pipeline operators in determining an annual amount payable to each pipeline operator providing such a BB service. The BB Operator will recover this additional cost within its annual fees to shippers.

8. Bulletin Board IT options and Issues

The following is a summary of IT design options considered and implications for BB design and users. More detailed discussion of BB IT options and issues is provided in Appendix 3.

The BBWG has given preliminary consideration to the IT platform to support the proposed BB design.

8.1 Proposed IT System (utilising FTP)

The proposed option is a system based on the exchange of standardised files via FTP (File Transport Protocol) complemented by email updates for infrequently changing data. The general consolidated data would be available via a public website. Participant specific data would be accessible over the internet but would be hosted on separate hardware, that is suitably sized, that would be accessible to the relevant industry participants via nominated accounts.

The benefits of using FTP are:

- it is a low level technological solution that can be used to implement manual as well as automated solutions;
- it is technology that is in common use within the industry and, although it doesn't provide synchronous data exchange, if implemented with a short polling period it should provide a response in a timeframe acceptable to Participants.

The disadvantages of this system are:

- submission of the data is asynchronous (batched) rather than synchronous (real time);
- receipts of submissions can be handled via email, but due to control issues, this would have to be seen as a secondary or courtesy mechanism;
- the process is a minimalist one which deals with the immediate business requirements, but may not be a suitable basis for the development of a future short term trading market.

8.3 Higher Cost alternative IT System utilising GUIs

An IT platform providing for entry of data via a Graphical User Interface (GUI) would provide some advantages but would have development costs in the order of 50% higher than the current budget provision. As with the system previously described in section 8.2, the general consolidated data would be available via a public website. Participant specific data would be hosted on separate hardware that is suitably sized, and would be accessible to industry participants over the internet via nominated accounts.

The benefits of a GUI system are:

- this would allow synchronous (real time) submission of data;
- it provides a simple and common way for participants to submit data manually which doesn't require any IT developments by participants;
- a response can be returned as part of the synchronous submissions that takes into account the required validations, indicating success or otherwise of the submission.

The disadvantages of this system are:

- development of GUI will incur higher costs due to increased time/resources to deal with usability issues such as presentation, screen controls, and additional coding, for example to retrieve existing data for review;

- a solely GUI-based system would not lend itself to automation and, hence would likely be an addition rather than an alternative to the FTP approach.

It is likely that a GUI interface would be required with the introduction of a short term trading market, when there would be a requirement for the interface to be more interactive (for the submission of bids etc). Nevertheless, the BBWG considers that it would be appropriate and most cost effective for the BB to be implemented initially on the basis of FTP interfaces, with the potential to add on a GUI interface system should this subsequently be considered desirable.

Under the anticipated data requirements specification, each Hub and/or State may provide data at different times, due to different time zones and different definitions of "gas days". Assuming BB data provision and publication remains on a daily basis, then the issue of different time zones may not be a substantive one. However, if there should be a need for data provision or publication at different times during the day, then different or changing time zones (e.g. daylight saving) can cause significant issues from an IT perspective. Ideally, a single, universal reference time zone should be used. If this is not practical Australia wide, then as a minimum the systems should be designed to avoid having to modify data and processes to accommodate changes due to daylight saving time.

Consultation – IT System

There was general consensus on the use of a simple, low cost system such as the FTP/email/CSV file web-based system as proposed. One or more respondents cautioned that costs should not be avoided at this stage if it could result in higher upgrade costs in the future.

Recommendations

1. The Bulletin Board system will be a simple and low cost web-based system that uses FTP/email and CSV files for inputs.
2. The BB system will have secure access and data security mechanisms to ensure that commercially sensitive data is only accessible by those parties entitled to access that data or information under the rules.
3. Provision will be made in the BB IT design to enable low cost expansion to include other jurisdictions or pipelines in the future.

8.4 Handling of Time Zones

Under the anticipated data requirements specification, each Hub and/or State may provide data at different times, due to different time zones and different definitions of "gas days". Assuming BB data provision and publication remains on a daily basis, then the issue of different time zones may not be a substantive one. However, if there should be a need for data provision or publication at different times during the day, then different or changing time zones (e.g. daylight saving) can cause significant issues from an IT perspective. Ideally, a single, universal reference time zone should be used. If this is not practical Australia wide, then as a minimum the systems should be designed to avoid having to modify data and processes to accommodate changes due to daylight saving time.

Consultation - Time Zones

There was general consensus that the use of time zones should be avoided or minimised to keep the system as simple and flexible. Consistent time-stamps (using one time zone) should be used.

Recommendation

The supply, demand and capacity data posted on the Bulletin Board on a given date corresponds to the defined gas day applicable to the facility in the relevant jurisdiction and use of time zones should be minimised. All BB data should be time-stamped on a consistent basis e.g. using EST.

8.5 Access to Historical Data

(Note: This item refers to the normal data that has been posted on the BB and not specifically historical flow data that is under consideration for posting on the BB.)

It will need to be determined whether the system should provide access to stored or archived historical BB posted data, or possibly to provide a subscription service where data can be bundled up and provided at a cost. If this is the case, then the system will need to be designed such that this could be automated or, at a minimum, store the data such that it is retained and can be easily accessed and distributed for these purposes.

Consultation – Access to Data

The submissions focussed on the provision of actual flow historical data (should the GMLG decide that this will be published) and not normal day to day BB posted data. In this regard, those wanting historical flow data published also wanted it archived and downloadable.

In regard to normal day to day BB posted data of supply, capacity and nominations etc, there was no clear feedback. However, in any BB system there will be a need for some level of archiving and this will also be required to enable the BBO to monitor and review the quality and completeness of information posted on the BB.

Recommendations

All general BB data will be archived and provision will be made to enable users to access this data. A user pays fee would apply.

9. Legal Issues

The BBWG was required in its Terms of Reference to identify legislative requirements to support collection of data/information and BB operation. The BBWG considered two main issues:

- The regulatory framework for imposing and enforcing obligations on the participants to provide information to the BB operator and for cost recovery for the BB operator; and
- Potential liabilities of BB information providers and the BB operator.

The BBWG obtained legal advice from Deacons on some key issues, and, based on that advice and the options available for statutory support for the BB, has reached the following position.

9.1 Regulatory Framework

The BBWG considered implementing the BB through a statutory framework in the long term, with the possibility of an interim voluntary framework.

9.1.1 *Implementing the BB through a voluntary framework*

As a threshold issue, the BBWG was concerned to determine whether the BB could be introduced as a voluntary mechanism pending a statutory framework, as there was considerable doubt concerning the practicality of putting in place a statutory framework in time for the proposed implementation of the BB.

The BBWG sought advice on whether there is any means available for imposing obligations on BB Information Providers outside the proposed statutory framework, having regard to the following:

- (a) the existing market operators (VENCorp, REMCo and Gas Market Company) cannot adopt rules which bind all of the necessary parties;
- (b) agreements between the BB operator and all other BB Information Providers could be voluntarily entered into but would be very costly and time consuming to complete (even assuming all parties were prepared to do so);
- (c) it may be possible to impose the requirements under existing licences/authorisations, but this would require the co-operation of all States and Territories, and this may take longer than finalising the proposed statutory framework; and
- (d) the GMLG and BBWG would wish to limit the liability of BB Information Providers in an appropriate manner (see discussion of liability in section 8.2).

Deacons agreed with the limitations outlined, and advised that it would be necessary for the BB Operator and all BB Information Providers to enter into agreements to support the operation of a voluntary BB. Even with such agreements in place, in the absence of statutory protections, there would be residual exposures liability for the BB operator and information providers.

Recommendation of the BBWG

Based on this advice, the BBWG concluded that a voluntary arrangement would be unworkable, due to the impracticality of the requirement for contractual arrangements with multiple parties, the significant additional cost and time delay inherent in entering into those contractual arrangements and the residual exposures to liability for the BB Operator and BB Information Providers which could not be fully addressed in a voluntary framework.

Accordingly, the BB Working Group recommends that a statutory framework is necessary to underpin the introduction of the Bulletin Board.

9.1.2 *Statutory Framework*

As a consequence of the legal advice on the practicality of a voluntary arrangement, the Energy Market Reform Working Group has recommended to the Ministerial Council on Energy that a statutory framework to support the implementation of the Bulletin Board be incorporated into the amendments to the National Gas Law (NGL) intended to be introduced in 2007/08.

The statutory framework is expected to include the following:

- Obligation to provide information

Gas producers, shippers, storage providers, operators of covered and uncovered pipelines and pipeline users would be obliged by the NGL to provide information to the BB Operator in accordance with the rules. The NGL would also provide that any duty of confidence does not absolve compliance with these rules but that compliance with the rules does not create liability for a breach of confidence, breach of contract or other civil wrong.

- Operator Liability

VENCorp, which will initially operate the bulletin board, would require an exclusion from civil liability to actions done in relation to its bulletin board functions and powers which were not in bad faith or negligent. This would be equivalent to s 119 of the National Electricity Law as it operates for NEMMCO.

- Rule-making head of power

The NGL should also include appropriate rule making heads of power. The BBWG has identified the following heads of power to address the issues which are likely to be included in the Rules:

- Commencement and application
- Definition and Registration of participants (including IT interface requirements)
- Role, powers and obligations of the BB operator
- Provision of information to the BB Operator
 - What (mandatory information requirements and voluntary information provision)
 - Who (identifying parties required to provide information)
 - When (time limits for providing information)
 - How (format, specifications for interfacing with the BB)
 - Ownership of/responsibility for data
 - Procedures where information is not made available or received by the BB operator
- Publication of information on the BB
 - Requirement on BB Operator to aggregate and/or publish information on the BB
 - Confidentiality issues regarding commercially sensitive information
 - Procedures where information is not made available or received by the BB operator
- Access requirements
- Cost recovery
 - Fee determination (process and timing)
 - BB Operator recovery of fees from industry participants
- Liability – exclusions of liability in favour of BB Operator and BB Information Providers
- Compliance/Rule enforcement
- Rule change procedure (process for development, approval and implementation)
- Procedures development, approval and implementation,

Consultation: Statutory Framework

There was general consensus that a statutory framework was necessary.

Recommendations of the BBWG

That the proposed statutory framework be adopted as an appropriate means of implementing the BB and, in particular, that:

1. VENCORP is appointed as the interim BB Operator until an AEMO is in place.
2. The statutory framework establishing powers to establish and enforce a BB and requirements to comply with a BB should be contained in the National Gas Law, with Rules to be developed by the GMLG for adoption under that Law at the commencement of operation of the BB.
3. With the exception of supply/capacity offers, provision of information and data required for the BB will be mandatory under legislation (National Gas Law) and will be specified in detail in the rules (National Gas Rules).
4. The BB enabling legislation should provide that participants will not breach confidentiality agreements by complying with the Law and Rules.

9.2 Liability Issues

It is the intention of the GMLG and the BBWG that obligations to provide information for publication on the BB "are imposed in such a way that responsible parties who use bona fide and reasonable endeavours to fulfil their obligations are not exposed to liabilities as a result of errors and omissions" (National Gas Market Development Plan, p 21).

The BBWG sought advice on the potential liability of persons providing information for publication on the BB (including market participants who may post information directly to the BB, and the BB Operator who may receive, aggregate and publish certain information on the BB) (together BB Information Providers) under the Trade Practices Act 1974 (Cth), State Fair Trading Acts or at general law, having regard to the types of information to be published on the BB and its intended use.

Legal Advice on Potential Liability

Arrangements substantially lessening competition

The Commonwealth Government advised the BBWG that advice⁵ had been received in establishing the National Electricity Rules under the National Electricity Law that where obligations are imposed under statute, they do not constitute a contract, arrangement or understanding for the purposes of Part IV of the Trade Practices Act. Accordingly, the Government has determined that there is no requirement for any statutory exemption for the NEL and the National Electricity Rules.

The BBWG accepted that the principles of the NEL and the National Electricity Rules would apply to the NGL and Rules to implement the BB.

Misleading or Deceptive Conduct

- **Section 52 of the TPA**

⁵ Advice of Mr Hutley and Ms Pritchard dated 5 August 2004, available on the MCE website

The BB Information Providers could be exposed to liability under section 52 of the Trade Practices Act 1974 (Cth) (TPA) for engaging in conduct that is misleading or deceptive, if information supplied to the BB Operator and/or published on the BB is shown to be misleading or deceptive or likely to mislead and deceive and is relied upon, resulting in damage. As the information on the BB will include forecasts, it is important to note that predictions about the future may be misleading and deceptive unless the corporation has reasonable grounds to believe the statement to be true at the time of making it. In order to sue for damages, there must be reliance on the misleading or deceptive conduct and a causal link between the conduct and the damage suffered. The plaintiff must show it was induced to do something or refrain from doing something by virtue of the conduct and suffered damages as a result.

If the BB Operator receives and publishes the information on the BB without altering or adapting it in any way, it cannot be said to have engaged in conduct that is misleading or deceptive. If however the BB Operator aggregates any information, it will be exposed to such liability. The BB Operator could also be liable under section 75B of the TPA, aiding and abetting a contravention of the TPA, if it is or should have been aware of the facts that gave rise to the contravention and intentionally participated in the contravention, or where there was a combination of suspicious circumstances and the BB operator failed to make inquiry.

- Fair Trading Acts and Common Law

The misleading and deceptive conduct provisions of the Fair Trading Acts in the States and Territories are substantially the same as section 52 of the TPA, and will need to be addressed under the State based legislation as part of the statutory framework.

Section 52 of the TPA provides much wider grounds for liability than the common law and has effectively rendered consideration of common law liability for misstatement redundant.

Contractual Breach

It would be expected that some existing contracts impose confidentiality obligations on one or both parties, possibly prohibiting disclosure of information in the nature of the information to be provide to the BB Operator. It could potentially be a breach of contract for an Information Provider to provide such information to the BB Operator.

The BBWG sought advice on how any potential liability identified above may be limited or removed, for example:

- (i) whether a disclaimer on the BB is sufficient to protect BB Information Providers from such liability;
- (ii) whether a requirement for users of the BB to accept specific terms and conditions of usage is required and could be sufficient to protect BB Information Providers from such liability; or
- (iii) whether a statutory exemption from liability is necessary to protect BB Information Providers from such liability.⁶

⁶ Note: There is a precedent for statutory exemptions from liability for the market operator and market participants under the Electricity Law, which exempts certain parties from any civil monetary liability for an act or omission in the performance or exercise, or purported performance or exercise, of a function or power under the Law or the market Rules unless the act or omission is done or made in bad faith or through negligence.

Legal Advice on Limiting or Removing Liability

Waivers and Exclusions

It would be rare for a person who has expressly agreed not to rely on information, for example as a condition of use of the BB, to be able to successfully bring a claim for misleading or deceptive conduct under the TPA.

In order to obtain the necessary waiver, the BB Information Providers should:

- obtain mutual waivers in any documents between themselves; and
- require all users of the BB to accept terms and conditions of use including waivers or exclusion clauses on a "clickwrap" basis when accessing the website. A "clickwrap" agreement, where the user usually clicks "I Agree" on a website to signify acceptance of terms and conditions, is generally thought to be capable of being enforced in Australia, although there are no decided cases on point.

Evidentiary difficulties may arise in respect of the following issues:

- (a) establishing what terms and conditions were in fact in use on the website at the time the agreement was entered into, which would require the BB Operator to maintain comprehensive records of the terms and conditions appearing on the BB website from time to time;
- (b) establishing that the user actually viewed the relevant contractual terms before being able to click "I Agree" which is most easily accomplished by ensuring that the user must physically scroll through all of the contractual terms before the "I Agree" button appears;
- (c) maintaining an electronic log file (or similar) so that the BB Operator can establish exactly when a particular user clicked "I Agree;" and
- (d) establishing the identity of the person reading the terms and clicking "I Agree", including whether that person is authorised to contract on behalf of the User.

Even if a binding contract or terms and conditions containing waivers or exclusions are in place, waivers and exclusions do not provide a complete defence to the potential liability under section 52 of the TPA or the equivalent provisions of the Fair Trading Acts. The objective of both waivers and disclaimers is to be able to assert that the claimant is not reasonably entitled to rely on the information provided to it. A disclaimer, waiver or other form of express exclusion of liability does not create a contractual defence to liability but is an element to be considered in determining whether the conduct in question is misleading or deceptive. A Court must consider the conduct as a whole and should accordingly consider whether the representation in question, including the disclaimer or exclusion clause, is misleading or deceptive.

Statutory Exemption

A more complete solution would be to obtain a statutory exemption for such liability. In the light of the potential application of both the TPA and the State and Territory Fair Trading Acts, to be effective, both State and Federal legislation would be required. A statutory exemption of this type is relatively uncommon, although limited statutory exemption is available under the National Electricity Law. It is suggested that any statutory exemption should be limited to Information Providers in respect of information provided by them if they can demonstrate that they acted according to required behaviour, such as acting bona fide and exercising a reasonable level of care and due diligence. Such a standard would be consistent with the GMLG Plan.

Contractual Breach

Where Information Providers are subject to confidentiality agreements under existing gas supply or pipeline transportation contracts, and consent has not been obtained, the information should be de-identified e.g. by aggregating it, before sending it to the BB Operator. However, it may be difficult for the

Information Provider to provide such information without breach of its confidentiality obligation if the confidential characteristics of the information would be apparent in any event.

In the statutory framework, a requirement compelling the provision of the information and providing statutory immunity against breach of contracted confidentiality obligations will resolve the issue.

The BB Operator would need to be satisfied that any information provided by an Information Provider is not provided in breach of a confidentiality obligation to a third party. This could be addressed in terms of a bilateral deed between the BB Operator and the Information Provider.

Ownership of Information

If any of the information is, in fact, owned by a third party, appropriate consents/licences from the third party would be required to prevent any infringement of the intellectual property rights of that third party.

The BB operator would need to be satisfied that any information provided by an Information Provider does not infringe a third party's intellectual property rights, which issue could be addressed in the bilateral deed with Information Providers.

The legislative underpinning of the Statutory Framework could provide statutory immunity for breach of contractual or other forms of intellectual property infringements.

Consideration of the BBWG

The BBWG considered the risks of providing false and misleading information associated with the specific information required to be provided on the BB. The BB considered that information relating to:

- 3 day outlook for daily production capacity in the event of material change;
- 3 day outlook for daily supply capacity for LNG or UGS in the event of material change; and
- 7 day aggregated nominations,

could be construed as information relating to future activity. As such, although all due care and reasonable diligence has been applied, the information may, in fact, be incorrect. The BB considered it would be inappropriate to expose BB Information Providers to any liability for misleading information as a result of such information being published on the BB.

Consultation - Liability Issues

There were a number of concerns expressed in regard to provision of suitable protections in the NGL against liability. The BBWG's legal advice is that the recommendations below will meet these concerns.

Recommendations on Section 6: Legal Issues:

The BBWG recommends that:

1. the BB include a click wrap agreement containing appropriate waivers and exclusions, which each user of the BB will be required to accept prior to entering the BB, and that the BB incorporate an electronic file to store the identity of all users
2. the BB include additional specific descriptions of information provided where it relates to future events and additional disclaimers regarding relying on such information (for example, aggregate nominations are the aggregates of the nominations provided by users for each pipeline and do not represent forecast demand in the market.)
3. the NGL should incorporate protections against the breach of confidentiality provisions in agreements.

/Cont..d

4. the NGL should provide that participants and the BB Operator are exempt from liability to any person, except in cases of bad faith or negligence, and liability for bad faith or negligence should be capped

Appendix 1: BBWG Terms of Reference

- Objectives -** The BBWG reports to the GMLG's BB/STTM Steering Committee with the objective of overseeing and ensuring the establishment, implementation and operation of a BB by the end of 2007 that covers all major gas transmission pipeline systems in Australia and meets the requirements envisaged by the GMLG's National Gas Market Development Plan and the data support requirements of NGERAC. Budget allocation for establishment of the BB is \$500,000.
- Scope -** Using the conceptual description of the BB in the GMLG's National Gas Market Development Plan plus additional NGERAC data support requirements as a basis, the BBWG will:
- Further refine and define the conceptual design and functionality of the BB and confirm this meets GMLG/NGERAC requirements;
 - Develop detailed specifications for the BB data/information requirements, including:
 - Content and format of data and information to published
 - Level of aggregation of published data/information
 - Frequency/triggers (including "materiality" of any changes) for updating published data/information
 - Identification of parties required to provide input data/information
 - Processes/systems for provision and uploading of input data/information
 - Security requirements
- Develop conceptual design ("business requirements") specification for approval by GMLG.
- Develop policies and procedures for the collection and presentation of data/information.
 - Oversee development of full Functional and Technical Specifications, procurement of IT infrastructure, IT design, build, testing and implementation.
 - Identify legislative requirements to support collection of data/information and operation of BB.
- Approach -** The BB project can be seen to comprise at least two distinct phases:
- Phase 1 - the refinement of the conceptual BB description in the GMLG's National Gas Market Development Plan into a detailed "business requirements" specification describing precisely what information is to be collected and from whom, legislative requirements to support this, the content and format of the information to be published, and how and how often this information is to be updated; and
- Phase 2 - conversion of the business requirements into a detailed Functional and Technical Specification, leading to procurement, design and implementation of the IT infrastructure.

Continuity must be preserved over both phases but Phase 2 is effectively an IT project with a quite different skill set required from that for Phase1.

For Phase 2 the initial BBWG membership will therefore need to be supplemented with additional IT design and IT project management expertise in Phase 2. This is a matter to be resolved by the BBWG membership in consultation with the BB/STTM Steering Committee during Phase 1.

Timetable - Implementation of the BB is to be achieved by end 2007, with a budget of \$500,000. The BBWG is to develop a project plan consistent with achieving this target. It is expected that this will be refined, with increased granularity and additional milestone dates, particularly for Phase 2.

The initial aim is to complete Phase 1 and present a detailed “business requirements” specification to GMLG for approval by end May 2007.

Reporting - BBWG is to provide the BB/STTM Steering Committee with regular progress reports as required, including progress against the project plan, milestone dates and budget.

BBWG Membership

Terry Grimwade (VENCORP – Chair)

Matthew Arnold (ExxonMobil)

Jeff Cooke (SEA Gas)

Warwick Forster (Alinta)

Mark Frewin (TRUEnergy)

Peter Geers (AGL)

David Headberry (representing End Users)

Patricia McKenzie (GMC)

David Grove (Origin Energy)

John Savage (VENCORP – Project Manager)

Appendix 2: Extract from National Gas Market Development Plan – Bulletin Board

The extract is comprised of sections 3.3 to 3.9 as follows:

3.3 Information requirements

The BB would provide up-to-date information on the overall physical condition and capacity of the supply and pipeline system to meet projected demand, along with contact details for key industry participants.

Information would be provided to users or potential gas users as to where supply or pipeline constraints exist in real time, or may occur under certain conditions to assist them in identifying potential trading, risk mitigation or investment opportunities.

It is emphasised that parties should not be encouraged to rely solely on information on the BB as a basis for entering into commercial arrangements, but rather that the BB information would provide a basis for interested parties to commence commercial negotiations with other appropriate parties in the gas industry⁵.

The information to be published on the BB would, where necessary, be in aggregated form so as not to reveal commercially confidential contractual quantities or other details.

The published information could include the following.

(a) A “baseline” set of information on supply and pipeline capacity. This would be in the form of “nameplate ratings” of each major supply and storage facility’s daily production capacity and the daily transportation capabilities of each transmission pipeline, and, where bi-directional flows are possible, in each direction. This information would be updated annually, and whenever significant changes occur.

(b) Temporary changes to the baseline data would be reported, on an exception basis, whenever maintenance or unplanned outages result in material changes in supply capacity or constraints in transportation capacity. It would be preferable that such advice includes details of the estimated extent and duration of the resultant restriction on supply or transportation capacity. However, it is acknowledged that when plant or pipeline failures or outages occur, such estimates can be problematic and the asset operator/owners’ priority will be to channel their efforts to rectifying the problem. Therefore, on occasions, it may be impractical to require detailed and frequently updated information to be posted while the fault is being rectified. Nevertheless, as a minimum, advice would be provided to the market of the existence of a problem and a qualitative statement on the impact on supply or transportation capacity, even if this impact is of uncertain magnitude and duration.

⁵ The legal status of information posted on the BB is a matter for further advice and consideration as part of implementation. The intent is that, provided the responsible parties have used reasonable, bona-fide endeavours to provide the required information, they should not be exposed to liability for losses or damages incurred by third parties acting solely on information posted on the BB.

- (c) Details of available firm and non-firm pipeline capacity, including non-binding indicative prices⁶.
- (d) Details of forecast aggregate daily demand at major demand centres (city gates), updated on a daily basis for each of the next three days.
- (e) Key contact details for pipeline operators, producers, storage providers, shippers and retailers (this could be done through hyperlinks to their individual websites).

The Allen Consulting Group Report (Section 5.2) suggested that a BB should also include a requirement that all short-term contract trades for periods of one year or less be recorded on the BB, regardless of whether they were traded through the BB or not.

However, the GMLG considers that such a requirement is unlikely to be either viable or useful. The intended objective for requiring details of such trades to be published is, presumably, to provide increased price discovery and transparency. However, unless all the terms and conditions of a negotiated trade are fully known and understood, then the price and quantity involved would not be particularly meaningful to third parties. Even in the event of a standardised contract being adopted, it is likely that many trades would still involve negotiated variations to standard terms and conditions to suit the specific circumstances and requirements of the parties involved.

It is noted that a Short-Term Trading Market (see Section 4) will establish a daily ex-ante value of gas at specific hubs, thereby providing a far clearer and more accurate indication of the market value of gas than would be provided by posting prices of individual trades on a BB.

Producers, storage providers and pipeline operators would be required to provide baseline information regarding supply and pipeline transportation capacities, and to update the BB by exception when these capacities change materially (permanently or temporarily).

Data to compile the daily demand forecasts for the next three days would be provided by "Users" (i.e. retailers or direct, "self-contracting", end-use customers) in the form of aggregate totals for all metered off-takes for which they are assigned responsibility, probably categorised by specified withdrawal zones or regions, which are chosen to reflect different pipeline sectors or possible points of constraints. The BB Operator would further aggregate the data provided by individual users so as to protect commercially sensitive data.

⁶ The proposal is based on details being provided by pipeline operators of spare, uncontracted, pipeline capacity and does not extend to a mandatory requirement on shippers to provide details of any unused contracted capacity. This is because to do so would only be useful to the extent that a shipper was willing to on-sell any such spare capacity, in which case the shipper could voluntarily offer such capacity for sale via the BB. The BB would not directly address any potential "hoarding" by shippers of unused contracted capacity. Nevertheless, it is noted that section 5.8 of the National Third Party Access Code for Gas Pipeline Systems does place obligations on "Users" to provide information on unused contracted capacity (where this is a "Marketable Parcel") and, where applicable, the BB could provide a facility for "Users" to meet these obligations.

3.4 Legislation requirements

To operate effectively, provision of the physical system information for posting on the BB would need to be standardised⁷ and mandatory. This will require legal obligations (on a reasonable endeavours basis) on pipeline owners/operators, storage operators, producers and/or shippers to provide timely information in a specified, standard format.

Legal advice would be required to ensure that obligations to provide this information are imposed in such a way that responsible parties who use bona-fide and reasonable endeavours to fulfil their obligations are not exposed to liabilities as a result of errors or omissions.

3.5 Bulletin Board administration/maintenance

The BB would be implemented in such a way as to minimise any additional work and costs imposed on those parties required to provide data. These parties include producers, storage providers, pipeline operators and shippers/retailers.

The preferred approach is to enable each party responsible for providing the required information to access, input and update that data directly through an electronic and (as far as possible) automated system.

An independent Market Operator would be required to oversee the development, maintenance and ongoing smooth operation of the BB (refer Section 8).

3.6 Access to the Bulletin Board

To achieve the intended transparency and availability of information, there should be public access to most, if not all, of the information provided on the BB.

However, for reasons of commercial confidentiality and security, it may be necessary to develop "public" and "restricted" areas, with only registered parties having access to the restricted areas. Such a structure is in place, for example, on the Victorian Market Information Bulletin Board (MIBB), which provides all market participants with general access to much of the information but also has areas where confidential information is available only to the relevant individual market participants.

⁷ While information to be provided should be standardised to the extent possible, it is recognised that individual pipelines or components of pipeline systems may have specific characteristics that warrant the provision of specific information or specific treatment of that information.

3.7 Impact on scheduling/pipeline operation

The BB would have no direct impact on pipeline operations, or the way in which gas injections and withdrawals are scheduled by the pipeline owner/operator. Production and pipeline operation would continue in accordance with the existing nominations and operational procedures as set out in the contractual arrangements that are in place.

3.8 Impact on contracting arrangements

A BB scheme would have no direct impact on the operation of existing gas supply or pipeline transportation contracts. Future gas supply and pipeline transportation arrangements would generally continue to proceed on the basis of bilaterally negotiated contracts.

The BB would provide historical (and short-term future) information that existing and new industry participants could use either in negotiating new long-term contracts, or for short-term trading around their contracted positions.

3.9 Consistency with NGERAC direction

To assist with the national coordination and management of gas emergencies, the MCE's National Gas Emergency Response Advisory Committee (NGERAC) is developing proposals in support of the National Gas Emergency Response Protocol.

At its meeting on 8 March 2006, NGERAC confirmed that establishment of a single central BB, containing the information proposed in this report, would be consistent with, and go a long way to fulfilling, the approach currently being considered by NGERAC in terms of the publication of system supply/demand information. Further, NGERAC has acknowledged that an independent Market Operator would likely be well placed to provide it with independent expert analytical support.

The GMLG considers there should be a single BB to meet the needs of both NGERAC and the market. The proposed Market Operator (see Section 8) would be well placed to assist NGERAC with collection, analysis and reporting of information, appropriately leveraging the Market Operator's skills and capabilities.

Appendix 3. Bulletin Board IT Proposal and Issues

This appendix sets out the types of considerations needed in finalising the IT design and seeks input on the preferred approaches from industry participants.

In general the solution recommended is based upon the exchange of standardised files via FTP (File Transport Protocol). This is based upon technology that is utilised fairly extensively and is not technically sophisticated. It is proposed that the general public consolidated data would be available via a public website. Participant specific data would be accessible over the internet but would be hosted on separate hardware, that is suitably sized, that would be accessible to industry participants via nominated accounts.

1. Data delivery & Data Synchronicity

A range of mechanisms could be used to submit data by participants to the bulletin board. These vary in the synchronicity of the exchange from asynchronous (or batched), where the processing of the information into the Bulletin Board operator (BBO) systems is separate from its submission by the participant, to synchronous (or real-time), where the processing of the information is performed as part of the submission. As part of the synchronous submission a response can be returned that takes into account the required validations, indicating the success or otherwise of the submission.

Appendix 1 lists six possibilities considered by the BBWG. The options are:

Three synchronous options

1. Manual entry via a Graphical User Interface (GUI)
2. Web Service – Machine to machine data exchange
3. The Bulletin Board Operator fetches that data from Participant Systems

Three asynchronous options

4. File delivered by FTP
5. File delivered by Email
6. Submission of data into a buffer database

The first three synchronous options were ruled out by budgetary considerations.

Of the remaining options examined, the FTP file exchange process is recommended as the most economical and for the Bulletin Board Operator (BBO) the most administratively simple solution. The benefits are: it is a low level technological solution that can be used to implement manual as well as automated solutions; it is technology that is in common use within the industry and although it doesn't provide synchronous data exchange, if implemented with a short polling period it should provide a response in a timeframe acceptable to Participants.

It should be noted that the solution proposed is a fairly minimalist one which deals with the immediate business requirements but may not be a suitable basis for the development of a future short term trading market. See section 5 below for a simple diagrammatic representation of the proposed system.

It has been agreed by the BBWG that polling twice a day for aggregated demand forecast updates would be acceptable, and this or a more frequent polling interval, i.e. every 10mins could be accommodated.

The BBWG has requested that receipts of submission be made via email. While this is possible, due to control issues this would have to be seen as a secondary, or courtesy, mechanism. If emails are not received as expected then a check on the BB system by the submitting participant would need to be made to confirm whether an issue existed. Note: Any responses to the emails would be ignored and, as

with the FTP process, any issues that occurred would need to be handled through manual processes via helpdesks or designated contacts.

Since this is a secondary mechanism its requirement would have to be validated and it would have to be costed appropriately.

2. Data handling & Constraints

In relation to the management and handling of data a number of issues will need to be considered:

- Handling of Invalid / missing data
- Data concurrency & handling of time zones
- Notification process
- Data ownership and access
- Data Model
- Handling of "Static" Data
- Subscription Service
- Data Format

2.1 Invalid / missing data.

Where specific timelines exist for the submission of data, consideration needs to be given to what the fallback option is when data is not delivered on time. The reason for the failed delivery could be many, i.e. the data provided in an incorrect format, invalid data supplied and the provider being unable to respond in time, or system problems have meant that the data has not been able to be submitted on time. Possible solutions could be any or a combination of the following:

- Use of standing data to provide some coverage of missing data.
- Default values
- Flags on the bulletin board that have an indication of the quality of data.
- No enforcement of cut off time which allows the data to be provided after the nominal submission time has passed.
- Other...

The easiest and least cost method of handling this situation would be to flag the Bulletin Board, but, depending on the reliability of the delivery of the information, this may result in no data being available to be displayed.

The actual validation on the individual data components submitted should be subject to a reasonably simple set of rules. The participant submitting the data will be responsible for ensuring that any error or validation issues are addressed.

Difficulties will be encountered if dependencies exist in the processing of data i.e. if multiple parties are required to submit data at a Hub, what will be the process to get the data corrected if validations fail on the aggregated data? Processes will need to be established to handle these in a timely manner. It may be cumbersome if all the related participants have to be notified and their response managed. Solutions may be for the BBO to override data, or for the standing data to prevail.

A series of simple validations will need to be developed to confirm the integrity of the data. Some sort of quality indication such as a flag will need to be able to be shown on the BB to account for problems

with data. To assist in managing any possible data interdependencies, consideration should be given to having one party responsible for supplying aggregated data for a HUB or a state

2.2 Data concurrency and handling of Time zones

Under the current data requirements specification, each HUB and/or state will be updated at different times. Thus various time different timelines for the submission and updating of data will exist for the BBO.

The two main issues that need to be dealt with are display and timing.

In relation to display issues – that is, how data will be displayed on the website to accommodate different time zones. It is proposed that:

- The gas day dates displayed at all hubs should be the same regardless of time zone changes
- The times displayed on the Bulletin Board do not need to reflect the time zones of the states so long as a timestamp with an identifiable time zone e.g. AEST is used

In relation to timing issues, how will time stamping within data files work due to the different time zones and the need to submit information based upon local times. Actual data submitted on a daily basis will not be a problem, but the problem will arise when representing times of events, or if data at shorter intervals than daily is required (e.g. hourly data).

In addition, the BB must deal with the issue of daylight saving. Where local times are used this can cause significant issues within a single time zone, with more complexity across multiple time zones where different states have different periods for daylight savings. Having to modify for daylight savings in any system can significantly add to its complexity and it is preferred that the systems be developed such they operate in the normal time zones as a minimum.

The simplest solution from the BBO perspective would be to operate everything in one time zone, i.e. AEST. This would require participants in different time zones to modify their data to reflect AEST. Alternatively a universal time approach could be taken where data is supplied with the time zone offset.

It should be noted that the actual systems would be operated in AEST which would mean that all file timestamps etc would be recorded in that time zone.

As a minimum, the systems should be designed to avoid having to modify data and processes based upon daylight savings. As well, a consistent time reference system i.e. Universal Time or a single time zone i.e. AEST should be utilised for time stamping in data exchanges and reporting.

2.3 Notification process

This refers to how the notifications of events, such as the acknowledgements or alarms, are to be delivered. Essentially the notifications could be handled in a push or pull manner. By push the BBO could deliver the notifications to participant systems via FTP or email or possibly some other method. By pull the Participant would be responsible to poll / monitor the BBO systems for the notifications

From the BBO perspective if it has a requirement to deliver the notifications then it would need to be sure that they could be delivered in a reliable fashion. This would make the push options less desirable since the BBO can't be sure of the availability and reliability of the systems that the notifications are sent to. This means that the parties responsible for the submission of data would have to poll the BBO systems frequently for any alerts or notifications that could be sent at specific times. As noted above a secondary email mechanism could be utilised as long as it didn't become a key dependency in the process.

2.4 Data ownership and access

Consideration will need to be given to the roles within the market and what relationship they have to data. This will make the development of a data and security model simpler which will assist in the reporting of data. The simplest model would be where everyone has access to aggregated data but only the supplier of the individual pieces of data to have access to that data. Normally some blending is required, such that certain roles or participant types need access to particular information, which requires a more complex system to manage the access and reporting.

2.5 Data Model Constraints

Prior to development starting, a clear indication of what elements are to be included in the data model will need to be provided. As identified in the data requirement proposal, the main entities involved in the data model will be government officers, pipeline operators, and producers. Quantities of gas, whether offers, capacities, demands or aggregated totals will be provided by these entities. The lowest level of data resolution for this information is daily. This means that no consideration of sub daily apportionment or assignment of gas will need to occur. The exclusion of these would limit the ability to use the systems as part of the building blocks for a future STTM. On the other hand the inclusion would add significant extra complexity to the development effort.

2.6 Handling of "Static" Data

Much of the data to be provided is only required to be provided on a yearly basis or less. For such data, the simplest process may be for the BBO to designate an email inbox to which this information can be sent. The BBO would be responsible for reviewing this and liaising with Participants to ensure the data is provided. Given the timeframes for this, i.e. yearly updates, this should not be an issue in relation to system and or infrastructure availability. Data would need to be provided in standard format.

2.7 Access to Historical Data.

It will need to be determined whether there is a requirement that the system be able to provide access to historical data, or possibly to provide a subscription service where data can be bundled up and provided at a cost. If this is the case, then the system will need to be designed such that this could be automated or, at a minimum, store the data such that it is retained and can be easily accessed and distributed for these purposes.

2.8 Data Format.

A variety of possible data formats would be possible. The two most common would be CSV (comma separated value) file or XML (eXtensible Markup Language). Although XML is a more robust and sophisticated file format, in that it is accompanied with the schema definition that can allow many validation or rule to be enforced using xml parsing tools, it is not thought that this level of sophistication is not required and CSV file formats should be suitable.

3. Data Access

Two distinct types of access to the bulletin board are required.

3.1 Public Access

Public access to the open portion of the BB will need to be provided to all and sundry. The systems will have to handle an undefined number of hits, which could be quite large at certain times, and as such it will need to be hosted on systems that are scalable for this purpose. It would make sense for this to be hosted on VENCORP's current website. Another website could be set up specifically for the purpose, but could incur significantly extra costs.

It is envisaged that this portion of the web site would consist of a collection of graphical displays that are updated by the provision of data files from the BBO at regular periods. (Note: This is what currently

occurs for the provision of public market data on VENCORP public website at the moment, although it doesn't have graphical displays to access the data with.)

3.2 Private Access (Private Network vs. Internet)

This will be needed for a small number of Participants to access individual or possibly collective information only relevant to those in the industry. Since the amount of data to be submitted is small and the number of users for this is small or at least definable, it does not require the capacity of the larger system necessary for the public component. In addition, the BBO will need to be able to operate and administer the site and to do this will have to be able to run scripts & have executables operating. This is not normally allowed on publicly hosted websites as it can create problems for the website operators. Because of this it is proposed that the industry specific parts of the site be hosted locally or separate from the public information on smaller servers that are suitable for the purpose.

To limit access to non public sections becomes a trade off between security and reliability and cost. If internet access is chosen then measures need to be taken to make sure that the systems are safe from physical attack such as denial of service attacks etc. I.e. even if the systems are password protected they could be made accessible by external parties launching high numbers of requests to access the systems. Other measures will be needed to protect against this. Alternatively a Private Network could be used that will only allow those who have been configured to be allowed into the network access to the systems. Although this simplifies the security measures that then need to be taken, it puts significant overheads into setting up access to the systems and a significant amount of time can be spent establishing connectivity.

Accordingly, it is considered that the benefit of providing access via the internet outweighs the security issues and this approach would be pursued.

3.3 Access

It is envisaged that access to the systems would be restricted by the use of usernames and passwords and that a standard password management policy would be enforced, i.e. restrictions on password length and complexity and a requirement to change the passwords within a defined period. Username and passwords can be configured essentially out of the box for most operating systems as these are standard facilities available and as such they can be more easily managed when issues arise.

Alternatively certificates could be used which have the advantage that access is transparent, i.e. once the certificate is installed the user can just access the data without having to enter passwords. A Certificate based system would be more costly to administer due to the need to have certificates created and administered and it is not thought that the extra security is warranted. Good practice would also require that certificate be replaced after a defined period, i.e. biannually, which would create another administrative overhead.

If the private data is to be accessible over the internet then it would be advised to utilise a secure transport protocols, i.e. https, which provides for the encryption of the data stream compared to the usual http protocol.

4. Data submission options

4.1 Synchronous Data Exchange Options

4.1.1 Manual entry via a Graphical User Interface

Provision of an application where the Participant can submit the data manually via a form presented to them. Apart from the benefits of synchronicity noted above it provides a simple and common way for Participants to manually submit data and it doesn't require any IT developments by Participants to submit the data. Other costs though may be involved in making the data available to submit.

Initially, however, the expectation is that not much data needs to be submitted and a simple interface will suffice, generally, the development of GUI's can be time consuming as a significant amount of time is spent on getting the usability issues correct, i.e. presentation, screen controls etc. Often complexities arise that require significant coding within the GUI such as the need to retrieve existing data for review or the need to support multiple browsers which can have their own specific problems etc. As well this option doesn't allow for automation of the submission process and will be dependent upon people being available to submit the data.

A real risk exists that the costs associated with the development of a GUI could consume a significant portion of the total costs available for establishing the Bulletin Board.

4.1.2 Web Service – Machine to machine data exchange

This allows for the automation of the data submission directly from participant systems. Participants will need to modify their systems so that they can access and utilise the web service. This is quite a sophisticated development which has the benefit that it is possible to remove the human intervention from of the submission processes or at least allow a more tightly coupled integration with Participant systems. It has a significant upfront technology cost associated with its implementation that would not be suitable to many.

4.1.3 The Bulletin Board Operator fetches that data from Participant Systems.

Rather than relying upon Participants to “supply” the data the Bulletin Board Operator accesses individual participant systems to extract the data. The BBO would have significant issues with this approach as it doesn't have the control over the systems that it would have to access to get the data, whereas it will have control over its own systems and can be held responsible for ensuring its accessibility and reliability. As well the approach would require the BBO to have to cater for a range of different systems, protocols and security regimes to access that data. Rather than the BBO operator having to access multiple systems it would be much simpler and cost effective for all parties to be responsible for the delivery of their own information using a common systems and standards. As a result it also means that all the parties will be treated equally.

4.2 Asynchronous Data Exchange Options

4.2.1 File exchange via FTP (File Transport Protocol)

A common file format for delivering data is agreed upon and the participants would post files onto a file share using a logon they have been assigned. The BBO would poll for these files and upload them and, if required, would provide a response by moving the file into another directory confirming the data had been processed. As well the data would be reported back to the participant directly from the BBO database system to provide assurance that the data has been processed into the systems properly.

This process has the benefit that it doesn't have to deal with the usability issues of GUI (Graphical User Interface) and provides a very loosely coupled and flexible system. Participants could create and read files manually or they would be able to automate the creation and delivery of files to the BB or the parsing of files extracted from the BB by using common FTP utilities and parsing tools available.

A common formal file format specification would need to be agreed to, to ensure that well formed files are supplied to all parties such that that automated systems can handle them reliably. I.e. ensuring that special characters etc don't appear in the files that would corrupt the data such as commas or line breaks in text fields which can make Comma Separated Files unreadable to parsing tools.

4.2.2 Email

Similar to option 4, as described in section 1 above, but the delivery mechanism becomes email. Participants would send files containing the data to a mailbox specified by the BBO. Although this is a common and desirable communication protocol it does place a significant reliance on systems that the

BBO and / or Participants have no control over and it is difficult to know reliably when the information has been exchanged. I.e. no single point of exchange exists that allows the receiver to take control of the information from the sender. If infrastructure issues exist in between the parties this may not be immediately apparent and could result in the loss of data or unacceptable delays in delivery of information. As such this is not thought to be an appropriate mechanism to utilise.

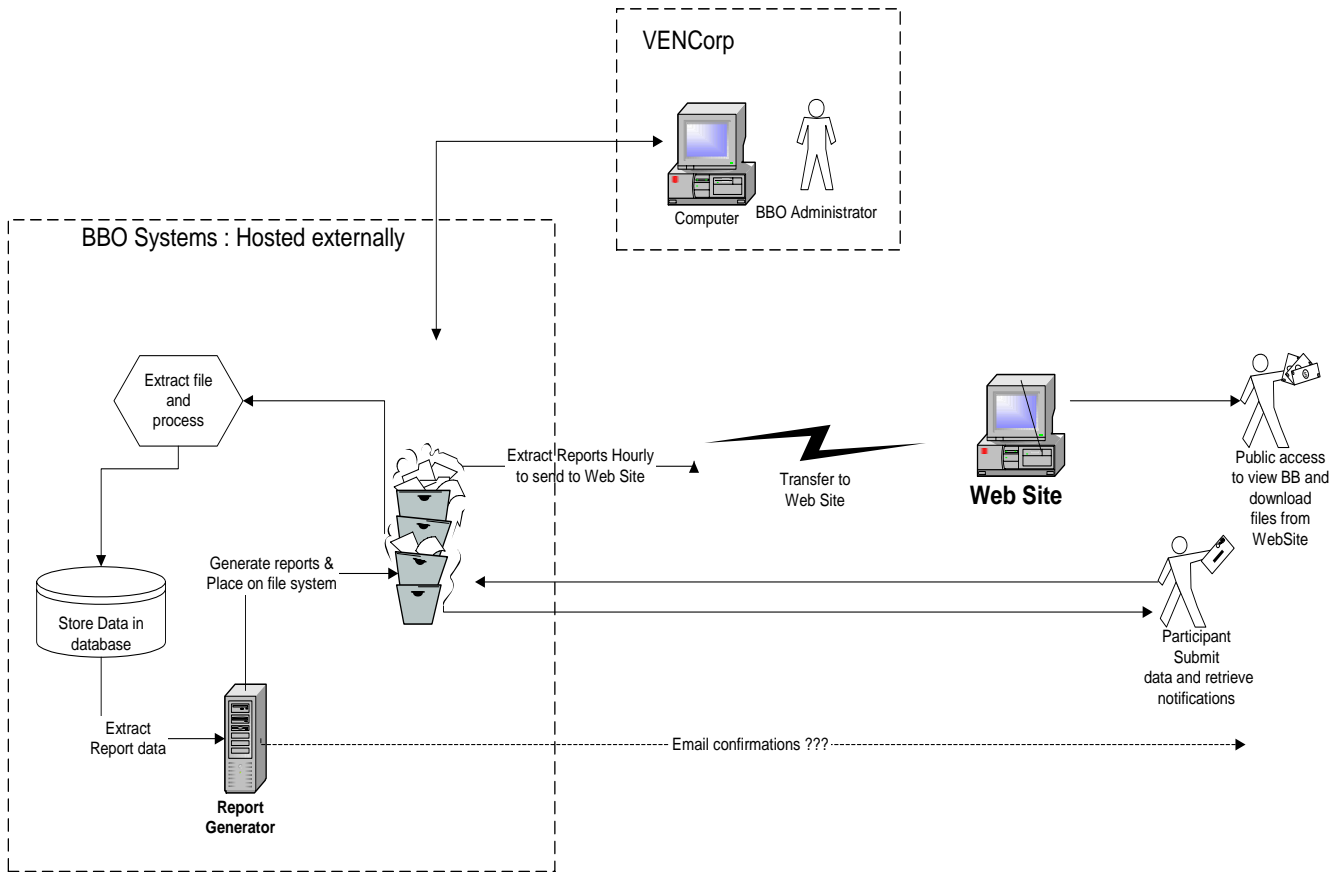
Email could be seen as a secondary mechanism for the delivery of say successful submission notifications. If no email is received in response to a submission then confirmation could be ascertained using the primary mechanism before pursuing the matter further. This would mean that multiple systems would need to be utilised which could lead to unnecessary confusion and administrative overhead.

4.2.3 Submission into BBO database

Rather than deliver the data to a file system Participants are provided with access to a database which can be used to directly lodge the information. Participants would have access to views within the database through which data could be inserted by either manual or automated processes. The solution is asynchronous since the database would be a buffer database to protect the operational database for security and performance reasons. Once data is submitted, a batch process would operate that would transfer the data into the operational database.

The option removes the need for the BBO to parse files delivered by participants and insert the data into the BBO database system. It means that Participants would have multiple points of access since the file based reporting system would still be required for supply of information from the BBO. This would lower the overall system reliability due to the need to manage multiple access points and their associated security i.e. the management of accounts for file base access as well as separate ones for database access. As well the interfacing point at the database is not as simple and obvious as at the file base level and could create more technical overhead and require a higher level of technical sophistication in the implementation that may not be appreciated by all participants.

5. Simple representation of the proposed system



Appendix 4. Summary of issues raised in submissions and BBWG responses

No	Issue Type	From	Summary of Issues raised	Response
1	BB Costs	WA OOE	Funding from WA industry should be subject to the extent of WA participation	Will be considered after further consultation with W.A. in rules phase
2	BB Costs	APA Group	Supports low cost system with appropriate exclusion of small pipelines. Pipeline operator BB service fees should be recoverable via the BB operator. In WA cost recovery may be inequitable under current ERA cost arrangements	Will be considered after further consultation with W.A. in rules phase
3	BB Costs	APIA	Supports low cost FTP/email/web based IT system. Pipeline operators should be able to recover their costs for BB services as shippers and customers are the main beneficiaries	A simple FTP/email/CSV web based system is to be constructed. GMLG has agreed the principle that costs should be borne where they fall in respect of interaction with the BB. An exception to this is the requirement for pipeline operators to provide the BB operator with aggregated delivery nominations on behalf of the shippers, where recovery of associated costs is considered by GMLG to have merit and will be considered in rules phase.
4	BB Costs	APPEA	Individual parties should meet their own BB related costs. Pipeline operator should receive fees directly from shippers. Does not support general participant fees for BB	It is expected that BB operational costs will be minor. Therefore, structure of fees should be kept simple to minimise administrative costs. Fee structure to be considered and consulted further in rules drafting phase.
5	BB Costs	DBP	WA market is too shallow for BB benefits to exceed costs. Costs of ERA involvement are not provided	There are market transparency benefits with isolated pipelines and customers may not concur with this view. BBWG to consider WA and ERA involvement after further consultation with W.A. stakeholders.
6	BB Costs	EUAA	All stakeholders should contribute	
7	BB Costs	Gas Week	Free access to public with BB funded by a levy on gas users	Whatever the fee structure, the BB operational costs are likely to flow through to gas users ultimately. A simple fee based approach for BB users or a subset of BB users is preferred
8	BB Costs	TRU	Support establishment of low cost basic IT system for BB but with flexibility to implement changes/enhancements in the future	BBWG concurs with this approach
9	BB Costs.	Alinta	Pipeline operators should be compensated for BB services.	See above response to APIA (issue no.3).
10	BB Implementation	APA Group	BB definitions, processes, obligations should align with gas law, access arrangements, the gas Code. Effective implementation will require operator input.	Enabling legislation covering the BB operations, the rules and protections for participants will be included in the National Gas Law package in 2008. Working groups established by the GMLG including a legal working group and the BB working group have industry representation to provide input into or help develop laws, rules and operation and to consider consistency of systems

11	BB Operator	APIA	Support VENCORP as interim operator/developer subject to input on design from other jurisdictions, GMC, REMCo	The BB Working Group established by the GMLG has representatives that cover multiple jurisdictions in SE Australia and industry sectors, including GMC. VENCORP is now a key service provider to REMCo in respect of WA and SA gas markets.
12	BB Operator	Alinta	Similar to APIA (issue no.11). VENCORP as interim operator should consult GMC & REMCo	Refer to response above, issue no 11.
13	BB Operator	APA Group	Raises some concerns with GMLG appointment of VENCORP as interim BB operator	The GMLG does not consider these concerns to be substantiated but agrees that in this role, VENCORP is to operate independently and transparently..
14	BB Operator	EUA	Support VENCORP as interim operator subject to suitable ring-fencing in BB management & objectives from Vic gas market	BBWG concurs. This would happen regardless of who the BBO is. VENCORP operates in a number of markets and implements suitable ring-fencing arrangements
15	Capacity/Supply Offers	APA Group	Rules for dealing with unused capacity already exists under the Gas Code	Not all pipelines are 'covered' by the Code. The provision of capacity/supply offers via the BB is proposed to be voluntary and any BB requirements are independent of any requirements imposed under the Code. The BBWG acknowledges that there should not be requirements imposed that require duplication of information provision and will accept further submissions on specific instances should this be the case.
16	Capacity/Supply Offers	DBP	DBP own website system is adequate for posting spot capacity w/o need for BB and Gas Code requires posting of capacity information	The BB would provide a common and consistent means to meet the requirements under the Code or otherwise and provides for offers of both capacity and supply. Requirements for BB in WA are, nevertheless, to be subject to further consultation.
17	Capacity/Supply Offers	QGC	Suggest that publication of offer prices for supply at demand centres may not be workable under contract carriage	The use of the BB for supply/capacity offers is not mandatory. GMLG and BBWG representatives with contract carriage expertise do not believe this will be problematic.
18	Capacity/Supply Offers	WA OOE	BB facilitating such trade has potl to enhance competition incl pipeline capacity and gas commodity rather than delivered gas	Agreed. The BB proposal is flexible and allows almost any sort of supply/capacity offer to be posted with free text to explain the offer. The BB will not clear bids but will simply publish offers and contact details.
19	Data requirements	APA Group	Duplication of reporting issues must be addressed in the rules, in particular, in WA. Provision of hourly data may not be workable in emergencies. Time zone issues may arise.	The BB may be enabled for hourly polling but hourly updates by users during emergencies are not proposed or expected and normal market use would only require daily updates for data that typically changes on a daily basis. Subject to NGERAC BB emergency requirements, emergency related updates would only need to occur if there were a material change to information. The BB will not need to use different time zones.
20	Data requirements	APPEA	Cautions against making all data public to non-market participants	One objective of the BB is to provide transparency in markets to facilitate competition and efficiency. Access would only be limited in cases where outcomes could be counter productive from an overall market or emergency management perspective. This may apply to BB use for major emergencies

				but not for day to day use.
21	Data requirements	ESAA	Legislative requirements should be proportionate to BB requirements and GMLG objectives and should not be unnecessarily onerous	Agreed. That is the intention.
22	Data requirements	ESAA	Information published should not conflict with or impair contract carriage arrangements	Enabling legislation and rules will be put in place that appropriately covers liability, confidentiality and contract issues as explained in the report.
23	Data requirements	ESAA	Only data related to information gaps to the market should be collected for the BB	The BB is intended to fill a major gap identified in current markets. It should provide a reasonably complete picture of the S-D and Capacity outlook across major systems that can be accessed by all stakeholders and not be limited to a few major stakeholders.
24	Data requirements	EUAA	Data should not be aggregated to an extent that does not allow end users or regulators to understand the prevailing gas supply market conditions, market dynamics, competition and capacity	The GMLG has decided to publish data by individual pipeline and/or production/storage facility.
25	Data requirements	Gas Week	Strongly advocates access of the public to a broad range of gas system of current and archived data including supply, demand and operational transmission system data. Experience to date is that suppliers are unwilling to provide data for commercial reasons. The BB provide an opportunity to provide transparency and meet many of the GMLG objectives	It is believed that the BB will provide significant additional transparency of gas system information.
26	Data requirements	MEU	BB is needed to promote market transparency and competition in a market given the limited depth in production and transmission	Agreed by most users and shippers
27	Data requirements	MEU	Support NGERAC standing data - peak day and capacity.	NGERAC has specified its requirements, which have been agreed by GMLG.
28	Data requirements	QGC	Data lacking demonstrated use should not be collected for the BB	Agreed. The BBWG has considered the merits of each data item that has been included in the consultation report and submissions received.
29	Data requirements	QGC	Information duplication should be minimised	Agreed

30	Data requirements	WA OOE	Supports BB market objectives. BB and STTM need to separately treat (unbundle) gas commodity, pipeline capacity, and storage and lower barriers for small players to provide adequate benefits in WA. The OOE seeks further info on design aspects e.g. Hubs in WA. Supports mandatory provision of data	Noted, there will be further consultation with WA stakeholders with regard to potential application of the BB in WA.
31	Data Validation	TRU	Supports use of upper lower limits subject to these being established with relevant participants	BBWG supports this approach. There is general support for some sort of data checks and use of data quality flags in published data
32	Demand Forecasts	Alinta	If aggregates based on Shippers' noms as proxy for demand forecasts are provided in good faith by pipeline operators, they should not incur risk of liability	Enabling legislation and rules will be put in place that appropriately covers liability, confidentiality and contract issues as explained in the report
33	Demand Forecasts	APA Group	Same issues as APIA (see item 34)	See APIA item 34
34	Demand Forecasts	APIA	Shippers rather than pipeline operators are best placed to provide this data (as they do in Vic). Nominations are a guide and not a demand forecast	It is more efficient for the pipeline operators to provide aggregate nominations rather than for shippers to do this individually. VENCORP will perform this role as pipeline operator for the Victorian PTS. It has been noted that pipeline operators will provide aggregate delivery nominations, NOT demand forecasts.
35	Demand Forecasts	APIA	Does not support publication of individual pipeline nominations (or injections into pipelines) as these may provide inappropriate signals to participants	GMLG has considered this argument but, on balance, decided to publish individual pipeline nominations (see report).
36	Demand Forecasts	APPEA	Supports publication of aggregate nominated deliveries by Hub/ jurisdiction as provided by pipeline operators. Such data at the pipeline level and only during emergencies should be limited to NGERAC.	See response to item 35. Access to emergency related information on the BB would be limited.
37	Demand Forecasts	DBP	There are no hubs as such on the DBNGP and there is uncertainty as to the level of aggregation involved or required.	Noting that there is to be further consultation with WA stakeholders - the main customers incl residential loads) served by the pipeline constitute the Hub. Forecast or actual flow data would be aggregated to the highest level that reasonably reflects the pipeline and its loads. Consultation with the parties involved will resolve this. The same would apply to actual flow data.
38	Demand Forecasts	EA	Supports publication of aggregate nominated deliveries and suggest that DBs are well placed to provide Hub demand information	DBs do not normally contract gas from producers or capacity from pipeline operators and they size their networks systems on peak hourly flows and not daily quantities. Shippers usually nominate gas to meet their customers' demand, however, pipeline operators are uniquely placed in respect to knowing aggregated delivery nominations for a gas day.

39	Demand Forecasts	ERAA	Supports use of aggregate nomination data as proxy for demand provided by pipeline operators. This minimises cost for small retailers/shippers	Agreed
40	Demand Forecasts	EUAA	Aggreg noms need to be published at the individual pipeline into Hub level and argues against APA position	GMLG decision supports this position.
41	Demand Forecasts	MEU	aggregate daily noms (next day) and forward noms (up to 7 days) should be published with and w/o GPG by individual pipeline, and by production facility to each Hub	GMLG has decided to publish nominations by individual pipeline and production quantities by individual production facility, but it is not intended to separately publish GPG or other single large end-use customer demand.
42	Demand Forecasts	TRU	Demand data should be provided by pipeline operators as aggregates nominations (aggregates forecast in Vic) to minimise overall costs	The BBWG agrees with this approach recognising that pipeline operators may seek cost recovery for these BB services.
43	Demand Forecasts	WA OOE	Support publication of aggregate noms - will increase transparency	Agreed.
44	Emergency Use	APA Group	BB may not be suited for the dynamics of emergency use and stand-alone system with instant confirmation should be considered	BB is intended to supplement rather than replace existing operational systems and processes for emergency management. It is accepted that other operational emergency management tools/systems are commercially available.
45	Emergency Use	APIA	Given the sensitive nature of some data, access to BB should be limited. A stand-alone BB process and system should be considered	Agreed – BB to have separate emergency “page” with protected access.
46	Emergency Use	APIA	Confidential information should not be published. BB should provide high level aggregate information only. Access to potential confidential NGERAC has industry reps should be limited appropriately.	Enabling legislation and rules will be put in place that cover liability, confidentiality and contract issues.
47	Emergency Use	APPEA	Publishing curtailment or load shedding information in the event of an emergency may unnecessarily increase phone traffic at critical times	Access to emergency related information on the BB would be limited. The intention is that provision of selected emergency information via the BB will reduce phone traffic as many general enquiries would/could be answered on the BB
48	Emergency Use	APPEA	Supports use of BB to communicate with NGERAC. Complementary emergency procedures for the BB use are required to this end and should not duplicate other systems	The MCE and NGERAC has identified that current information flows during major emergencies are not adequate partly due to confidentiality and contractual issues. NGERAC is considering use of the BB and other means for this purpose.
49	Emergency Use	DBP	WA already has adequate processes without need for BB recognising WA system is isolated	Further consultation will occur with W.A in regard to BB use in rules phase

50	Emergency Use	EA	NGERAC convened flags -triggers for escalation and flags to indicate this on the BB need to be developed and the BB should provided for more frequent updating during emergencies	The BB will provide for more frequent updating when required. NGERAC is still refining its communications and escalation processes and any use of the BB for NGERAC purposes will be consistent with these.
51	Emergency Use	EA	DBs should be included in the scope of the BB in respect to use in emergencies. BB would be very useful for emergency information sharing if updated frequently. Access should be limited for this purpose	DBs will be able to access the BB. All parties may use any BB emergency features provided in handling of local jurisdictional emergencies or national emergencies. The intention is that access to emergency-related data on the BB will be more limited so that information is not misconstrued by the media or public
52	Emergency Use	ERAA	General support for this use of free text updates for public/industry. Frequency of updates would need to be adequate. Care needed for sensitive information or could be counter productive	NGERAC have been consulted on this matter and have agreed that the BB should provide for emergency status updates accessible by public. Clearly any published statement would take account of the potentially sensitive nature and potl impact of such information
53	Emergency Use	EUAA	Provides potential to assist by an improved market response to emergencies through central repository of up to date info but requires a well designed information dissemination protocol. Cites information issues with June 07 NSW - MSP emergency.	Agreed and requirement for information dissemination protocol noted. It is envisaged that this may be progressed between BB operator and NGERAC.
54	Emergency Use	Gas Week	Public should have access during emergencies	Given the uncertainties and communications issues that s arise in emergencies, especially in the early stages, care must be taken that the public is not unnecessarily alarmed or misled by incomplete or incorrect information. NGERAC is considering the use of the BB for emergencies, for example, publicly available emergency status reports that would be based on information that has been verified and supported by informed analysis. Other "raw" data that may be used feed into status reports may be restricted.
55	Emergency Use	MEU	More frequent update of supply, demand, capacity are needed and this info should be accessible to large customers as they are impacted first if load shedding occurs	Provision will be made for more frequent polling suited to purpose
56	Emergency Use	WA OOE	Any BB benefits in relation to emergency management/response etc in WA would not be as large as for interconnected systems in SE Australia. However, increased transparency could provide benefits to gas customers. Given just one distributor on the DBNGP, current emergency processes are unlikely to be assisted by a BB.	Further consultation with WA in regard to this aspect during rules phase
57	Historical Flow Data	Alinta	see APIA Cautions on use of preliminary flow data.	Data will be flagged as operational and not settlements quality.
58	Historical Flow Data	APA Group	same issues as APIA	See APIA item

59	Historical Flow Data	APIA	Publication this prelim operational data may facilitate trade but could add costs and occasionally be misleading esp. during an emergency. Users must understand this. Should only be published at state/hub level and not by individual pipeline. May highlight differences in noms and actuals and lead to an improvement in noms accuracy	Cautions and disclaimers will appear on the BB and will have to be accepted by a user every time they enter. Comparison of noms and actuals is more beneficial if it is at the individual pipeline level.
60	Historical Flow Data	APPEA	Suggest there is little benefit in providing production figures and there is a risk that this may become a requirement in the future	Actual production quantities when compared with production capacity informs the market about spare production capacity. A knowledge of overall production quantities compared with capacity available within a supply hub would be of interest to NGERAC in the event of a major emergency where options for additional alternative supplies need to be understood. Participants seeking gas supplies may also find actual production data to be of value.
61	Historical Flow Data	APPEA	Actual demand data should be aggregated to Hub/State and not be by individual pipeline	GMLG has decided to publish data by individual pipeline (see report).
62	Historical Flow Data	APPEA	Actual production/storage is seen of little value but if published should be at the supply hub level and is best provided by shippers as they know the destination	The producer/storage operator is best placed to provide actual production totals for their plant.
63	Historical Flow Data	APPEA	Access should be limited to market participants	Where reasonable access should be public for greatest transparency. Emergency event may be an exception.
64	Historical Flow Data	EA	Supports publication of actual flow data by hub and pipeline as a minimum and production by production Hub as well. This data would be of value, increase market transparency and provide long term investment signals. Such data should be easily downloadable.	Current and historical data will be downloadable from the BB by users in CSV or other basic standard format.
65	Historical Flow Data	ERAA	Supports publication of actual demand to enable comparison with forecasts, temperatures and other market dynamics	Agreed
66	Historical Flow Data	ERAA	May be difficult to aggregate due to confidentiality issues.	Could be aggregated to supply Hub by BB operator.
67	Historical Flow Data	EUAA	Required at the individual pipeline level for planning purposes and for investment signals and does not agree with APA position that reconciling noms and actual flows is an issue.	GMLG has decided to publish data by individual pipeline (see report).
68	Historical Flow Data	MEU	previous days deliveries to Hub by individual pipeline and production into supply hub by individual facility should be published	GMLG has decided to publish deliveries and production by individual pipeline and production facility (see report).

69	Historical Flow Data	QGC	Provision of actual production or storage flows is not justified on cost benefit grounds whereas pipeline deliveries into Hubs are. Confidentiality aspects of existing contracts should be respected.	Subject to exemptions for small facilities, GMLG has decided to publish deliveries and production by individual pipeline and production facility (see report).
70	Historical Flow Data	TRU	Support publication of actual withdrawal and injection (historical operational data) which is considered of value to retailers. This includes injection by producers and storage providers into major pipelines	GMLG has decided to publish actual withdrawal and injection data by individual pipeline and production/storage facility (see report).
71	Inclusion/Exclusion	Alinta	Focus should be on inclusions being appropriate	Agreed
72	Inclusion/Exclusion	APA Group	The BB market objectives are consistent with the SE Aust interconnected systems but may not be so relevant to major separate pipelines elsewhere e.g. WA and northern Q'ld	The intention is that the major Q/land pipelines and all around Australia be included. Consultation with the parties involved will resolve what to include at start-up. Connectivity with SE Australia is not a criterion for inclusion or exclusion though more value of the BB may be realised in interconnected systems. There are arguably market benefits from transparency on isolated major pipelines from the customer perspective.
73	Inclusion/Exclusion	APA Group	Support proposed exclusion of very small pipeline, dedicated lateral and spurs though the definition of the threshold needs clarification. Suggest sanity check on initial list if included facilities	Agreed
74	Inclusion/Exclusion	APIA	The BB market objectives are consistent with the SE Aust interconnected systems but may not be so relevant to major separate pipelines elsewhere e.g. WA and northern Q'ld	While the potential benefits may be more apparent in interconnected pipelines there are potential benefits to users on any major pipeline system from increased transparency. There will however be further consultation in this regard with stakeholders in WA, NT and northern Queensland.
75	Inclusion/Exclusion	EA	Strongly supports inclusion of Queensland incl CSM	The intention is that the major Q/land pipelines and all around Australia be included. Consultation with the parties involved will resolve what to include at start-up. Connectivity with SE Australia is not a criterion for inclusion or exclusion though more value of the BB may be realised in interconnected systems
76	Inclusion/Exclusion	EA	Threshold for inclusion should be reduced to 10TJ/d given size of proliferating CSM fields that collectively produce a significant and growing amount of gas. Suggests inclusion of laterals dedicated to GFPG as these impact linepack	The rationale of considering the aggregate of supply sources that feed into one pipeline is perhaps valid and there will be further consultation with the local parties when establishing the initial list of facilities to be included. Dedicated laterals are not to be included separately as the potential market benefits are outweighed the costs. Security and linepack issues on laterals are considered to be a local problem best managed by the relevant local participants and not requiring NGERAC involvement.

77	Inclusion/Exclusion	ERAA	Support subject to consultation with asset owners	Agreed
78	Inclusion/Exclusion	EUAA	Support incl of major pipelines across Australia as the BB can provides range of benefits within emergency use, investment signals, and regulation wrt planning.	Agreed for SE Aust and Sthn Qld but other jurisdictions will be consulted further.
79	Inclusion/Exclusion	EUAA	Users of pipelines that may be exempted should be consulted first	Agreed
80	Inclusion/Exclusion	EUAA	20TJ/d should be interpreted as 'name plate' capacity	Consultation will apply for those facilities near the borderline wrt size criteria
81	Inclusion/Exclusion	EUAA	Need mechanism for review of excluded pipelines esp. in regard to future likely interconnections e.g. with Q/d, NT.	Agreed
82	Inclusion/Exclusion	MEU	All major pipelines should be included with <u>conditional</u> exclusions of smaller pipelines	Generally agreed
83	Inclusion/Exclusion	QGC	Supply dedicated to GFPG or LNG liquefaction for export should be exempt	Agreed
84	Inclusion/Exclusion	TRU	It would be simpler to list the facilities to be included on the BB rather than use of incl/excl criteria	Use of an initial list of included facilities at BB commencement is supported however criteria would be needed to cover future facilities
85	Inclusion/Exclusion	WAM	Supports use of these criteria, in particular, for the exclusion of the small Kambalda to Esperance pipeline	Agreed
86	IT system	Alinta	Support simple system w/o time zones.	Agreed
87	IT system	APA Group	Supports low cost basic system as proposed FTP/Email/web based. Secure access and monitoring of use are required with limited access to sensitive data	Generally agreed
88	IT system	EUAA	Support most efficient solution not necessarily the lowest cost - BBWG should continue to consult with users	A simple FTP/email web based system is proposed and recommended by the BBWG
89	IT system	TRU	Support use of FTP and email in basic system utilising website and provision of CSV downloads of BB data for current and historical data	BBWG supports this approach
90	IT system	WA OOE	Supports the basic FTP/email type system initially unless the GUI option can be shown to have adequate benefits	The net market benefits of the BB assuming a basic FTP system were assessed by MMA consultants in 2006
91	Legal	EUAA	BB reqs are no less than that for NEM operation	
92	Legal	WA OOE	Should not hold up NGL package. Need to consider BB legislation interaction with Gas Code requirements	Enabling legislation is expected to be included in the NGL package. A Legal working group has been established under the GMLG to consider all NGL

				and related issues.
93	Liability	Alinta	Obligations for provision of information (in good faith) should be legislated to provide suitable protections along with 'click-wrap' agreement and other measures	Agreed
94	Liability	APIA	Data provided via the BB in a timely manner and in good faith may prove to be incorrect and the provider should be protected. Data may be confidential under contracts. Market Operator should be accountable for misuse of BB data	Legislation will be put in place to mandate provision of BB data also to provide appropriate protections to participants providing BB data in good faith and to the BB operator operating in good faith.
95	Liability	DBP	Obligations for provision of information (in good faith) should be legislated to provide suitable protections	Agreed
96	Liability	ERAA	Data provided via the BB in a timely manner and in good faith esp. under emergencies may prove to be incorrect and the provider should be protected to minimise reticence in this regard.	Agreed. Suitable provision will be made under the National Gas Law and the Rules to this end
97	Liability	QGC	Data provided via the BB in a timely manner and in good faith esp. under emergencies may prove to be incorrect and the provider should be protected to minimise reticence in this regard.	Agreed. Suitable provisions will be made under the National Gas Law and the Rules to this end
98	Liability	TRU	Obligations for provision of information (in good faith) should be legislated (rather than in Rules) to provide suitable protections	BBWG supports this approach though the details of data provision will occur in the Rules as these will change form time to time and are too detailed for Legislation
99	Loss of Reserve	Alinta	Flags will depend on pipeline operators judgement made in good faith and they should not incur liability	Agreed
100	Loss of Reserve	APA Group	Support traffic light proposal but asks whether red relieves parties of obligations. LOR definitions need to be clear.	The red light will simply inform the market of a likely or actual S-D shortfall on a pipeline and no more than that.
101	Loss of Reserve	APIA	Cautions that pipelines rely on data from others to make these assessments	Agreed.

102	Loss of Reserve	EA	Supports LOR traffic light proposal but suggest this could be extended to Hubs and DB networks	The use of the BB is confined to major transmission systems as a key objective is of the BB is enabling more competition between basins and pipelines and facilitating use of alternative gas supply in the event of a major transmission constraint or production outage. This could be managed within a 3 days outlook if an LOR is foreseen by the pipeline operator and published on the BB. The fact that one major pipeline to the Hub flags raises and LOR indicates that the Hub has a supply issue to be resolved and so the LOR automatically applies to that Hub. The BB may have a role in information exchange in the event of major national emergencies involving NGERAC but local DB constraints are considered to be best managed by the network operator. The pipeline operators generally have suitable arrangements in place that align with LORs that are suitable for states other than Victoria and these will be defined more clearly.
103	Loss of Reserve	MEU	This may be adequate - may not have worked in recent (June 07)MSP linepack depletion incident with load shedding in NSW. Strongly recommends that BoD linepack for each pipeline be published on BB	The Linepack/Capacity Adequacy Flag (formerly LOR) will take account of available linepack. Absolute linepack numbers are not necessarily helpful as these may not reflect useable linepack or pipeline operating conditions.
104	Participant Contact Details	APPEA	Contact numbers should not be available to the public in the event of an emergency as this may unnecessarily increase phone traffic at critical times	Access should be limited to emergency contacts but not to general market contacts
105	Pipeline Capacity	Alinta	'Nameplate' rating needs definition	This is a facility's nominal capacity adjusted for any plant outages (planned or unplanned) and is not adjusted for day to day variations in operating conditions
106	Pipeline Capacity	APA Group	Capacity is variable as it is subject to operating conditions, assumptions. VENCORP is to provide such data for the PTS but does not conduct the maintenance	BB proposal is for the 'nameplate' capacity which is only varied subject to maintenance or long term changes in plant or operational settings. VENCORP as operator is informed of maintenance plans for the PTS (and of producers) supplying the PTS
107	Production Capacity	APPEA	Supports proposal for publication of capacity	
108	Production Capacity	EA	Support 3 day outlook but this may be too short and use of something akin to short term and medium term PASA as in the NEM should be considered	IT is expected that that production capacity will remain at name plate rating aside from maintenance during periods of low demand exception forced outages. The ST/ LT PASA idea has merit but this has limited given there is not single integrated national gas market .
109	Production Capacity	QGC	Supports proposal for production capacity outlook as in paper but not forecast production. Capacity may be misleading due to downstream constraints	Paper proposes capacity outlooks that relate to the plant capability and considers actual production (history) but not forecast production daily quantities as such. Pipeline operator will provide LOR information if downstream constraints apply.

110	Storage Capacity Data	TRU	Suggests the BB link into Storage IT systems for automated extraction of capacity reduction information for the 3d BB outlook	Automated systems such as this will raise the cost of the BB IT system
111	Storage inventory	TRU	Regarded as commercially sensitive	LNG Storage is already monitored in Vic given that it is a scarce commodity and important to system security. UGS inventory should be made for NGERAC purposes in the event of a major emergency where UGS inventory is critical. E.g. Moomba Jan to May 2004
112	Time zones	APIA	Mandating time zones and frequent updates may be costly and inefficient	Normal operation is for daily updates for data elements where this is required and flexibility in time zones to keep the IT system simple. There may be provision for more frequent updates e.g. with hourly polling for emergency use.
113	Updating data triggers	MEU	Update criteria may be too coarse and need review e.g. greater of (10% nameplate rating or 30TJ) e.g. 10% reduction to Longford pipe is a critical level in winter and could cause a supply shortfall in Vic	Consultation will occur with smaller (borderline size) facilities to achieve a pragmatic outcome

Appendix 5. Project Time -Line

The current project high level Gantt chart has an indicative 'go-live' date of late May 2008. This is based on the simpler FTP option.

