



Agenda

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| MEETING TITLE | Gas Advisory Board |
| MEETING NO | 22 |
| DATE | Tuesday, 20 October 2015 |
| TIME | 1:00 PM - 3:00 PM |
| LOCATION | IMO Boardroom, Level 17, 197 St Georges Terrace, Perth |

| Item | Responsibility | Duration |
|--|----------------|----------|
| 1. Welcome | Chair | 2 min |
| 2. Meeting apologies/attendance | Chair | 2 min |
| 3. Minutes of previous meeting | Chair | 5 min |
| 4. Actions arising | Chair | 5 min |
| 5. Overview of GSI Rule and Procedure Change Proposals | IMO | 5 min |
| 6. Discussion: Electricity Market Review update | PUO | 30 min |
| 7. GBB Zones Review | IMO | 10 min |
| 8. Presentation: GBB data visualisations | IMO | 10 min |
| 9. Opportunities to enhance the information published on the GBB | IMO | 20 min |
| 10. Other business | Chair | 5 min |
| 11. Next meeting: Tuesday 15 December 2015 | | |

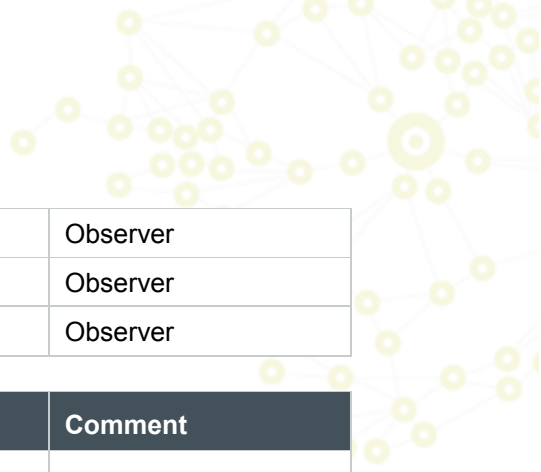
Please note this meeting will be recorded to assist with the preparation of minutes.



Minutes

| | |
|----------------------|---|
| MEETING TITLE | Gas Advisory Board |
| MEETING NO | 21 |
| DATE | Wednesday 15 July 2015 |
| TIME | 3:00 PM – 4:55 PM |
| LOCATION | IMO Board Room, Level 17, St Georges Terrace, Perth |

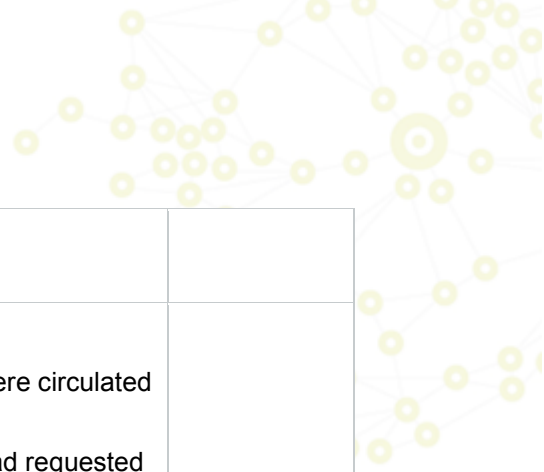
| Attendees | Class | Comment |
|----------------------|--|----------------------|
| Allan Dawson | Chair | |
| Erin Stone | IMO | |
| Stewart Gallagher | Gas Producer | |
| Pete DiBona | Gas Producer | |
| Mark Cooper | Pipeline Owner and Operator | 3:10 PM – 4:55 PM |
| John Jamieson | Pipeline Owner and Operator | |
| Chris Campbell | Gas Shipper | |
| Allan McDougall | Gas Shipper | Proxy |
| Andrew Sutherland | Large Gas User | |
| Ian Mumford | Large Gas User | |
| Ray Challen | Coordinator of Energy | |
| Matthew Martin | Minister's Appointee – Observer | Proxy |
| Natalie Jackson | Economic Regulation Authority (ERA) – Observer | |
| Simon Middleton | Public Utilities Office (PUO) | Presenter |
| Don Bower | Energy Access Services | Observer |
| Hans Niklasson | Kleenheat Gas | Observer |
| Carole Clare | Synergy | Observer |
| Mark Brodziak | IMO | Presenter |
| Mark Katsikandarakis | IMO | Presenter |
| Marc Hettler | IMO | Presenter |
| Laura Koziol | IMO | Presenter |
| Martin Maticka | IMO | Observer |
| Neetika Kapani | IMO | Observer |
| Alex Penter | IMO | Observer |
| Jessica l'Anson | IMO | Observer and Minutes |



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| Caroline Cherry | IMO | Observer |
| Peter Shardlow | IMO | Observer |
| Joachim Tan | IMO | Observer |

| Apologies | Class | Comment |
|--------------|--|----------------|
| Mike Lauer | Gas Shipper | Proxy attended |
| Aden Barker | Minister's Appointee – Small End Users | |
| Nerea Ugarte | Minister's Appointee – Observer | Proxy attended |

| Item | Subject | Action |
|------|---|--------|
| 1. | <p>WELCOME</p> <p>The Chair opened the meeting at 3:00 PM and welcomed all members and observers to the 21st Gas Advisory Board (GAB) meeting.</p> <p>The Chair thanked the departing member Mr Mike Shaw for his contribution over the past year and welcomed Mr Chris Campbell as a new GAB member.</p> <p>The Chair also provided a brief introduction to the 2015/16 GAB Members, outlined the GAB's role and reminded members that they have been appointed as individual members to represent their class and to act in the best interests of the Western Australian gas industry.</p> | |
| 2. | <p>MEETING APOLOGIES/ATTENDANCE</p> <p>The following apologies were noted:</p> <ul style="list-style-type: none"> • Mike Lauer (Gas Shipper) • Aden Barker (Minister's Appointee – Small End Users) • Nerea Ugarte (Minister's Appointee – Observer) <p>The following proxies were noted:</p> <ul style="list-style-type: none"> • Allan McDougall (proxy for Mike Lauer) • Matthew Martin (proxy for Nerea Ugarte) <p>The following presenters/observers were noted:</p> <ul style="list-style-type: none"> • Don Bower (Energy Access Services) • Hans Niklasson (Kleenheat Gas) • Carole Clare (Synergy) • Mark Brodziak (IMO) • Mark Katsikandarakis (IMO) • Marc Hettler (IMO) • Laura Koziol (IMO) • Martin Maticka (IMO) • Neetika Kapani (IMO) • Alex Penter (IMO) • Jessica l'Anson (IMO) • Caroline Cherry (IMO) | |



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| | <ul style="list-style-type: none"> • Peter Shardlow (IMO) • Joachim Tan (IMO) | |
| 3. | <p>MINUTES OF PREVIOUS MEETING</p> <p>The minutes of GAB Meeting No. 20, held on 26 May 2015 were circulated prior to the meeting.</p> <p>The Chair noted the clarification that Mr Stewart Gallagher had requested and the IMO had included.</p> <p>No further comments were raised and the minutes of the previous meeting were accepted as a true record.</p> <p><i>Action Point: The IMO to publish the minutes of Meeting No. 20 on the IMO's website as final.</i></p> | IMO |
| 4. | <p>ACTIONS ARISING</p> <p>Ms Erin Stone provided an update on the Action Items:</p> <ul style="list-style-type: none"> • Action Item 62: Ms Stone noted that this item was complete and the cost-benefit analysis had been circulated with the GAB Meeting No. 21 Papers for discussion under Agenda Item 12. • Action Items 63 and 64: Ms Stone noted that these items would be discussed under Agenda Items 11 and 12. • All other action items were completed. | |
| 5. | <p>OVERVIEW OF GSI RULE AND PROCEDURE CHANGES</p> <p>Ms Stone noted that there were no GSI Rule or Procedure Change Proposals currently underway.</p> <p>Ms Stone further noted that Phase 2 of the Electricity Market Review (EMR) was in progress and the PUO had released a Position Paper on the new Rule Change Assessment Panel (RCAP) that recommends that the RCAP also applies under the GSI Rules. Ms Stone noted that if this was to progress, the timing of any new GSI Rule or Procedure Change Proposals are likely to be affected.</p> <p>Mr Andrew Sutherland queried whether the wording of the Position Paper stated that the IMO's rule approval function "will" be removed. Ms Stone clarified that this was the preferred position in the Position Paper.</p> <p>Mr Gallagher queried where the Gas Bulletin Board (GGB) Zones Review fits with respect to the rule change process. Ms Stone responded that Marsden Jacob and Associates have made a number of recommendations in its report provided to the IMO. The IMO will publish the report and consider the suggested recommendations. However, Miss Stone indicated that it is likely that any rule changes which flow from the report will be deferred similarly to the Wholesale Electricity Market (WEM) rule changes.</p> <p>Mr Pete DiBona queried when the new RCAP would come into effect. The Chair responded that this would be discussed in Agenda Item 6 and 7.</p> | |
| 6. | <p>DISCUSSION: ELECTRICITY MARKET REVIEW UPDATE</p> <p>The Chair introduced Dr Ray Challen to provide an update on Phase 2 of the EMR. The following key points were discussed:</p> <ul style="list-style-type: none"> • Dr Challen noted that Phase 2 of the EMR commenced in April 2015. Dr Challen noted that there are two key matters in the EMR which affect the gas industry. The first matter is the current access regimes moving to the National Electricity Law and National Electricity Rules | |

and therefore moving regulations from the ERA to the Australian Energy Regulator (AER). It was noted that WA currently mirrors the National Gas Law (NGL) and National Gas Rules (NGR), however the PUO and EMR team are looking to move to applied laws and rules. Dr Challen noted that the timeframe is driven by the electricity reforms and anticipated that legislation would be passed through Parliament in 2016, and the same process and timeframes would apply to gas.

- Mr DiBona asked whether the transition to the national regulator would be just for electricity and exclude gas, or if it would include both. Dr Challen responded that it would be unusual to move electricity to the national framework and national regulator and leave the ERA with gas access.
- Ms Stone queried the operational aspect of shifting gas to the national scheme and whether the regulated asset bases of gas businesses would need to be revalued before regulation is moved to the AER. Dr Challen responded that gas already effectively operates under the NGL and NGR and that therefore a revaluation is not necessary. However, that is not the case for the electricity network and there are substantial changes required to the scheme and therefore is appropriate.
- Mr Gallagher asked whether the gas specifications would be included in the regulations and legislation. Dr Challen responded that to the extent the gas specification does become part of the terms and conditions for a standing offer under an access arrangement, it would be contained in the regulations or legislation but noted that current contracts would not be changed.
- Mr DiBona asked whether there will be public consultation around the move to the national regulatory framework. Dr Challen responded there will be to the extent that derogations from the national frameworks are likely to be applied (e.g. gas trading markets).
- Dr Challen stated that the second matter of the EMR which directly relates to the gas industry is the establishment of the RCAP. Dr Challen noted the reason for pursuing a RCAP was to remove the perceived conflict of interest the IMO has as the maker, approver, operator and enforcer of the Market Rules. He noted that if this is a concern of the electricity industry then it would likely be a concern for the gas industry.

7. POSITION PAPER - A PROPOSED DESIGN FOR THE NEW RULE CHANGE ASSESSMENT PANEL

The Chair invited Mr Simon Middleton to present on the position paper on the proposed decision of the RCAP. The following key points were discussed:

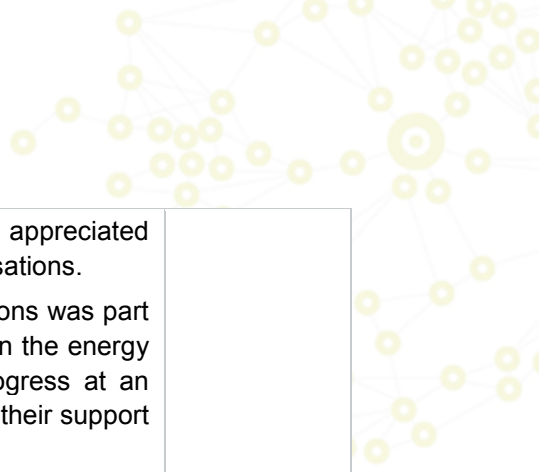
- Mr Middleton noted that during Phase 1 of the EMR a discussion paper was released. Submissions to this identified concerns regarding the IMO being the maker, approver, operator and enforcer of the Market Rules.
- Mr Middleton stated that the new RCAP is intended to replace the IMO Board as the decision maker for Rule Change Proposals. He stated that the position paper provided two preferred options to assist in the consultation process and noted that nothing is final until the

Government approves the changes. It is intended that the RCAP is established by the end of the first quarter of 2016. It is proposed that there are three Standing Members being the ERA Chair, the Coordinator of Energy and the IMO Chair. The position paper also provides a model for the secretariat services. This is proposed to be a single person (PUO employee) supported under a Service Level Agreement, initially with the IMO, but with the possibility of establishing a new body in the future.

- Mr Middleton noted that the PUO was mindful not to impose undue costs on participants.
- Mr DiBona queried the reason behind the Minister's decision to appoint discretionary Additional Members to the RCAP and how decisions will be made under this framework. Mr Middleton responded that the concept of Additional Members is to provide the RCAP with a broader skill base where required.
- Mr Middleton noted that any party can propose a rule change, including members of the RCAP, but in this event it would need to have the support of both other panel members. Mr DiBona asked what the decision making protocol was in the case where rule changes are proposed by those not on the RCAP. Mr Middleton responded that decisions would be made by majority vote.
- Mr DiBona noted that these changes are proposed to apply to the GAB as well as the Market Advisory Committee (MAC) and that there is a suggestion that the role of the MAC would increase. Mr DiBona queried what that increased role would be. Mr Middleton clarified that this was one point that the PUO would like particular feedback on. Mr Middleton noted that stakeholders should reflect on the role of the MAC and GAB in the market and make recommendations in their submissions. Dr Challen noted that there was a large divergence of views from the Steering Committee on this particular point, noting the MAC and GAB have other functions in addition to consulting on Rule Change Proposals. Dr Challen noted that whether this area is going to be part of the reforms is not firm at this stage and that changes to the MAC and GAB have been put forward at this stage for comment only.
- Mr Sutherland noted his concern that the IMO is more independent than the PUO and that under the preferred option the governance framework will provide greater control to the PUO. Mr Sutherland raised the issue that if the PUO chairs the RCAP, there would be a Government entity controlling the rule change process. Mr Sutherland noted that this is a major concern for electricity participants. The Chair noted that the proposed structure relies heavily on the secretariat. Dr Challen noted that the three Standing Members of the RCAP are also statutory officers, and as their positions are established by statute they are required to provide independent advice.
- Mr Sutherland asked how the PUO would assess the responses to the position paper. Mr Middleton responded that submissions should be aligned with the EMR objectives and criteria identified in the position paper and if there are overwhelming submissions in a particular direction, this would also be considered. He noted that the EMR Steering Committee would ultimately agree on the final design and propose this to the Minister for decision.

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| <p>8.</p> | <p>PRESENTATION: GBB ZONES REVIEW</p> <p>The Chair invited Mr Marc Hettler to present on the GBB Zones Review. Mr Hettler presented the key recommendations included in Marsden Jacob and Associates' final report, which will be published and considered by the IMO for further action.</p> <p>The following key points were discussed:</p> <ul style="list-style-type: none"> • The Chair clarified that the definitions of the GBB Zones included in Schedule 2 of the GSI Rules were recommended to be moved to a GSI Procedure to give the IMO more flexibility in amending them. • Mr Allan McDougall noted it would not be beneficial to lower the threshold to capture Large User Facility data which is not connected to a GBB Pipeline from 10 TJ/d to 5 TJ/d as he expected few additional facilities would fall into this category. • The Chair explained that the initial decision to include the definition of the GBB Zones in the GSI Rules was based on the assumption that there would be little change in gas infrastructure in Western Australia. The Chair noted that with two new pipelines expected to commence operation in the next 12 months, more flexibility in amending the GBB Zones would be beneficial. • Mr Campbell sought clarification around Marsden Jacob and Associates' recommendation of how to address the concerns regarding the publication of Nomination and Forecast Flow Data of Large User and Production Facilities. Mr Hettler stated that one option suggested by Marsden Jacob and Associates was to publish the data on a Gas Market Participant portfolio basis. The Chair emphasised that further analysis regarding the recommendations will be done and that the IMO will work with Gas Market Participants to resolve outstanding issues. • Mr DiBona sought clarification on whether the administrative changes regarding the GBB Zones would require a rule change which would have to be approved by the new RCAP. In particular noting the establishment of such a panel could take another 9 to 12 months. Ms Stone noted that the time required to implement the administrative changes through the new RCAP could potentially postdate commencement of the new pipelines. The Chair clarified that urgent rule changes could be facilitated under certain circumstances if the EMR Steering Committee and Minister support the Rule Change Proposal, however structural and administrative changes will likely have to wait until the new RCAP is established. Mr McDougall responded that a pipeline would be commencing operation in a few months, therefore these changes would be required soon. <p><i>Action Point: The IMO to publish the presentation on the GBB Zones Review and Marsden Jacob and Associates' final report on the IMO website.</i></p> <p><i>Action Point: The IMO to undertake further analysis and consultation with Gas Market Participants regarding the recommendations of the GBB Zones Review final report.</i></p> | <p>IMO</p> <p>IMO</p> |
| <p>9.</p> | <p>DISCUSSION: GBB EMF TEST ACTIVATION</p> <p>The Chair introduced Mr Mark Katsikandarakis to present on the test activation of the Emergency Management Facility (EMF) on the GBB</p> | |

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| | <p>conducted by the PUO under the Westplan for Gas Supply Disruptions in June 2015. The following key points were discussed:</p> <ul style="list-style-type: none"> • Mr Ian Mumford queried if any person acted with Ministerial discretionary powers during the mock exercise. Mr Katsikandarakis noted that Mr Bryon McLaughlin, the Primary Contact Officer at the PUO, activated the EMF as delegated by the Coordinator of Energy. • Mr DiBona questioned whether the data regarding the amount and type of alternate fuels provided by Gas Market Participants was confidential information. Mr Katsikandarakis confirmed that information is confidential but that information published on the EMF is only visible to individuals provided access to the EMF as directed by the Coordinator of Energy or his delegate. In this case, only selected staff from the PUO were given access to the EMF. • Mr DiBona asked if the PUO's new crisis information management system (OCA) worked well and if alternative communication platforms were considered. Mr Katsikandarakis responded that the general consensus at the Operations Management Group was that the OCA system had worked well. Mr Campbell commented that the communications had worked well as he had received multiple email updates during the emergency management exercise. • Mr Matthew Martin asked for further clarification on a suggestion to activate the EMF earlier and whether activation may occur too early in any given emergency when compared to the requirements of activating the EMF under the Westplan. Mr Katsikandarakis replied that the activation of the EMF allows for greater visibility of data to inform decision making by reducing the time lag of Daily Actual Flow Data to one hour behind real-time data, allowing the IMO and the PUO to gain visibility of any unfolding emergency. Mr Katsikandarakis further noted that if the EMF is not activated, Daily Actual Flow Data is not available until two days later. Mr Katsikandarakis clarified that the earlier activation of the EMF could provide the PUO with more timely information to inform its decision making however the consequences of activating the EMF earlier must also be considered. | |
| <p>10.</p> | <p>PRESENTATION: GBB DATA VISUALISATIONS</p> <p>The Chair introduced Mr Mark Brodziak to present on the gas data visualisations that the IMO is currently developing for the GBB.</p> <p>The Chair noted that the IMO now had two years' worth of data from the GBB, which meant the IMO had a sufficient amount of data to start looking at better ways of presenting the data for it to be more user friendly. The Chair noted that the gas data visualisations presented were in concept form only and work was still underway. The Chair encouraged members to provide feedback on the proposed gas data visualisations and suggest any new visualisations that would be valuable.</p> <p>The following key points were discussed:</p> <ul style="list-style-type: none"> • Mr Mumford queried how often the data visualisations would be updated. Mr Brodziak confirmed the data visualisations would be updated daily on a basis that is consistent with the GSI Rule requirements for publishing data. • Mr Campbell commented that he was a heavy user of the WEM data visualisations and appreciated any work that the IMO could do in this area. Mr Sutherland agreed and noted he presented the | |



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| | <p>data visualisations to his company's shareholders, who appreciated the simplicity of the data when presented through visualisations.</p> <ul style="list-style-type: none"> The Chair noted that the development of data visualisations was part of the IMO's broader strategy to increase transparency in the energy sector and suggested to provide an update on its progress at an upcoming GAB meeting. The Chair thanked the GAB for their support of this initiative. <p><i>Action Point: The IMO to provide an update on the gas data visualisations at an upcoming GAB meeting.</i></p> | IMO |
| 11. | <p>DISCUSSION: OPPORTUNITIES TO ENHANCE THE INFORMATION PUBLISHED ON THE GBB</p> <p>The Chair introduced Ms Laura Koziol to present on the opportunities to enhance information published on the GBB.</p> <p>The following key points were discussed:</p> <ul style="list-style-type: none"> The Chair reiterated that a large amount of data currently collected through the GBB could be better utilised. The Chair noted that any additional data visualisations could impose a cost on Gas Market Participants and the IMO is conscious of this and welcomes feedback on this. The Chair also expressed a desire for members to share more data with the IMO to enable further transparency and for that data to have a finer level of granularity to assist with gas data visualisations, which would require no extra effort and little cost for Gas Market Participants. Mr Campbell agreed with the Chair's comment on greater transparency of data. Mr DiBona noted that reducing the time lag of five days for publishing data could be achieved and would be beneficial. The Chair and Mr Campbell agreed and noted that there is now a greater level of comfort amongst Gas Market Participants in increasing the transparency of information. Mr Gallagher noted his support for publishing the Westplan status on the GBB if the Coordinator of Energy was comfortable. Mr DiBona queried what liability would be imposed on the Facility Operator to update the proposed outage warning flag on the GBB. The Chair clarified that would depend on whether the requirement was codified into the GSI Rules, making it mandatory or whether it was optional. Mr Mumford expressed concern that if the outage was resolved quickly, the warning flag may not be removed from the GBB until some hours after the resolution of the outage. Mr Mumford queried whether real-time data could be used. The Chair responded that the outage warning flag could be updated in real-time as the outage incident progressed. Mr Mark Cooper noted there is subjectivity on whether an outage would be classed as significant enough to create a warning flag for any particular incident. He expressed concern over codifying a warning flag as choosing the correct wording would not be easy. The Chair noted that there were options that could be considered including operators having direct access to post messages and standard wording. The Chair noted that the more outage information was made public, the less media attention outages might attract. Mr Sutherland asked Mr Cooper whether the Dampier to Bunbury Natural Gas Pipeline metering data was accurate. Mr Cooper | |

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| | <p>responded that real-time data would be inaccurate but still valuable for information purposes of advising and updating an outage incident. Mr Cooper stressed that real-time data would contain gaps due to various contingencies and noted that real-time data cannot be used for billing purposes.</p> <ul style="list-style-type: none"> Mr Gallagher expressed concern that additional reporting requirements on Gas Market Participants would require further costs to be incurred by participants but noted his enthusiasm for improving the publication of existing data. Mr Cooper noted that there are civil penalties under the GSI Rules for reporting of incorrect data and noted that these penalties could not apply to providing real-time data. The Chair noted that for WEM visualisations, the data used was SCADA data which also is real-time data that similarly contains gaps. The Chair further noted the opportunity to change the GSI Rules to allow for real-time data to be provided on a best endeavours basis to assist with visualisations. Mr Cooper agreed and noted the need for a rule change to allow for errors in real-time data. Mr John Jamieson noted that some operational considerations were needed but agreed that pipeline data could be provided quicker than two days. GAB members agreed that a balance between the timeliness of data and the accuracy of data was required and that there must be an equitable requirement on both Producers and Large Users to provide data. The Chair clarified that the IMO is conscious of balancing the data requirements on both the demand and supply sides. <p><i>Action Point: The IMO to publish the presentation on opportunities to enhance the information published on the GBB on the IMO website.</i></p> <p><i>Action Point: The IMO to develop a series of options, recommendations and necessary changes related to enhancing the data published on the GBB for consideration at an upcoming GAB meeting.</i></p> | <p>IMO</p> <p>IMO</p> |
| <p>12.</p> | <p>DISCUSSION: OPTIONS FOR GSI REVIEW</p> <p>The Chair noted there was a copy of the cost benefit analysis undertaken during the implementation of the GSI which was circulated with the GAB Meeting No. 21 Papers prior to the meeting. The Chair reiterated that the review was not required but agreed as part of the GSI implementation and welcomed GAB members' feedback on whether it was necessary.</p> <p>The following key points were discussed:</p> <ul style="list-style-type: none"> Mr DiBona noted that he didn't think there was value in undertaking a cost benefit study and that the IMO should extract further value from the GBB and Gas Statement of Opportunities (GSOO). Mr Sutherland suggested that the value from a cost benefit study could increase over time. The Chair suggested that GAB could reconsider undertaking the review at a later date. Mr Gallagher noted that a five-yearly review could be more suitable as the initial cost benefit study was over a period of five years. Mr Cooper <u>noted-agreed that a periodic review would be worthwhile whether it be in two or five years, but noted that it would-may be no easier to quantify the outcomes of the GSI in five years.</u> <p><i>Action Point: The IMO to assess the value of a GSI cost benefit study in mid-2017.</i></p> | <p>IMO</p> |



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| 13. | OTHER BUSINESS No other business was raised. | |
| CLOSED: The Chair declared the meeting closed at 4:55 PM. | | |

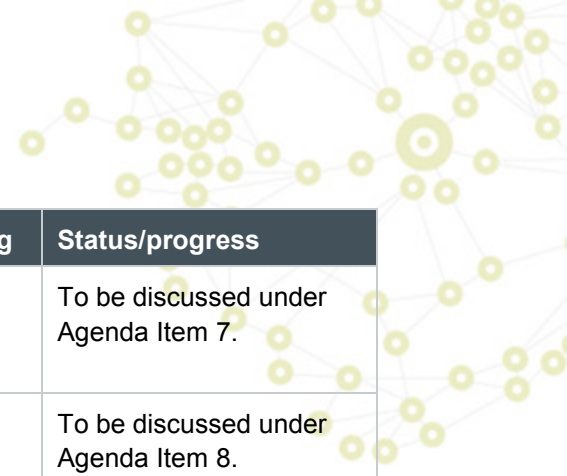


Agenda Item 4: GAB Action Items

GAB Meeting 20 October 2015

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| Shaded | Shaded action points are actions that have been completed since the last GAB meeting. |
| Unshaded | Unshaded action points are still being progressed. |
| Missing | Action items missing in sequence have been completed from previous meetings and subsequently removed from log. |

| # | Year | Action | Responsibility | Meeting arising | Status/progress |
|----|------|--|----------------|-----------------|-----------------|
| 63 | 2015 | The IMO to include further discussion on the need for a cost-benefit review, or other review of the GSI at an upcoming meeting. | IMO | May | Completed. |
| 64 | 2015 | The IMO to include further discussion at an upcoming GAB meeting on the options to provide information to Gas Market Participants where a facility is unavailable. | IMO | May | Completed. |
| 66 | 2015 | The IMO to publish the minutes of Meeting No. 20 on the IMO's website as final. | IMO | July | Completed. |
| 67 | 2015 | The IMO to publish the presentation on the GBB Zones Review and Marsden Jacob and Associates' final report on the IMO website. | IMO | July | Completed. |



| # | Year | Action | Responsibility | Meeting arising | Status/progress |
|----|------|--|----------------|-----------------|--------------------------------------|
| 68 | 2015 | The IMO to undertake further analysis and consultation with Gas Market Participants regarding the recommendations of the GBB Zones Review final report. | IMO | July | To be discussed under Agenda Item 7. |
| 69 | 2015 | The IMO to provide an update on the gas data visualisations at an upcoming GAB meeting. | IMO | July | To be discussed under Agenda Item 8. |
| 70 | 2015 | The IMO to publish the presentation on opportunities to enhance the information published on the GBB on the IMO website. | IMO | July | Completed. |
| 71 | 2015 | The IMO to develop a series of options, recommendations and necessary changes related to enhancing the data published on the GBB for consideration at an upcoming GAB meeting. | IMO | July | To be discussed under Agenda Item 9. |
| 72 | 2015 | The IMO to assess the value of a GSI cost benefit study in mid-2017. | IMO | July | |



Agenda Item 5: Overview of GSI Rule and Procedure Change Proposals

GAB Meeting 20 October 2015

1. Current progress

There are no Gas Services Information (GSI) Rule or Procedure Change Proposals currently being progressed.

2. Future developments

As part of Phase 2 of the Electricity Market Review, the Government intends to establish a new body to approve proposals for changes to the Wholesale Electricity Market Rules and the GSI Rules.

The IMO notes that the process for progressing any new GSI Rule Change Proposals will be affected.



Agenda Item 7: GBB Zones Review

GAB Meeting 20 October 2015

1. Background

The Gas Bulletin Board (GBB) commenced operation in 2013 to improve the transparency of information, security of supply and to facilitate competition in the Western Australian natural gas market. To show where natural gas is being supplied and used across the state, much of the information on the GBB is published by geographic Zones.

Under subrule 82(2) of the Gas Services Information (GSI) Rules, the IMO is required to review the GBB Zones at least once every five years. The IMO engaged Marsden Jacob Associates (Marsden Jacob), an independent consultant, to assist the IMO in undertaking the GBB Zones Review.

Marsden Jacob's final report was published on 3 August 2015 and is provided at Attachment A.

The IMO has considered Marsden Jacob's final report and documented its response to the recommendations in the 'IMO Final Report of the 2015 GBB Zones Review' which is provided at Attachment B.

The IMO is seeking Gas Advisory Board (GAB) members' endorsement of the IMO's proposed treatment of the recommendations and other findings of the 2015 GBB Zones Review.

2. Recommendation

The IMO recommends that the GAB members:

- **note** the draft version of the 'IMO's Final Report of the 2015 GBB Zones Review; and
- **discuss and endorse** the IMO's proposed treatment of Marsden Jacob's recommendations and other findings.

3. Next steps

The IMO intends to incorporate any feedback and suggested changes as appropriate and publish the IMO's final report by late October 2015.

The IMO will then progress any necessary Rule Change Proposals once the new rule approval body is established under the State Government's Electricity Market Review.



INDEPENDENT
MARKET
OPERATOR



IMO Final Report on the 2015 Gas Bulletin Board Zones Review

13 October 2015

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1. Background

The Gas Bulletin Board¹ (GBB) commenced operation in 2013 to improve the transparency of information, security of supply and to facilitate competition in the Western Australian natural gas market. To show where natural gas is being supplied and used across the state, much of the information on the GBB is published by geographic Zones.

Under subrule 82(2) of the Gas Services Information (GSI) Rules, the IMO is required to review the GBB Zones at least once every five years.

Following the recent completion of the Fortescue River Gas Pipeline, and the ongoing construction of the Eastern Goldfields Gas Pipeline and the Gorgon and Wheatstone domestic gas Production Facilities, the IMO decided to undertake the first review of the GBB Zones to consider whether any changes were required to accommodate these (and other) new facilities.

The IMO engaged Marsden Jacob Associates (Marsden Jacob), an independent consultant, to assist the IMO in undertaking the '2015 GBB Zones Review' (Review).

As part of the Review, the IMO undertook a public consultation process to obtain feedback from Gas Market Participants and interested stakeholders on the consultant's draft report (including recommendations).

The key steps of the Review are as follows:

- Publication of Marsden Jacob's draft report – 2 June 2015;
- Public consultation period – closed on 30 June 2015;
- Publication of Marsden Jacob's final report – 3 August 2015;
- Next steps – publication of the IMO's final report in October; and
- Development of any necessary rule changes.

2. Marsden Jacob's draft report

In its draft report², Marsden Jacob made six recommendations, summarised in the following table.

Table 2.1: Draft report recommendations

| Draft report recommendations | |
|------------------------------|--|
| 1. | Remove definition of the GBB Zones from the GSI Rules to give the IMO greater flexibility in amending the Zones. |
| 2. | Publish nominations and forecasts for individual facilities. |
| 3. | Capture Large User Facility data for Facilities connected to non-GBB Pipelines. |
| 4. | Divide the current Dampier Zone into two separate Zones. |
| 5. | Adopt new guidelines for allocation of new pipelines to GBB Zones. |

¹ The IMO's Gas Bulletin Board is available at: <https://gbb.imowa.com.au>.

² Available at: <http://www.imowa.com.au/2015-gbb-zones-review>.

Draft report recommendations

6. Adopt new guidelines for the revision of GBB Zones.

3. Public consultation process

On 2 June 2015, the IMO published Marsden Jacob's draft report on its website and invited submissions over a period of four weeks. Over that period, the IMO received nine submissions on Marsden Jacob's draft report. The IMO published copies of the submissions on its website³.

The following stakeholders provided submissions during the public consultation process:

- Alinta Energy;
- APA Group;
- Australian Petroleum Production and Exploration Association;
- Citic Pacific Mining Management;
- Chamber of Minerals and Energy;
- DBNGP (WA) Transmission;
- Energy Supply Association of Australia;
- Santos; and
- BHP Billiton.

The majority of submissions were supportive of recommendation 1 in Marsden Jacob's draft report (the removal of the definition of Zones from the GSI Rules) on the basis that it will allow the IMO greater flexibility in amending the Zones to suit market needs.

Recommendation 4 of the draft report (division the Dampier Zone into two separate Zones) received mixed support in the consultation period, and ultimately Marsden Jacob removed it on the basis that recommendation 2 (publication of individual facility nominations and forecasts) appears to be a better solution to this issue.

Submissions were generally supportive of recommendation 2, and a number of stakeholders indicated that this information, both for production and large user facilities, would be valuable and would support short term trading in WA.

Submissions were generally supportive of recommendation 3 (capture of Large User Facility data for non-GBB Pipelines), although Marsden Jacob noted the situation is yet to emerge, and the recommendation is considered a lower priority.

Submissions were generally supportive of recommendations 5 and 6 of the draft report but feedback from the IMO and stakeholders suggested combining the two recommendations into a single recommendation.

³ Available at: <http://www.imowa.com.au/2015-gbb-zones-review>.

Further details of submitter’s specific concerns are examined in Marsden Jacob’s final report⁴ and the IMO’s responses to each of the issues can be found below in Table 5.1.

4. Marsden Jacob’s final report

In its final report⁵, Marsden Jacob made four recommendations and presented a number of additional findings about the use of the GBB Zones and other related issues.

Marsden Jacob made two major changes to the recommendations in its final report due to stakeholder feedback received in the consultation period:

1. Removal of recommendation 4 (division of the Dampier Zone into two separate Zones).
2. Combination of recommendations 5 and 6 into a single recommendation.

The following tables summarise the recommendations and additional findings made by Marsden Jacob, with related issues grouped together for ease of consideration.

Table 4.1: Final report recommendations

| Recommendations | |
|-----------------|---|
| 1. | Remove the definition of the GBB Zones from the GSI Rules and instead include it in a GSI Procedure. |
| 2. | Publish nominations and forecasts for individual facilities. |
| 3. | Capture Large User Facility data connected to non-GBB Pipelines. |
| 4. | Adopt new guidelines for the allocation of new pipelines to GBB Zones and any future revision of GBB Zones. |

Table 4.2: Final report findings

| Findings | |
|----------|--|
| 1. | While the GBB Zones are used by some stakeholders, in particular smaller participants, new entrants and other stakeholders such as policy makers, they are not used by many Gas Market Participants. |
| 2. | Linepack Capacity Adequacy (LCA) Flags should be provided for a pipeline as a whole rather than segmented by Zone. The IMO should consider a new requirement for Production Facilities to provide a reliability flag to indicate any issues with production at a facility, which would need to be updated closer to real time if an unplanned incident occurred. |
| 3. | The IMO should consider reducing the threshold for inclusion of facilities on the GBB to 5TJ/day. |
| 4. | The IMO should undertake incremental change to the GBB rather than a wholesale review. |

⁴ Available at: <http://www.imowa.com.au/2015-gbb-zones-review>.

⁵ Available at: <http://www.imowa.com.au/2015-gbb-zones-review>.

5. Conclusion

Table 5.1 sets out the actions the IMO will undertake in regards to the Marsden Jacob's final report recommendations and findings.

Table 5.1: IMO's response to the final report's recommendations and findings

| Recommendations and findings | IMO response |
|--|--|
| <p>Finding 1 – while the GBB Zones are used by some stakeholders (in particular smaller participants, new entrants and other stakeholders such as policy makers), they are not used by many Gas Market Participants.</p> | <p>The IMO notes this finding especially as it supports some of the other proposed changes in Marsden Jacob's final report.</p> <p>The role of Zones on the GBB was based on the National Gas Bulletin Board (NGBB) which publishes all flow information (forecast and actual) at the zonal level and does not provide much Facility-level data.</p> <p>This finding, and others below, indicate that users of the GBB generally value facility-level information over Zone information.</p> |
| <p>Recommendation 1 – remove the definition of the GBB Zones from the GSI Rules and insert this in a GSI Procedure.</p> <p>Recommendation 4 – the IMO should adopt guidelines for adding facilities to the Zones and/or modifying the Zones and these guidelines should also be included in a GSI Procedure.</p> | <p>The IMO intends to adopt these recommendations and progress a rule change to do so as soon as practicable.</p> <p>Given finding 1 above, the current level of oversight of the Zones appears to be an unnecessary administrative burden. Moving the definition of the Zones into a GSI Procedure will enable the Zones to be amended more easily if required.</p> <p>In implementing these recommendations, the IMO will also give consideration to:</p> <ul style="list-style-type: none"> • what modifications, if any, are required to the heads of power for GSI Procedures. Ideally the GSI Rules should not be too prescriptive about how the Zones are defined but perhaps use more general language about the Zones providing for aggregation in regions or locations, as doing so may enable different types of Zones to be established in the future (e.g. around trading hubs); and • whether the requirement for the IMO to undertake a review of the Zones at least once every five years is still appropriate. <p>Marsden Jacob has proposed guidelines for amending the Zones, however these are likely to need further consideration and development in consultation with stakeholders.</p> |
| <p>Recommendation 2 – nominations and forecasts should be published for individual facilities.</p> <p>In particular, Marsden Jacob recommends that this information should be published for Production Facilities. While Marsden Jacob indicated that it is likely that there are benefits from publishing this for</p> | <p>The IMO agrees with the Marsden Jacob's recommendation, and is currently undertaking further consultation on the proposed changes with the Gas Advisory Board (GAB) to enhance the information on the GBB. The scope of work for this consultation includes the publication of nominations and forecasts on a Facility basis as well as outage warnings for Facilities.</p> <p>A number of stakeholders have indicated that this information, both for Production and Large User Facilities, would be valuable and would support short term trading in the market.</p> <p>Publication of nomination and forecast information by Large User Facilities will require some large users to provide additional data to the</p> |

| Recommendations and findings | IMO response |
|--|--|
| <p>large users (either by Facility or user), they noted that there are issues that may need to be resolved prior to doing so (principally concerns raised were about commercial sensitivity for some users).</p> | <p>IMO, so the costs and benefits of this additional information need to be considered.</p> |
| <p>Recommendation 3 – require Large User Facilities not connected to GBB Pipelines to be reported on the GBB.</p> | <p>While this recommendation was supported by some submissions, the IMO does not consider that this change is required and will not undertake any further action on this recommendation.</p> <p>There are currently no Large User Facilities or Production Facilities that are not (or will not be) connected to GBB Pipelines.</p> <p>The GBB has also been designed to ensure this situation does not arise by requiring that all relevant pipelines are registered GBB Pipelines.</p> <p>There are currently two situations in which a pipeline does not need to be registered:</p> <ol style="list-style-type: none"> 1. if a pipeline has a capacity of less than 10TJ/day, then the Facilities connected must also be less than 10TJ/day. The GBB has been designed to capture the vast majority of gas flows throughout the State and uses the 10TJ/day threshold (about 1 per cent of total daily gas consumption) to exempt Facilities for which the burden of reporting likely exceeds the benefits; and 2. if a pipeline has a capacity of greater than 10TJ/day but is not a Transmission Pipeline (as defined in the GSI Rules). This is most likely where the pipeline has only one facility connected to it, it can be considered a ‘lateral’ pipeline or simply a connection asset. In this case, the pipeline will generally be connected to another GBB Pipeline and data about the pipeline and the Facility connected to it will be captured by virtue of the registration of the other GBB Pipeline. <p>In the event there was a pipeline similar to a lateral but with more than one facility connected to it (production, user or storage) and that had a capacity of greater than 10TJ/day, the current GBB design would capture this and require it to be registered.</p> |
| <p>Finding 2 – LCA flags should be provided for a pipeline as a whole rather than segmented by Zone and the IMO should consider a new requirement for production facilities to provide a ‘reliability flag’ to indicate any issues with production at a facility, which would need to be updated closer to real time if</p> | <p>This finding is not strictly within the scope of the GBB Zones Review. The IMO is currently consulting on this matter with GAB regarding enhancements to the GBB in conjunction with recommendation 2.</p> <p>Based on feedback from DBP Transmission, Marsden Jacob concluded that LCA flags for pipelines are not providing clear information to GBB users when an incident occurs. This is because the LCA flag could indicate an issue with a Production Facility, a physical issue on the pipeline and/or a contractual limitation on deliveries to some users.</p> <p>In addition, for pipelines that are in multiple Zones, DBP indicates it is very unlikely that a different LCA flag would apply in different Zones.</p> |

| Recommendations and findings | IMO response |
|---|--|
| <p>an unplanned incident occurred.</p> | <p>This is because users along the pipeline have different rights and those with interruptible supplies will always be curtailed ahead of those with firm supplies, regardless of their location on the pipeline.</p> <p>The proposal of a separate reliability flag for Production Facilities resolves one aspect of this issue. A reliability flag could be provided ex-post (ideally close to real time) which may identify risks to production and therefore deliveries on the day and may support various risk-management activities including opportunities for short term trading. The IMO has proposed further consultation with GAB at the October meeting in relation to the proposal of a reliability flag.</p> <p>Submissions to the Marsden Jacob draft report and recent GAB discussions have both highlighted concerns with the lack of information available when an incident occurs at a Production Facility.</p> |
| <p>Finding 3 – the IMO should consider reducing the threshold for inclusion of Facilities on the GBB to 5TJ/day.</p> | <p>The IMO will not lower the threshold for Large User Facilities from the current threshold level of 10 TJ/day.</p> <p>This finding, while also out of scope of the GBB Zones Review, was made in response to one submission which suggested the threshold should be lowered.</p> <p>The IMO does not consider this to be a priority issue, given that such Facilities account, individually, for less than 1 per cent of total gas flows and are included in aggregate figures reported on the GBB.</p> <p>In addition, at the July 2015 GAB meeting, various stakeholders expressed the view that it would not be beneficial to lower the threshold due to the small number of Facilities that would be affected by the change.</p> |
| <p>Finding 4 – the IMO should undertake incremental change to the GBB rather than a wholesale review.</p> | <p>The IMO notes this finding.</p> <p>Some submissions indicated the IMO should not be considering changes to the GBB Zones without undertaking a comprehensive review of the GBB.</p> <p>However Marsden Jacob considered that, given the maturity of current market arrangements and use of the GBB, incremental change is likely to be preferable to enable the GBB to better achieve the GSI Objectives. This view is consistent with discussions at the May 2015 GAB meeting, where several members questioned the benefit of undertaking a cost-benefit review of the GSI at this stage. GAB members confirmed this view at the July 2015 GAB meeting and it was agreed to review this decision in 24 months.</p> |



FINAL REPORT

JULY 2015

Review of the Gas Bulletin Board Zones

Report prepared for the Independent Market
Operator

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Executive summary

Context and Review Process

The Independent Market Operator (IMO) is required to undertake a review of the Gas Bulletin Board (GBB) Zones at least once every five years in consultation with Gas Market Participants and gas industry groups.¹

The purpose of the IMO's Review of the GBB Zones is to consider the appropriateness of the GBB Zones in achieving the GSI Objectives² by providing an appropriate breakdown of gas supply and use within the state.

The IMO assigned Marsden Jacob to assist with their Review of the GBB Zones.

Marsden Jacob completed a Draft Report in May 2015 in support of the Review of the GBB Zones, which included six preliminary recommendations³. The IMO undertook a consultation process to obtain feedback from market participants and interested members of the public on the Draft Report (including the recommendations). The formal consultation period commenced on 2 June 2015 and concluded on 30 June 2015, although the IMO did accommodate one late submission.

Nine submissions were received during the extended consultation period. Submissions are available on the IMO's website and a summary of submissions and Marsden Jacob's response is included in Appendix A. Key trends from the submissions are also outlined in Chapter 2.

In preparing this Final Report, Marsden Jacob has reviewed the submissions provided in response to the Draft Report and incorporated that feedback into this report. This Final Report will be presented to the IMO for their consideration. The IMO is then obligated to run a Rule change consultation process to propose and implement any of the recommendations made by Marsden Jacob in this report.

Awareness, understanding and usefulness of GBB Zone data

Submissions indicated that market participants had a good understanding of the GBB Zone data, but that most participants did not use the GBB Zone data. Most participants have ready access to alternative sources of information (e.g. meter flow data) or tended to utilise individual facility data once available (i.e. ex post data).

Discussions with market participants indicated that Zone based data appears to be of most benefit to smaller gas players (users or traders), potential new entrants (investors), as well as policy makers, who do not have ready access to alternative sources of actual or forecast gas flow and capacity data. Santos acknowledged in their submission that the information could be used to assist in the management of gas supply emergencies (see Appendix A).

¹ In accordance with subrule 82(2) of the Gas Services Information Rules.

² That is, security, reliability and availability of gas: efficient investment in and operation of infrastructure; and to facilitate competition.

³ A copy of the Draft Report and information about the Review is available on the IMO's website at: <http://www.imowa.com.au/home/gas/consultations/2015-review-of-the-gas-bulletin-board-zones>

Several participants questioned the value of the Zone based data and questioned whether participants should bear the costs associated with maintaining or modifying the GBB Zones.

The Chamber of Minerals and Energy (CME) suggested that the IMO should undertake a broader review of the GBB and related services in order to streamline or remove any unnecessary components. Santos further argued that the GBB Zone information does not meet the GSI Objectives and that a review of the GBB be undertaken to establish which parts meet the GSI Objectives.

Final Recommendations

The Draft Report made six preliminary recommendations. After consideration of the feedback from market participants in discussions and via written submissions, Marsden Jacob have made four final recommendations. Draft Recommendation 4 (Division of the Current Dampier Zone) has been rejected by Marsden Jacob (see discussion in 3.4) and Draft Recommendations 5 (IMO adopt Guidelines for allocation of new pipelines to GBB Zones) and 6 (IMO adopt Guidelines for revision of GBB Zones) have been combined into a single final recommendation.

Recommendation One: Remove the definition of GBB Zones from the GSI Rules

Marsden Jacob recommends removal of the Zones prescription currently included in Schedule 2 from the GSI Rules (via an amendment to rule 82) to allow the IMO greater flexibility in amending the Zones to suit market needs going forward. This recommendation is consistent with the Draft Report and was generally supported in submissions.

Further to the Draft Recommendation, Marsden Jacob recommends that the prescription of the Zones which is removed from the Rules be included in a GSI Procedure. Inclusion of this detail in a GSI Procedure would provide continued and appropriate regulatory oversight including consultation requirements regarding changes.

Recommendation Two: Publish nominations and forecasts for individual facilities

Given the critical importance of individual gas production facilities data to facilitate trade and the impact that a single gas plant outage may have on the reliable delivery of gas to end users across Western Australia, it is recommended that nominations and forecasts for individual gas production facilities be published on the GBB⁴.

The publication of gas nominations and forecasts for large user facilities may also benefit the market through identification of trading opportunities, however, most participants indicated that this is relatively less important given the significantly lower gas quantities of large user facilities relative to producers, and the relative concentration of large users within production dominated Zones. It could be more meaningful to publish aggregate nominations and forecasts for common owners and/operators of large user facilities exceeding 50 TJ/day, such as Alcoa, Synergy or Alinta.

Our Final Recommendation is for the IMO to consider a Rule change to:

- allow nominations and forecasts for individual production facilities to be published (rather than this information being published on a Zones basis); and

⁴ Nomination and forecast data for individual gas production facilities is currently published at an aggregate Zone basis initially. Actual data for individual facilities is published following the Gas Day.

- allow nomination and forecasts for larger users to be published in an aggregated (but non-Zone) basis.

Marsden Jacob notes that publication of facility data on a non-Zone basis could help to clarify the purpose of the Zones, including usefulness of data which is published on a Zone basis.

Recommendation Three: Capture large user facility data connected to non-GBB pipelines

The purpose of the GBB is to capture information relating to short and near term natural gas supply and demand and gas transportation and storage capacity in the State.⁵ However, the current definition of Zones (with reference to GBB pipelines) means that accurate data at the facility level may not be captured for some large use customers being supplied from non-GBB pipelines.

Marsden Jacob recommends the IMO propose a Rule change to extend the definition of large user facilities to capture gas use from non-GBB pipelines to ensure the supply and demand information is as complete as possible.

Recommendations Four: IMO adopt Guidelines for GBB Zones

Marsden Jacob developed guidelines for:

- the allocation of a pipeline (and therefore a large user or production facility) to a GBB Zone; and
- the revision of GBB Zones to accommodate future gas market developments.

The development and adoption of these guidelines seeks to reduce the regulatory process for GBB Zones' administration going forward. Marsden Jacob recommends these guidelines be incorporated into a GSI Procedure. The inclusion of guidance in a GSI Procedure would also complement the revised governance arrangements for Zones (as per Recommendation One).

We recommend that the IMO develop the guidelines in consultation with stakeholders as part of the Rule change process to remove the prescription of GBB Zones from the Rules and include these in a GSI Procedure (Recommendation One).

⁵ The purpose of the GBB is outlined in Section 4(1) of the *Gas Services Information Act 2012*.

1. Background

The GBB is a website that provides information on short term gas demand and supply, natural gas transmission and storage capacity in Western Australia.⁶

The GBB, in combination with the Gas Statement of Opportunities (GSOO), provides useful information to gas market participants (i.e. shippers, pipeline operators and producers), regulators, policy makers, and future investors amongst others, to facilitate trade in gas and improve security of supply.

The GBB was formally established in 2013 and the IMO is responsible for operating and maintaining the GBB.

Data on the GBB includes publication of nominated and forecast flow data. This forward looking data is published by Zone on a daily basis. The GBB also provides information on the likely curtailment of interruptible and firm gas flows by Zone.⁷

In accordance with subrule 82(2) of the GSI Rules, the IMO is required to review the GBB Zones at least once every five years. The IMO is undertaking its first review of the GBB Zones in 2015.

1.1 IMO GBB Zones Review

The purpose of the IMO's GBB Zones Review is to consider the appropriateness of the GBB Zones in achieving the GSI Objectives by providing an appropriate breakdown of gas supply and use within the state.

The Terms of Reference for the IMO's GBB Zones Review outline four key tasks:

1. Understand awareness of the GBB Zone data amongst current and potential future gas users and/or others.
2. Understand current use of the GBB Zone data by current and potential future gas users and/or others.
3. What are the changes in use of the GBB Zone information that could arise due to future developments in the market and the addition of new facilities?
4. Consider changes in the GBB which may enable Zones to *better* meet the GSI Objectives.

⁶ The GBB can be accessed at: <https://gbb.imowa.com.au/#home>

⁷ Linepack Capacity Adequacy (LCA) Flags are updated by pipeline operators, where

- (a) A green flag indicates normal operation;
- (b) An amber flag indicates likely curtailment of interruptible gas flows; and
- (c) A red flag indicates likely curtailment of firm gas flows.

It is noted that the cause of likely curtailment is not evident through the publication of LCA Flags alone.

1.2 Marsden Jacob engagement

Marsden Jacob has been engaged by the IMO to assist with the Review of the GBB Zones.

Marsden Jacob's task in assisting with the Review is to:

- Canvas and consider any issues relevant to the definition of the Zones and present these in a Draft Report.
- Review, compile and consider stakeholder views on topics raised in discussions and in submissions via the IMO's formal Review of GBB Zones consultation process which occurred in June 2015.
- Develop a Final Report on the Review of the GBB Zones which includes an assessment of options against the GSI Objectives and makes recommendations for the IMO's consideration.

This Final Report will be made publically available as part of the completion of IMO's consultation process on the GBB Zones Review.

This Final Report addresses all four tasks outlined above (but does not repeat the background and discussion of potential issues provided in the Draft Report). However, the focus of the Final Report is on Task 4 (the assessment of options), including incorporating feedback from market participants in the consultation process.

1.3 Approach

In preparing this Final Report, Marsden Jacob has reviewed submissions received by the IMO as part of the public consultation process that provided feedback on the Draft Report prepared by Marsden Jacob.

After reviewing the submissions, Marsden Jacob met with one market participant to obtain further clarifications on their support/opposition for various recommendations that were outlined in the Draft Report.

Following a review of the submissions and the subsequent meeting with a market participant, Marsden Jacob has prepared this Final Report. This Final Report will be presented to the IMO for their consideration.

1.4 Structure of this report

The remainder of this report is structured into the following sections:

- **Chapter 2: Consultation and submissions** – An overview of the IMO consultation process, a summary of topics responded to in submissions, and an overview of issues raised by participants in their submissions.
- **Chapter 3: Review of current GBB Zones and potential options for reform** – In this Chapter we outline the recommendations and findings from the Draft Report and provide a summary of participants feedback obtained through the public consultation process. After taking into account the feedback from participants and further analysis undertaken by Marsden Jacob, we then make final recommendations.
- **Appendix A: Summary of submissions and Marsden Jacob response** – A detailed summary of individual responses to the recommendations, as well as other issues raised

by participants. Where appropriate, Marsden Jacob has provided its view on the relevance of the participant's response in relation to the recommendations made by Marsden Jacob in the Draft Report.

2. Consultation and submissions

2.1 IMO Consultation Process

As part of the Review of the GBB Zones, the IMO undertook a public consultation process to obtain feedback from market participants and interested members of the public on the Draft Report (including recommendations) written by Marsden Jacob. The formal consultation period commenced on 2 June 2015 and concluded on 30 June 2015, although the IMO did accommodate one late submission.

Nine submissions were received during the extended consultation period. Copies of submissions will be publically available on the IMO's website⁸.

Marsden Jacob has reviewed all submissions and a summary of the submissions and Marsden Jacob's responses are provided in Appendix A.

2.2 Overview of Market Participants that Provided Submissions

The organisations that provided submissions during the extended consultation period are listed below. We have also provided a brief description of the role of each of the organisations in relation to the WA gas market (i.e. pipeline operator, gas producer and/or user, or peak body for gas producers/users):

- Alinta Energy (Alinta) – a major shipper (user) of gas that retails gas within the state and owns and operates gas fired power stations in the Pilbara region and the South West interconnected system (SWIS) at Pinjarra and Wagerup.
- APA Group (APA) – owner and operator of the Mondarra Gas Storage Facility, the Goldfields Gas Pipeline (GGP), the Parmelia Pipeline, the Mid-West Pipeline and the Pilbara Energy Pipeline (PEPL).
- The Australian Petroleum Production & Exploration Association (APPEA) – peak national body representing Australia's oil and gas exploration and production industry. In Western Australia (WA), APPEA represents the interests of the owners and operators of all current and known future gas production facilities registered on the WA GBB.
- CITIC Pacific Mining Management Pty Ltd (CPMM) – operates the Sino Iron project which includes a magnetite mine and processing facilities at Cape Preston in the Pilbara. The facility utilises pipeline gas for on-site generation.
- The Chamber of Minerals and Energy of Western Australia (CME) – peak resources sector representative body. Members represent the vast majority of mining producers (by output and employment) in the State.
- DBP Transmission (DBP) – owner and operator of the Dampier to Bunbury Natural Gas Pipeline (DBNGP).
- The Energy Supply Association of Australia (ESAA) – peak industry body for the stationary energy sector in Australia and represents the policy positions of thirty-seven electricity and downstream natural gas businesses.

⁸ Refer to: <http://www.imowa.com.au/home/gas/consultations/2015-review-of-the-gas-bulletin-board-zones>

- Santos Ltd (Santos) – the third largest producer of gas in Western Australia through its joint venture positions in Varanus Island and Devil Creek (Reindeer).
- BHP Billiton (BHP) – a gas producer through its ownership of the Macedon gas facility and is also a shipper of gas which is required to operate its various mining and processing facilities in Western Australia.

2.3 Topics raised in submissions

Submissions provided comment on a range of issues including responses to consultation questions and providing views on the six recommendations made by Marsden Jacob in the Draft Report (Box 1).

The majority of submissions elected to respond directly to each of the Draft Report recommendations. As such, we have addressed these comments in detail in the next chapter of this report (Chapter 3).

General comments and responses to consultation questions are summarised in the remainder of this Chapter. Marsden Jacob’s consideration of these comments has also been included.

A full summary of issues raised in submissions is also provided in Appendix 1.

Box 1: Draft Report Recommendations

During the consultation process the IMO sought feedback on six recommendations that were made by Marsden Jacob in the Draft Report. The recommendations were the following:

- Recommendation 1: Remove the definition of GBB Zones from the GSI Rules.
- Recommendation 2: Publish nominations and forecasts for individual facilities (in particular, gas production facilities).
- Recommendation 3: Capture large user facility data connected to non-GBB Pipelines.
- Recommendation 4: Division of the current Dampier Zone.
- Recommendation 5: IMO adopt guidelines for allocation of new pipelines to GBB Zones (refer to Figure 1 on page 20 for guideline recommendations).
- Recommendation 6: IMO adopt guidelines for revision of GBB Zones (refer to Figure 2 on page 21 for guideline recommendations).

2.3.1 Awareness, understanding and access of GBB Zone data

Submissions confirmed Marsden Jacob’s preliminary finding that market participants have a good understanding of the GBB Zone data, but that the reliance and usefulness of Zone information to individual gas market stakeholders is highly dependent on the unique role of or interest that particular parties have in the gas market, and also the ready access to alternative sources of information (such as metered flow data supplied by pipeline operators) which serve the same purpose as the Zone information. Some participants indicated that they utilised individual facility data when available (ex post data).

Submissions which commented on the usefulness (and value of the Zones) came predominately from stakeholders already actively involved in the market or from market participant representatives. A number of these stakeholders have ready access to alternative sources of

equivalent information and data. As such, most respondents indicated that they did not use the Zone data.

Marsden Jacob's Draft Report suggested that Zone based data appears to be of most benefit to smaller gas players (users or traders), potential new entrants (investors), as well as policy makers, who do not have ready access to alternative sources of actual or forecast gas flow and capacity data.

Informal discussions with stakeholders which fall into these categories, as well as submissions from participants who supply data to the IMO suggest that modifications to GBB Zone information are possible to improve the usefulness of the information.

Where these suggestions relate to a specific recommendation, Marsden Jacob has summarised the suggestion in Chapter 3. Other suggested changes (which could be explored via alternative work streams) are outlined in the following sections.

2.3.2 Definition of LCA Flags

DBP provided a substantive discussion on LCA Flags. This included identifying a number of issues with the current definition and how the meaning of Flag colours could be interpreted by market participants.

Discussions with DBP and the IMO as well as our own understanding of the LCA Flags has lead Marsden Jacob to conclude that a review of the definition of the purpose of the Flags is warranted.

The GSI Rules define LCA Flag for a gas day as a green, amber or red flag indicating the actual or expected capability of the pipeline to meet the relevant delivery nominations with the Zone for that gas day based on the pipeline's linepack and capacity, where:

- (a) a green flag indicates normal operation;
- (b) an amber flag indicates likely curtailment of interruptible gas flows; and
- (c) a red flag indicates likely curtailment of firm gas flows.

The current definition is focused on the likely curtailment of gas flows. However, is it not evident through the publication of LCA Flags what has caused the curtailment. The result is that LCA Flags colours will change in response to a range of issues and factors, only some of which represent an opportunity for market participants to act.

For example, in the case of an outage to a gas production facility, only those users who have contracted to take firm supply from that particular facility may be interrupted. The DBP indicated that under current GSI Rules, the DBP would be required to change the LCA Flag to red for all three Zones (Dampier, Metro, and South West) along the DBNGP if there was a gas production outage, despite the fact that many customers will not be interrupted if they take supplies from other gas production facilities. This unnecessarily puts all gas users on alert that they may suffer gas interruptions.

Conversely, in the case of a disruption to a segment of the DBNGP in the Dampier Zone, users located downstream in both the Metro and South-West Zones are likely to be interrupted, so changing the LCA Flags for all Zones is appropriate so that users can make alternative arrangements (e.g. reduce operations, utilise alternative fuels etc.).

In Marsden Jacob's view, the current arrangement of having an LCA Flag for a pipeline, which combines production and/or pipeline reliability issues, may not provide sufficient information to producers or users of gas to assist them to respond efficiently to the alert.

Number of amendments are possible to improve the signalling ability of LCA Flags. DBP submitted that:

*“... a more appropriate change to the GSI Rules in order to address such issues as facilitating short term trading opportunities would be to require stakeholders to provide more information on the causes of supply disruptions in the WA gas market on a timely basis”.*⁹

Alternatively, separate reliability flags for individual gas production facilities may be introduced. Like LCA Flags updated by pipelines, these ‘Reliability Flags’ would be required to be updated regularly, allowing market participants to respond appropriately as incidents arise.

The use of a dual flag system – an LCA Flag for pipelines and a ‘Reliability Flag’ for production facilities would clarify the appropriate actions which may be taken by other market participants to ensure the safe, reliable and efficient operation of the gas network. For example, a red LCA Flag for a pipeline could signal to users that a system wide issue is evident. Users may respond by switching to alternative fuels (e.g. distillate) since gas may not be available via the pipeline. In contrast, a red ‘Reliability Flag’ for a gas producer would signal that gas flow from the particular producer is being curtailed but that there are no reliability issues with pipeline operations. Users could then appropriately respond by purchasing short term gas from another producer (with a green reliability flag – signalling normal operation), curtail their own gas usage or contract with another user with spare gas.

It is noted that a green reliability Flag for a producer which represents normal operations would not necessarily imply that gas is available from the producer for short term supply. The producer may be fully contracted. However, in Marsden Jacob’s view, the purpose of LCA and Reliability Flags should be to indicate the health and reliability of gas supply infrastructure, not necessarily the availability of contract gas.

While it is beyond the scope of this study, Marsden Jacob recommends that the IMO should review the current definition and application of LCA Flags to pipelines. Marsden Jacob does not consider the LCA Flag, in its current form, provides sufficient information to enable an efficient response by producers and users to a failure of gas infrastructure.

2.3.3 Definition of large user facilities (>10 TJ/day)

Under current GSI Rules, individual facilities which produce or consume less than 10 TJ/day and pipelines with capacity less than 10 TJ/day are currently exempt from the obligation to provide gas capacity and flow data. This exemption was designed to reduce the administrative requirements for smaller participants in the gas market to comply with GBB requirements.

In its submission, CPMM argued that the 10 TJ/day threshold is too high and should be lowered to 5 TJ/day.¹⁰ The rationale that CPMM put forward¹¹ for lowering the threshold was that it would result *“in improved volume accuracy, transparency and industry completeness and so that data accuracy can be relied on more which may in turn enhance gas trading activities in the short term gas supply market. This will be particularly relevant for the small gas participants who may not be fully committed to contract for long term gas or long term gas transport arrangements.”*

⁹ DBP, *Submission to Review of GBB Zones*, received 30 June 2015, p. 3.

¹⁰ CPMM, *Submission to Review of GBB Zones*, received 30 June 2015, p.3.

¹¹ *Ibid*, p.3.

The lowering of the threshold was also raised informally by several other market participants in discussions with Marsden Jacob prior to the release of the Draft Report.

While out of scope for this study, Marsden Jacob suggests that the IMO consider lowering the threshold for large user facilities to 5 TJ/day to help increase the transparency of gas use in the State and improve opportunities for trade, especially between producers and gas users.

2.3.4 Broader GBB Review

Discussions with stakeholders and feedback in submissions generally suggested wide-spread support for the GBB and the IMO's work towards developing the GBB (and GSOO). However, a couple of submissions queried that a broader review (or cost benefit analysis) of the GBB is required.

The CME suggested the IMO should undertake a broader review of the GBB and related services in order to streamline or remove any unnecessary components. APPEA submitted: *“Rather than make incremental changes to the Zones, the IMO needs to take a holistic view of the data presented on the GBB to ensure that it meets not only the GSI Objectives, but the needs of the WA gas industry”*¹² ESAA also queried a review of the GBB Zone in the context of a broader cost benefit analysis.

Santos further argued that the GBB Zone information does not meet the GSI objectives and that a review of the GBB be undertaken to establish which parts meet the GSI Objectives.

A number of constructive suggestions and areas of investigation were raised in discussions and submissions – not all of which were in scope. We consider the market is at a stage where it is comfortable with and has good knowledge of the GBB and GSOO developments. Given the period of time over which these developments have been working (since 2013), now is the time when effective and efficient design developments may be progressed in relation to these services.

While several participants requested a broader review of the GBB, Marsden Jacob have the view that incremental design improvements to ensure that the GSI Objectives are better met are likely to provide more immediate benefits and that such changes align more appropriately with the current maturity of the market and use of the GBB.

¹² APPEA, *Submission to Review of GBB Zones*, received 30 June 2015, p.1.

3. Review of current GBB Zones and potential options for reform

As outlined in the previous chapter, the Draft Report made six preliminary recommendations. This section of the report addresses each draft recommendation in turn, summarises responses received and outlines Marsden Jacob’s final recommendation, including the rationale for that recommendation.

3.1 Draft Recommendation 1: Remove the definition of Zones from the GSI Rules

3.1.1 Draft finding

The prescription of the Zones within Schedule 2 of the GSI Rules is unnecessary and adds to the regulatory burden for the IMO and market participants. The inability for new transmission pipelines to be efficiently included within Zones results in the IMO being unable to publish intended Zone information following commission of the new pipelines in the absence of a Rule change. The Rule change process, while a relatively small regulatory burden in comparison to other regulatory costs, is still an unnecessary obligation. Further, the level of regulatory oversight is not warranted based on the type of information provided by the pipelines.

Marsden Jacob recommends removal of the Zones prescription from the GSI Rules (by deleting the reference in rule 82 to Schedule 2 – list of GBB Zones) to allow the IMO greater flexibility in amending the Zones to suit market needs going forward.

3.1.2 Stakeholder feedback and further consideration

Five participants provided feedback on this recommendation with four of the five participants supporting the recommendation.

Alinta stated in its submission:

*“Alinta supports the Review’s proposal that the Zones be included in the existing GSI Procedure for Operation of the Gas Bulletin Board and the Emergency Management Facility. Incorporating the schedule of Zones in this Procedure would provide the IMO with an appropriate level of flexibility to accommodate new pipelines within the relevant Zone to ensure consistency between reporting by Zone and reporting by Facility”.*¹³

APA also supported the proposal, but stipulated that there needs to be an appropriate governance process in place and that any proposed changes should be *“kept to a minimum and adequately consider continuity of information”*.¹⁴

The DBP opposed the recommendation on the basis that it believes the existing arrangements provide sufficient regulatory oversight and that the addition of new energy infrastructure (e.g.

¹³ Alinta Energy, *Submission to Review of GBB Zones*, received 29 June 2015, p. 2.

¹⁴ APA, *Submission to Review of GBB Zones*, received 30 June 2015, p. 1.

pipelines and gas production facilities) can be foreseen by the IMO and that Rule changes can be put into effect to allocate pipelines to Zones¹⁵:

“DBP believes that having zones defined in the GSI Rules affords the appropriate level of regulatory oversight. While DBP notes there are some changes occurring to energy infrastructure throughout the State that will require further rules changes to update the GBB zones these changes are very infrequent.

Additionally, the IMO through the Gas Statement of Opportunities has a forward looking monitoring role that would allow it to plan required rules changes well in advance. Also the inclusion of the Fortescue River Gas Pipeline into the Pilbara Zone is evidence that the required rule change is not an overly burdensome process for the IMO or stakeholders.

DBP would not expect future rule changes would be required to be completed on an urgent basis as the commissioning of new pipeline assets are well known by all participants well before inclusion is required on the GBB.”

The DBP said that changes to energy infrastructure in the state are relatively infrequent. However, recent and current projects that could potentially involve Rule changes to incorporate pipelines into various Zones include the following:

- Fortescue River Gas Pipeline (2014);
- Wheatstone Ashburton West Pipeline (WAWP) which connects the Wheatstone Domestic Gas Production facility to the DBNGP at CS2 (2016);
- Gorgon gas facility and pipeline connecting to the DBNGP (2015);
- Ashburton to Onslow Gas Pipeline (AOGP) which connects the proposed Onslow Power station to the DBNGP (2015);
- Eastern Goldfields Gas Pipeline (2015) which connects to the GGP.

Conducting a Rule change process for the addition of each new pipeline is, in Marsden Jacob’s view and as well as the majority of market participants’, unnecessary given the relatively low importance of the information to active market participants (refer to section 2.3.1).

In the Draft Report, Marsden Jacob raised the option to include the description of the Zones (which are currently included in Schedule 2) within the existing ‘*GSI Procedure for Operation of the Gas Bulletin Board and the Emergency Management Facility*’.¹⁶

This suggestion was supported by Alinta, and is also likely to be acceptable to DBP given the governance arrangement provided for in GSI Procedures.

3.1.3 Final recommendation one

Consistent with the draft recommendation, Marsden Jacob recommends removal of the Zones prescription currently included in Schedule 2 from the GSI Rules (via an amendment to rule 82) to allow the IMO greater flexibility in amending the Zones to suit market needs going forward.

¹⁵ DBP, *Submission to Review of GBB Zones*, received 30 June 2015, p.6.

¹⁶ This procedure includes detail on publishing information on the GBB which the IMO must follow. Section 4.1 of this procedure currently refers to publishing network representation – Zone information – which could be amended to include Zone definitions.

Refer to: Marsden Jacob Associates, *Draft Report: IMO GBB Zones Review*, June 2015, p.23

Further to the Draft Recommendation, Marsden Jacob recommends that the prescription of the Zones which is removed from the Rules be included in a GSI Procedure, on the basis that this would provide continued and appropriate regulatory oversight (including consultation requirements regarding changes).

3.2 Draft Recommendation 2: Publish nominations and forecasts for individual facilities

3.2.1 Draft finding

The usefulness of current Zones is limited by the aggregate nature of the data. Marsden Jacob's Draft Report considered that the market may benefit from the publication of nominations and forecasts for individual facilities. That the information would give market participant's greater visibility of gas production outages, and improve both the preparation and management of actual or potential gas supply disruption events.

In particular, the publication of gas nominations and forecasts for receipt points for production facilities would enable opportunities for trade with various production facilities to be more readily identified by large gas users. Particularly within the Dampier Zone which currently accounts for 97% of gas production in the State, and will grow to almost 98% with the commencement of the Gorgon and Wheatstone gas production facilities.¹⁷

The Draft Report highlighted that, in the case of large user facilities, commercial sensitivity concerns in relation to the release of actual delivery data have been raised and adequate substantiation of these claims provided. In contrast, the IMO cannot cite any evidence from large users, producers or storage facilities in relation to the commercial sensitivity of the release of individual receipt or delivery nominations and forecasts as this issue was not expressly considered in the design of the GBB.

We noted that publication of gas nominations and forecasts for large user facilities may benefit the market, however, most participants indicated that this is relatively less important given the significantly lower concentration of large user facilities relative to producers. It could be more meaningful to publish aggregate nominations and forecasts for common owners and/operators of large user facilities exceeding 100 TJ/day, such as Alcoa, Synergy or Alinta.

We recommended, and sought feedback on, whether publishing nominations and forecasts for individual facilities would benefit the market, or alternatively cause issues for any market participant.

3.2.2 Stakeholder feedback and further consideration

Five participants provided feedback on Recommendation 2. Three of the five participants agreed with the recommendation (two pipeline operators and a large gas user).

APA supports the recommendation on that basis that:

“it is in the interests of providing transparent information to all parties in the industry not just certain parties with particular contractual arrangements. The intent of the Bulletin Board is to improve information transparency and this recommendation will help

¹⁷ IMO, *Gas Statement of Opportunities – December 2014*, p. 39.

ensure that all parties are equally placed to deal with short term changes in supply and demand dynamics”¹⁸

The DBP also agreed with the recommendation stating:

“the GBB should include gas nominations and production facilities forecasts that would allow for greater visibility of gas production outages”¹⁹

However, Alinta and ESAA were each opposed to the recommendation on the basis that it provided commercially sensitive information on gas user facilities, which may disadvantage users in negotiations with gas producers, and may also disadvantage gas fired generators operating in the WEM. Alinta stated that:

“Publishing ex ante forecasts weakens the position of downstream users in procuring any necessary make-up supplies on economic terms and therefore in Alinta’s view is inconsistent (with) the GSI Objective (d), “the facilitation of competition in the use of natural gas services in the State”. As well, mandating 7 day delivery forecasts for Large User Facilities supplying electricity to the WEM would impose a disadvantage for no benefit in either the gas or electricity markets.”²⁰

The ESAA also argued that mandating publication of 7 day delivery forecasts for large use facilities would disadvantage gas fired generators in the WEM:

“For the electricity generation sector, the publication of nominated and forecast gas flow data for gas-fired generation facilities risks revealing commercially sensitive information about production, an unintended consequence of which may be the introduction of distortions to the electricity market. This issue would arise due to the information asymmetry created between gas-fired generation facilities and those reliant on other fuels, particularly diesel fuelled peaking plant.”²¹

Furthermore, the ESAA explained:

“non- gas fired generation facilities would be able to adjust their short term trading positions in response to knowing gas has been nominated to a particular gas fired generation facility. This could occur well in advance (and in private) of electricity market information being made available.”²²

If large use facilities are commercially disadvantaged by the publication of gas nominations and forecasts, then gas users could deliberately provide inaccurate nominations and forecasts to protect their commercial positions in either the gas market or the WEM (for gas fired generators). This would not be consistent with the GSI Objectives.

In the Draft Report, Marsden Jacob indicated that while the publication of gas nominations and forecasts for large user facilities could be of benefit to the market, the larger benefit is likely to arise from publication of gas nominations and forecasts for individual production facilities – due to the identification of opportunities for trade in response to production outages.

¹⁸ APA Group, *Submission to Review of GBB Zones*, received 30 June 2015, p.1.

¹⁹ DBP, *Submission to Review of GBB Zones*, received 30 June 2015, p.1.

²⁰ Alinta, *Submission to Review of GBB Zones*, received 30 June 2015, p.3.

²¹ ESAA, *Submission to Review of GBB Zones*, received 30 June 2015, p.2.

²² Ibid, p.2.

Treating producers and users equitably in the provision of gas information is an important consideration. That is, if large users are not required to publish nominations and forecasts, then individual gas facilities should not be required to publish this information either.

Alinta noted:

“As a matter of consistency of principles, Alinta can see no justification for ex-ante publication by facility of production or consumption forecasts.”²³

3.2.3 Final recommendation two

Marsden Jacob has considered, in light of discussions with DBP and the IMO (see section 2.3.2) the role of LCA Flags, and the importance of publishing nomination and forecast data for production facilities.

The ability for forecasts and nominations to signal opportunities in response to unplanned outages is limited by the fact that currently nominations are only provided by shippers to pipeline operators on a daily, ex-ante basis, who then provide the information to the IMO. By not obtaining data directly from producers, the market will not be aware of unplanned gas production outages during the gas day. This inhibits an effective response by users and other gas producers to the failure of gas production facilities.

To maximise the effectiveness of the LCA Flag, it needs to be timely, accurate and facilitate an appropriate response. We consider that more work can be done in relation to the GBB design features which are beyond the scope of this review. This includes considering the role of LCA Flags, signals to the market regarding potential supply imbalances (either producer or consumer driven), and information about gas infrastructure failures that could potentially cause disruption to customers, termed ‘near misses’.

Within the context of this review, Marsden Jacob still recommends that nominations and forecasts for individual gas production facilities should be published on the GBB. This recommendation reflects the critical importance of individual gas production facilities to facilitate trade and the impact of a single gas plant outage on the delivery of gas to end users across Western Australia. Production facilities have a more significant individual impact on the market than individual users and hence, the monitoring of activity is arguably more important. It also considers no commercial sensitivity objectives have been substantiated in regards to the release of this information.

The publication of individual large user facilities data could also be useful to improving the efficiency of the market, for example, in facilitating the secondary sale of gas between users. On the other hand, the number of gas user facilities are less concentrated and changes in gas usage at the facility level does not have much impact on overall market outcomes. In addition, many large user facilities have common ownership (e.g. Synergy, Alinta, and BHP), where changes in portfolio gas usage can have significant impacts on market outcomes.

If gas producers are required to publish gas nominations and forecasts, rather than requiring each individual large user facility to also publish nominations and forecasts, nominations and forecasts by gas users could be published on the GBB on a portfolio basis (e.g. common ownership). For example, all portfolio gas users with a maximum capacity exceeding 50 TJ/day could have nominations and forecasts published on the GBB. Nominations and forecasts for individual facilities (> 10 TJ/day), or a portfolio of facilities less than (say) 50 TJ/day, would not have gas use data published on the GBB.

²³ Alinta, *Submission to Review of GBB Zones*, received 30 June 2015, p. 3.

By only ensuring that large gas use portfolios are published, this would ensure that owners of individual large user facilities are not disadvantaged in negotiations with gas suppliers for short term gas, and will ensure that individual gas fired power generators are not disadvantaged in the WEM relative to non-gas fired power generators.

Marsden Jacob recommends the publication of large user facilities data on a portfolio basis but acknowledges that there will be a range of issues that would need to be addressed, such as the minimum portfolio size (e.g. 50 TJ/day) that determines when gas nominations and forecasts are published.

Our Final Recommendation is for the IMO to consider a Rule change to:

- allow nominations and forecasts for individual production facilities to be published (rather than this information being published on a Zones basis);
- allow nomination and forecasts for larger users to be published in an aggregated or portfolio (but non Zone) basis.

The Rule change process to implement these recommendations necessitates a consultation process. During that consultation process the level of aggregation at which larger user data might suitably be published should be defined.

3.3 Draft Recommendation 3: Capture Large Use Facility data for non-GBB Pipelines

3.3.1 Draft finding

The Draft Report suggested that the gas use data for the proposed Onslow Power Station may be lost if the Ashburton to Onslow Gas Pipeline (AOGP) was not directly connected to a GBB Pipeline, but was connected to a gas lateral (i.e. the Wheatstone Ashburton West Pipeline or WAWP) that was connected to a GBB Pipeline. In effect, the flow data for the power station would be netted off at the receipt point of the WAWP into the DBNGP (at Compressor Station 2 or CS2).

Subsequently, the DBP has indicated that both the AOGP and WAWP will be connected directly to the DBNGP (a GBB Pipeline) and that there is no interconnection between the AOGP and the WAWP.²⁴ As the AOGP will be directly connected to the DBNGP, Onslow Power Station information will be required to be published on the GBB if the maximum capacity for the facility exceeds 10 TJ/day.

While in the above case, the gas use information for the Onslow Power Station would be published on the GBB (in aggregate, or at the facility level if maximum gas use exceeds 10 TJ/day), Marsden Jacob raised the possibility that future gas developments could give rise to a situation where gas flow data to a large gas user is not published on the GBB. This loss of transparency for a significant gas user, in our view, is not consistent with the objectives of the GBB.

These issue could be overcome by requiring that a gas lateral register as a GBB Pipeline. In order to reduce the regulatory burden upon owners of gas laterals to register as GBB Pipelines, Marsden Jacob recommended that the definition of large user facilities could be extended to capture gas supply from non-GBB pipelines.

²⁴ Email from DBP to the Marsden Jacob and the IMO dated 7 July 2015.

3.3.2 Stakeholder feedback and further consideration

Four participants provided feedback on Recommendation 3. All four participants supported the recommendation that capturing large use facility data for non-GBB pipelines is consistent with the intent of the GBB.

The ESAA saw merit in this recommendation as it would ensure that only major pipelines are classified as GBB pipelines and reduce reporting requirements for operators of smaller pipelines. The ESAA stated that there should be consideration of whether this would result in the disclosure of commercially sensitive data for specific facilities.

3.3.3 Final recommendation three

We recommend that the definition of large user facilities should be extended to capture gas supply from non-GBB pipelines. However, given that this situation has yet to emerge, this is a lower priority recommendation compared to others made in this report.

3.4 Draft Recommendation 4: Division of the current Dampier Zone

3.4.1 Draft finding

Gas production, pipeline interconnections and large user facilities are highly concentrated within the current Dampier Zone. The Draft Report suggested that the locations and nature of production and user facilities along the DBNGP pipeline mean that some supply disruption events, which would be indicated to the market via LCA Flags, could be extremely localised and that the short term trading opportunities would therefore require a more localised signal.

Marsden Jacob suggested that the usefulness of the LCA Flag for the Dampier Zone and the aggregate level of the receipt and delivery forecast and nomination data would be more useful to the market if the Zone were further segmented. Some of the benefits from the signal from an LCA Flag colour change were highlighted as being of assistance in managing risks, facilitating trade or providing information which enables market participants, policy makers and regulators to understand supply risks in this critical gas region of the State.

Two proposed options to reform the Zone breakdown for this region were considered in the Draft Report:

- Option 1: Dampier Zone split at Compressor Station 1 (CS1) on the DBNGP; and
- Option 2: Dampier Zone split at CS1, and CS2 on the DBNGP.

Marsden Jacob's Draft Report recognised the interactions between our second recommendation – to publish nominations and forecasts for delivery and receipt point – with any recommendation to segment the Dampier Zone. On this basis, we recommended Option 2.

3.4.2 Stakeholder feedback and further consideration

Six participants provided feedback on Recommendation 4. Four participants (3 gas users and 1 pipeline operator) supported the recommendation.

CPMM supported the further segmentation of the Dampier Zone and nominated Option 2 as its preferred proposal. CPMM's rationale for supporting the further division of the Dampier Zone was:

“From a supply and demand perspective, the reformed GBB Zones data are likely to play a role in identification of short term trading opportunities and helping to ensure the efficient management of any temporary supply and demand imbalance in the market. CPMM considers this another small step forward in maturing the short term gas trading market so that a more reasonable segment of zones and more transparency of data is available to all gas market and reliant industries.”²⁵

CPMM further argued that getting transparency on future Gorgon and Wheatstone gas production will not only improve transparency, but also:

“have a positive influence on competition and developing commercial gas transactions over the long term.”²⁶

Both the APA and ESAA were supportive of the further segmentation of the Dampier Zone provided that it does not reveal commercially sensitive information. However, BHP Billiton opposed the recommendation, on the basis that it *would* reveal individual production facility information for the Macedon gas facility, prior to the commencement of gas production from the Wheatstone and Gorgon gas facilities.

In Recommendation 2, Marsden Jacob have proposed that the nominations and forecasts for individual gas production facilities should be published on the GBB. If adopted, the major benefit of further segmentation of the Dampier Zone would be to display LCA Flags for individual segments of the DBNGP to highlight localised gas supply problems. However, the DBP is concerned that the creation of more Zones (and hence, more LCA Flags) would not assist in understanding the likelihood of gas supply disruptions within Zones along the DBNGP. As a result, the DBP did not support this recommendation.

DBP’s rationale for this was outlined in section 2.3.2. Put simply, the LCA don’t indicate the nature of the interruption is (i.e. production facility or pipeline outage), which may not provide sufficient information to producers or users of gas to assist them to respond efficiently. If more visibility on individual gas production capacity and flows is not available, DBP suggested that the design of LCA flags criteria in the GSI Rules should be reviewed prior to further segmentation of the GBB Zones.

DBP also argued that there should be a single LCA Flag for the DBNGP, given the concentration of gas users in the South West Zone at the lower end of the pipeline:

“70% of all deliveries are made to the South West requiring the vast majority of the gas to be transported the entire length of the pipeline. It is for this reason, if there is a pipeline operational issue in the north and there are is a possibility for curtailment of pipeline services DBP is almost always going to be required to update all LCA flags along the length of the DBNGP.”²⁷

Clearly, if individual gas production facility data is available (i.e. capacity, flow, outages), then there would be less requirement for the DBP to publish separate LCA information by Zone. However, the Zones will still be required to provide users with summary information on the demand and supply of gas within a region, which may be important in facilitating trade in gas.

²⁵ CPMM, *Submission to Review of GBB Zones*, pp. 2-3.

²⁶ *Ibid*, p.3.

²⁷ DBP, *Submission to Review of GBB Zones*, received 30 June 2015, p.3.

3.4.3 Final recommendation

In the Draft Report, Marsden Jacob recommended further segmentation of the Dampier Zone to enable greater transparency of information to market participants which is useful in the management of gas supply disruption events within the region and to facilitate trade.

DBP highlighted that the current definition of the LCA flags, which combines gas production and pipeline reliability, and the availability of contracted and physical gas supplies, does not provide sufficient information to producers or users of gas to assist them to respond efficiently to the alert. DBP suggested that there should be separate reliability flags for pipelines and individual gas production facilities that should be updated regularly, to allow market participants to respond appropriately.

Marsden Jacob concurs with this view and recommended in section 2.3.2 that the IMO should undertake a review of the current definition and application of the current LCA Flags.

Marsden Jacob believe that the GSI objectives are best served by adopting Recommendation 2 (i.e. publish individual production and portfolio user facility nominations and forecasts) and creating separate reliability indicators for gas production facilities and pipelines. If both of these changes were implemented, then there would be no requirement to segment the LCA by Zones along the DBNGP since market participants could obtain sufficient information from the separate production facility and pipeline reliability indicators. This further implies that a single LCA Flag is required by a GBB Pipeline.

Marsden Jacob does not recommend that the Dampier Zone be further segmented.

3.5 Draft Recommendations 5 and 6: IMO adopt Guidelines for GBB Zones

3.5.1 Draft findings

Following Marsden Jacob's first draft recommendation - to remove the prescription of the GBB Zones from Schedule 2 of the Rules – guidelines were developed for:

- the allocation of new pipelines to GBB Zones (Draft Recommendation 5); and
- the revision of GBB Zones (Draft Recommendation 6).

The draft guidelines are shown in Figure 1 and Figure 2 respectively.

Marsden Jacob's Draft Report recommended the IMO adopted each of these Guidelines to facilitate administration of Zone updates as market developments arose and provide transparency to market participants as to the likely allocation of new pipelines and facilities into Zones.

Figure 1: Guidelines for allocation of new pipelines to GBB Zones

If a gas pipeline has the following characteristics:

- is located within a single economic region of Western Australia where gas production and/or consumption occurs e.g. Pilbara, Perth, South West;
- is adjacent to an existing GBB Zone;
- is connected directly to an existing GBB pipeline;
- has only gas production receipt points or only user delivery points connected to the pipeline (not a mix of both) – implying that gas flows are typically one-way;

Then, allocate the pipeline to an existing GBB Zone. If not, consider creating a GBB Zone for the new pipeline or allocating the pipeline across multiple Zones (as is the case for the DBNGP and GGP).

Figure 2: Guidelines for the revision of GBB Zones

If the addition of new facilities to a GBB Zone implies the following:

- receipt points (e.g. production, pipelines, storage) and/or delivery (pipelines, storage and or User) are highly concentrated with a GBB Zone;
- the clustering of various facilities in a region enable a gas disruption event to be remedied within a sub-region of an existing GBB Zone (no impacts on other gas production/consumption regions);

Then, consider disaggregating the GBB Zone into multiple Zones to ensure that participants receive accurate information on the supply status of that gas production/consumption region.

3.5.2 Stakeholder feedback and further consideration

Five participants provided feedback on Recommendations 5 and 6.

ESAA and Alinta both commented on the reduction in the administrative burden through the collective support of Recommendations 1, 5 and 6. APA also submitted that Recommendation 5 and 6 appeared reasonable.

In relation to Recommendation 5, DBP submitted:

“there would be benefit in having greater guidance as to how new pipelines would be included in Zones.”²⁸

However, DBP also submitted it would be valuable to have some degree of flexibility in the way that pipelines are allocated to Zones given the future focus of the criteria, and also that a separate consultation process for the development of guidelines would be appropriate.

In relation to Recommendation 6, DBP provided only conditional support for guidelines in relation to Zones revisions:

“DBP does not consider that the MJA guidelines are adequate enough to address the future revision of GBB Zones, are highly subjective and are likely to lead to the continual segmentation of Zones.”²⁹

However, DBP also advised that should the IMO progress with a Rule change to remove the GBB Zones from the Rules, a consultative process on the development of appropriate guidelines would be required to ensure all issues are addressed. Further, DBP noted:

“it would be valuable to have some degree of flexibility in the way pipelines are allocated to zones as it is hard to predict the circumstances of future pipeline developments. This would be best achieved by developing guidelines contained in separate documentation to procedures or rules. The development of guidelines for inclusion of new pipelines should be subject to a separate consultation process.”³⁰

²⁸ DBP, *Submission to Review of GBB Zones*, received 30 June 2015, p.7.

²⁹ Ibid, p.8.

³⁰ Ibid, p.7.

In relation to governance and consultation requirements for the guidelines, Alinta noted:

“Alinta notes recommendations 5 and 6 refer to guidelines to be adopted by the IMO in respect of allocating new pipelines to GBB Zones and review of GBB Zones respectively. Alinta recommends that these guidelines be incorporated as Procedures under the GSI Rules.”³¹

Santos submitted that there would be no benefit in proceeding with either of the Guidelines on the basis that the Zones (more broadly) were not useful to the market.

3.5.3 Final recommendation four

The development and adoption of these guidelines is focused on reducing the regulatory process for GBB Zones administration going forward – a finding which is supported in submissions.

The guidelines also serve to complement the revised governance arrangements for Zones (as per Final Recommendation One).

As several submissions have observed, Recommendations 1, 5 and 6 from the Draft Report are related. Marsden Jacob recommends the IMO consider these recommendations simultaneously to ensure appropriate regulatory oversight and sufficient guidance to accommodate future market developments.

We recommend that the IMO develop guidelines in consultation with stakeholders as part of the process to remove the prescription of GBB Zones from the Rules and include these in a GSI Procedure.

We acknowledge that the Guidelines for Revision of the GBB Zones (Draft Recommendation 6) were viewed as inadequate by the DBP and that there is scope for improvements in the development of the Guidelines as part of any future IMO consultation process.

³¹ Alinta, *Submission to Review of GBB Zones*, received 30 June 2015, p.2.

Appendix A: Summary of submissions and Marsden Jacob response

The following table summarises the response by participants to the recommendations made by Marsden Jacob in the Draft Report – Review of GBB Zones, as well as other issues raised by participants.

Where appropriate, Marsden Jacob have provided a response to the issues raised by participants in the last column. Please note, this table is a summary only which includes some text copied directly from submissions. Please refer to the relevant submission to clarify any comments, including the context in which they were provided.

| Participant | Participant Comment | Marsden Jacob Response |
|--|---|---|
| Recommendation 1: Remove the definition of Zones from the GSI Rules | | |
| Alinta | Alinta supports Recommendation 1 on the basis that it would provide the IMO with an appropriate level of flexibility to accommodate new pipelines within the relevant Zone to ensure consistency between reporting by Zone and reporting by Facility. | Response noted. |
| APA | Supports this recommendation, subject to an appropriate governance process being in place. Changes need to be kept to a minimum and adequately consider continuity of information. | Response noted. |
| CPMM | Supports this recommendation. | Response noted. |
| ESAA | Broadly supportive on the basis that it contributes to minimising the regulatory burden and provides greater flexibility to amend GBB Zones as required. | Response noted. |
| DBP | DBP does not support this recommendation. The DBP believes that having zones defined in the GSI Rules affords the appropriate level of regulatory oversight and that changes required to accommodate new infrastructure are rare and can be accommodated under current processes as evidenced by the Rule change required to allocate the Fortescue River Gas Pipeline into the Pilbara Zone. | <p>Current projects that could potentially involve Rule changes to incorporate pipelines into various Zones include the following:</p> <ul style="list-style-type: none"> • Wheatstone Ashburton West Pipeline (WAWP) which connects the Wheatstone Domestic Gas Production facility to the DBNGP at CS2 (2016); • Gorgon gas facility and pipeline connecting to the DBNGP (2015); • Ashburton to Onslow Gas Pipeline (AOGP) which connects the proposed Onslow Power station to the DBNGP (2015); • Eastern Goldfields Gas Pipeline (2015) which connects to the GGP. |

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| | | It should be noted that if Recommendation One (Remove the definition of GBB Zones from the GSI Rules) is implemented, the consultation process that will remain in place will be the same as the fast track rule change process (the approach adopted to amend the Zones for the FRGP) |
| Santos | Santos believes that the zones serve no value to the market and could be removed altogether thus reducing the cost to industry. The zones do not result in any greater transparency to the market or increase competition. | It is our understanding that the regulatory burden of publishing Zone based data is low. A relatively higher regulatory burden is placed on pipeline operators for the provision of pipeline and facility level data. Most of the cost of GBB data provision is in the development of standard reports by pipeline operators; which is an upfront cost. The ongoing costs of providing the reports to the IMO would be relatively low. |
| Recommendation 2: Publish nominations and forecasts for individual facilities (in particular gas production facilities) | | |
| Alinta Energy | Alinta does not support Recommendation 2 for two reasons: It would compromise participants' abilities to manage their gas trading positions on a fair and equitable basis in a highly concentrated supplier market. Not consistent with GSI Objective (d) – facilitating competition in use of natural gas. Publication of 7 day gas forecasts for gas fuelled electricity generators would highlight intended trading positions in the Wholesale Electricity Market (WEM), therefore providing a competitive advantage to non-gas generators. Not consistent with the principle of competitive neutrality. | If large use facilities are commercially disadvantaged by the publication of gas nominations and forecasts, then gas users could deliberately provide inaccurate nominations and forecasts to protect their commercial positions in either the gas market or the WEM (for gas fired generators). This would not be consistent with the GSI Objectives. If this is a significant issue, aggregation of nominations and forecasts by gas users (portfolio basis) may be more appropriate than publishing data at the facility level. However, further evidence of disadvantage to both gas and electricity market participants should be provided to substantiate claims that large user facility level nominations and forecasts shouldn't be provided. |
| APA | Supports the recommendation on the basis that it provides transparency to all parties in the industry and not just those with particular contractual arrangements. Will assist all parties to deal with short term changes in supply and demand. | Response noted. |
| CPMM | Supports this recommendation. | Response noted. |
| ESAA | Not supportive since this risks revealing commercially sensitive information and the inequitable treatment of certain supply and end-user facilities. More particularly: <ul style="list-style-type: none">• If a gas producer is unavailable and a gas user is required to seek alternatives, increases bargaining position of alternative suppliers relative to the buyer;• Revealing forecast gas use by large use facilities may disadvantage gas-fired generation facilities operating in the WEM relative to other generators, particularly diesel fuelled. | See above comments in response to Alinta Energy's submission. |

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| | <ul style="list-style-type: none"> Non-gas-fired generation facilities would be able to adjust their short term trading positions in response to knowing nominated gas use by a generation facility. | |
| Santos | <p>Not supportive of this recommendation.</p> <p>The additional burden of providing forecast data and nominations is inappropriate and will not serve any benefit to industry. If producers have ullage in their facility for any reason, they engage with the market should they need to fill this capacity. There may also be valid reasons for not engaging such as maintenance, contractual obligations that mean that the capacity may not be used or reserves considerations. To be clear, there are no impediments to engaging with market participants as discussed in the points above.</p> <p>Further, the additional administrative burden of supplying forecast data and nominations will increase the cost to industry.</p> | <p>Marsden Jacob notes Santos response. While the benefits from release of this data is as yet untested, other submissions and discussions with stakeholders have indicated that producer facility data is of critical importance in understanding and responding to potential gas supply shortfalls.</p> <p>We note that supply of nomination and forecasts data by production facilities is already a function of the existing Rules.</p> <p>Marsden Jacob acknowledges however, that where individuals facilities have been granted an exemption from providing information also provided by a pipeline (an allowance provided so that the IMO does not receive two sets of the same data), this direct provision of the data by production facilities may represent a minor change in processes for some participants. However, we consider the provision of the data is unlikely to be a significant additional burden to industry.</p> |
| DBP | <p>DBP agrees with the recommendation, and in particular, believes that that gas nominations and production facilities forecasts will provide greater visibility of gas production outages.</p> | <p>Response noted.</p> |
| <p>Recommendation 3: Capture Large Use Facility data from non-GBB Pipelines</p> | | |
| APA | <p>Supports this recommendation on the basis that it will help improve transparency; however benefits of extra information needs to be weighed against the costs to provide.</p> | <p>Response noted.</p> |
| CPMM | <p>Supports this recommendation.</p> | <p>Response noted.</p> |
| ESAA | <p>ESAA sees merit in this recommendation as it would ensure that only major pipelines are classified as GBB pipelines and reduce reporting requirements for operators of smaller pipelines. Would need to address whether this would result in the disclosure of commercially sensitive data for specific facilities.</p> | <p>Response noted.</p> |
| DBP | <p>In the particular case of the Wheatstone Ashburton West Pipeline (WAWP) and the Ashburton to Onslow Gas Pipeline (AOGP), the DBP believes that these pipelines should not be registered as GBB Pipelines unless they meet the current criteria in the GSI Rules for GBB pipelines.</p> | <p>In the Draft Report, Marsden Jacob stated that the AOGP would not be connected directly to the DBNGP. DBP have indicated that the AOGP will be directly connected to the DBNGP, which implies that the Onslow Power Station will be captured in the aggregate data for the Dampier Zone (not</p> |

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| | <p>However, the DBP did state that it may be appropriate for the Onslow Power Station to report its own gas usage if it is required.</p> <p>The DBP also indicated that the AOGP is not directly linked to the WAWP and that the AOGP will be directly connected to the DBNGP, implying that if the Onslow Power Station exceeded 10 TJ/day, it would be required to provide facility data to the GBB.</p> | <p>at the facility level since the maximum capacity of the Power Station is likely to be less than 10 TJ/day).</p> |
| <p>Recommendation 4: Division of the current Dampier Zone</p> | | |
| Alinta Energy | <p>Supportive of recommendation.</p> | <p>Response noted.</p> |
| APA | <p>Supports the recommendation as it will help improve transparency, subject to any confidentiality requirements being addressed.</p> | <p>Response noted.</p> |
| CPMM | <p>Supports this recommendation and the adoption of Option 2.</p> <p>Getting improved transparency into the future of the Gorgon and Wheatstone production volumes separate to other gas producer's data will enable gas market participants to have a greater understanding of key gas production facility capacity's which will aid in information transparency and have a positive influence on competition and developing commercial gas transactions over the long term.</p> | <p>Response noted.</p> |
| ESAA | <p>Further segmentation of the Dampier Zone is reasonable provided that it does not reveal commercially sensitive information.</p> <p>Need to ensure large end-user facilities are aggregated to a sufficient level such that individual facility level data cannot be easily determined.</p> <p>Option 1 is supported provided confidentiality issues are addressed.</p> | <p>Response noted.</p> |
| DBP | <p>DBP does not agree with segmenting the Dampier Zone. The arguments raised by the DBP are outlined below under Linepack Capacity Adequacy flags.</p> | <p>Response noted.</p> |
| Santos | <p>The Zones do not result in any greater transparency to the market or increase competition.</p> <p>If producers have ullage in their facility for any reason, they engage with the market should they need to fill this capacity. There may also be valid reasons for not engaging such as maintenance, contractual obligations that mean that the capacity may not be used or reserves considerations. To be clear, there are no impediments to engaging with market participants as discussed in the points above.</p> | <p>Marsden Jacob notes Santos' response. We agree that the definition of concepts related to Zones and provision of individual facility data is likely to provide more market benefits than is being derived from the current use of Zone data.</p> <p>Marsden Jacob also acknowledges that the reasons for supply curtailment may be related to normal operations. For signals to be useful to markets the definitions used in the Rules should distinguish between normal operations and short term issues which cause gas supply shortage. We have recommended the IMO investigate a number of issues in this regard.</p> |

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| | | While Marsden Jacob has not been privy to market participant interactions with regards to trade, some discussions suggested that smaller participants, in particular, find it difficult to know who to engage with on short term trade opportunities based on the current information provided on the GBB. |
| BHP Billiton | BHP does not support the introduction of additional Zones on the basis that until the Gorgon and Wheatstone domestic gas projects commence, this will result in production information from the Macedon project being individually reported, while other major suppliers will continue to have their data provided on an aggregated basis. | Marsden Jacob notes BHP's submission. Given the importance of gas production facilities in terms of supply reliability and the ability to facilitate trade, Marsden Jacob have recommended that the nominations and forecasts of gas production facilities should be published on the GBB (Final Recommendation Two). |
| Recommendation 5: Adopt Guidelines for allocation of new pipelines to GBB Zones | | |
| Alinta | Supportive of recommendation. | Response noted. |
| APA | Supports the recommendation. | Response noted. |
| CPMM | Supports this recommendation. | Response noted. |
| ESAA | Broadly supportive as it will provide a set of transparent guidelines that can be applied to test when/where it may be appropriate to redefine GBB Zones in the future. | Response noted. |
| DBP | While DBP does not agree with the GBB Zones definition being removed from the GSI Rules, they suggest that there is scope for the use of proposed guidelines for the allocation of new pipelines to GBB Zones. | Response noted. |
| Santos | Does not support this recommendation. | Response noted. |
| Recommendation 6: IMO adopt Guidelines for revision of GBB Zones | | |
| Alinta | Supportive of recommendation. | Response noted. |
| APA | Supports the recommendation | Response noted. |
| CPMM | Supports this recommendation. | Response noted. |
| ESAA | Broadly supportive as it will provide a set of transparent guidelines that can be applied to test when/where it may be appropriate to redefine GBB Zones in the future. | Response noted. |
| DBP | Proposed guidelines for the revision of GBB Zones are not adequate and require further consultation if they are to be meaningfully used by the IMO. | Further revision of the Guidelines could be undertaken as part of any future Rule Change process undertaken by the IMO to implement the Guidelines. |

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| Santos | Does not support this recommendation. | Response noted. |
| Awareness, understanding and access of GBB Zone data | | |
| DBP | As a provider of a lot of the information to the GBB, DBP has a good understanding of the GBB Zones. However, as an organisation, DBP rarely has the need to access the GBB. | The DBP view that the Zone data is not valuable was consistent across most participants. In Marsden Jacob’s view, smaller gas players (users or traders), potential new entrants (investors), as well as policy makers who do not have ready access to alternative sources of forecast gas flow and capacity data derive the most value from data provided by the GBB. |
| Current use of GBB Zone information and data | | |
| APPEA | Feedback from APPEA’s members suggest that the GBB Zones information is little used, if at all. | See above. |
| CME | While the Gas Bulletin Board zone information and other geographic supply and demand information may be of potential interest to prospective market entrants, energy policy makers and interested others, CME’s members have indicated limited, if any, use of the zone information in their operations. | See Marsden Jacob response to DBP submission (above). |
| DBP | DBP does not rely on the GBB data to make decisions on its gas market activities. This is not due to the inadequacy in zone break down. Rather, it is because DBP provides the IMO with all information about the DBNGP that is placed on the GBB. DBP suggests that the IMO should review the use of zones information by market participants and determine their usefulness. DBP suspects that Zones are not used and could be removed from the GBB, therefore reducing regulatory costs on all participants. | It is our understanding that the regulatory burden of publishing Zone based data is low. A relatively higher regulatory burden is placed on the DBP for the provision of pipeline and facility level data. Most of the cost of GBB data provision is in the development of standard reports by pipeline operators; which is an upfront cost. The ongoing costs of providing the reports to the IMO would be relatively low. |
| CPMM | In arguing in support of Recommendation 4 of the Draft Report, CPMM indicated that GBB Zone information is useful for policy makers and investment institutions. In addition, the reformed GBB Zones data are likely to play a role in identification of short term trading opportunities and helping to ensure the efficient management of any temporary supply and demand imbalance in the market. | Response noted. |
| Santos | Santos has talked to a large number of industry participants who have indicated that they do not use the zone information. Relevant information is available from other parts of the GBB. | Refer to Marsden Jacob response to DBP comments (above). |
| Linepack Capacity Adequacy flags | | |

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| <p>DBP</p> | <p>DBP is concerned that the Draft Report has over stated the role Linepack Adequacy Indicators (LCA) flags can have in facilitating short term trade and that an alternative approach of requiring stakeholders to provide more information on the causes of supply disruptions in the WA gas market on a timely basis may be more appropriate.</p> <p>Further, if the IMO believes that changes to the LCA flag arrangements are warranted, then the following changes need to be considered:</p> <p>The criteria for each LCA flag colour needs changing to better reflect the likelihood of gas supply interruptions for users. The current definition confuses various concepts, which can imply that even when the flag is green, various shippers may suffer a supply interruption (related to gas production interruptions, not a pipeline interruption). Conversely, a red flag may not result in any supply interruption.</p> <p>There is a strong case for requiring only a single LCA flag for all zones on the DBNGP since 70% of all deliveries are made to the South West requiring the vast majority of the gas to be transported the entire length of the pipeline. If there is a pipeline operational issue in the north, then this will impact services in the south, requiring all LCA flags along the DBNGP to change.</p> <p>Rather than further segmentation of GBB Zones (or even continued maintenance of the current classification of the DBNGP across three zones), the DBP suggest that the above problems could be overcome if forecast flows from production facilities be provided on a facility basis or at least 'LCA flag' equivalent basis for each facility so as to indicate to market participants whether daily commodity nominations are likely to be met or not.</p> | <p>In Marsden Jacob's view, the current arrangement of having an LCA Flag for a pipeline, which combines production and/or pipeline reliability issues, may not provide sufficient information to producers or users of gas to assist them to respond efficiently to the alert.</p> |
| <p>Definition of a large user facility</p> | | |
| <p>CPMM</p> | <p>CPMM considers that the 10 TJ/day threshold for a large user facility is too high and should be lowered to 5 TJ/day. The provision of this additional data will improve volume accuracy, transparency and ensure industry completeness.</p> <p>This will be particularly relevant for the small gas participants who may not be fully committed to contract for long term gas or long term gas transport arrangements.</p> | <p>While out of scope for this study, Marsden Jacob suggests that the IMO consider lowering the threshold for large user facilities to 5 TJ/day to help increase the transparency of gas use in the state and improve opportunities for trade, especially between producers and gas users.</p> |
| <p>Review of GBB Consultation Process</p> | | |
| <p>Alinta</p> | <p>Given the GBB was implemented in August 2013 and this Review, albeit in draft, was released in May 2015, Alinta believes it would have been more beneficial to the market for the IMO to have undertaken the review after the elapse of a longer post implementation period.</p> | <p>It is Marsden Jacob's understanding that the Review of the GBB Zones was required in order to ensure that new infrastructure was adequately incorporated into GBB Zones (e.g. Eastern Goldfields Gas Pipeline).</p> |

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| APPEA | <p>Rather than make incremental changes to the Zones, the IMO needs to take a holistic view of the data presented on the GBB to ensure that it meets not only the GSI Objectives, but the needs of the WA gas industry.</p> <p>APPEA concerned that the IMO is not engaging early with gas market participants to understand the priority areas, appropriate timing and the best method (internal or external) for further review of the IMO's gas information services. The Gas Advisory Board (GAB) is the ideal forum for such early and regular engagement with market participants.</p> | <p>As above.</p> <p>It is Marsden Jacob's understanding that the IMO would run a further consultation process to obtain approval and implement any of the recommendations outlined in the draft report. This includes further discussion at GAB on the next steps.</p> |
| CME | <p>IMO should undertake a broader review of the GBB and related services to ensure the streamlining or removal of any components that are ineffective or unnecessary.</p> | <p>Response noted.</p> |
| Santos | <p>Santos concerned that the GBB Zone information does not meet the GSI Objectives. That the information can be used to assist the activities of the Emergency Management Facility as well as educating newcomers or interested parties. However, Santos does not know of any participant that utilises the Zone information.</p> <p>Santos believes there should be a broader review of the GBB to establish which parts of the service are meeting the GSI Objectives. This review could indicate which parts of the GBB should be streamlined.</p> | <p>Marsden Jacob appreciates that many gas market participants already have access to extensive gas supply information. However, this is not available to the broader community, smaller market participants or potential new entrants.</p> |
| GBB Cost Recovery | | |
| ME | <p>The CME has indicated that its members have little use for Zone based information and that it is inequitable for members to bear the costs of providing this information.</p> <p>The costs of recovering GBB costs should be on the basis of the 'user pays' principle.</p> | <p>It is difficult to attribute GBB costs to various users on the basis of the 'user pays' principle. Industry funding has been an accepted method for the recovery of information services and market operations in many jurisdictions.</p> |



Agenda Item 9: Opportunities to enhance the information published on the GBB

GAB Meeting 20 October 2015

1. Background

At the 15 July 2015 Gas Advisory Board (GAB) meeting, the IMO discussed opportunities to enhance the presentation of data and to increase the amount of information that is published on the Gas Bulletin Board (GBB). GAB members were supportive of the suggested opportunities to enhance presentation of GBB data and expressed a desire to increase the granularity of the data and the timeliness of the data published on the GBB.

GAB members also agreed at the July 2015 meeting that more could be done to reduce time lags on data that is received by the IMO, but noted that the IMO is prohibited from publishing some data under the Gas Services Information (GSI) Rules. The IMO indicated at the meeting that for some of the suggested changes, rule changes would need to be progressed to facilitate the changes.

2. Suggested opportunities

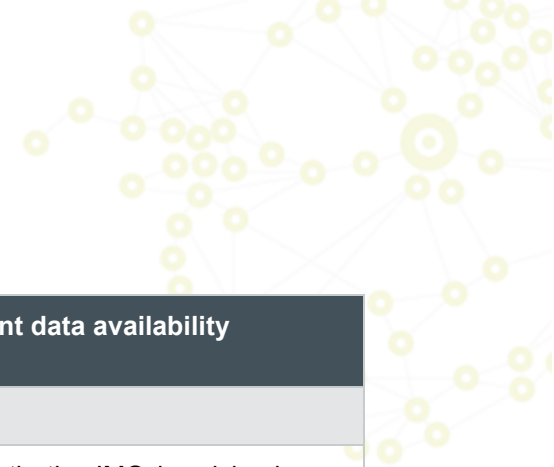
Based on the discussion during the July 2015 GAB meeting, the IMO suggests a number of changes to increase the transparency and useability of information on the GBB, as outlined in the table below.

The table also categorises each enhancement opportunity based on the degree of change that is required to support the initiative (i.e. if a rule change and/or the provision of additional information from Gas Market Participants is required to implement the proposed changes).

3. Recommendations

The IMO recommends that GAB members:

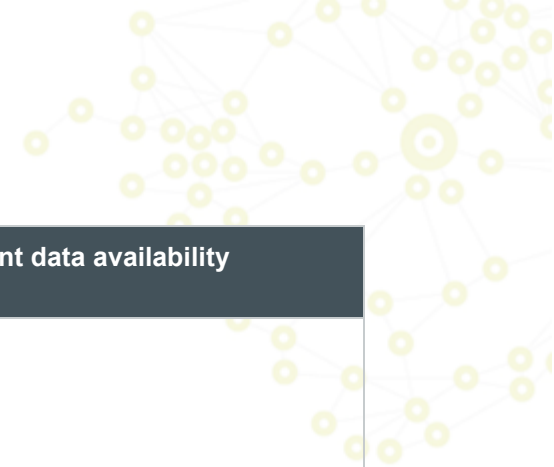
- **discuss** the attached table of enhancement opportunities to GBB data; and
- **agree** on the which of the opportunities should be further pursued by the IMO, including by exploration of necessary rule changes and system changes.



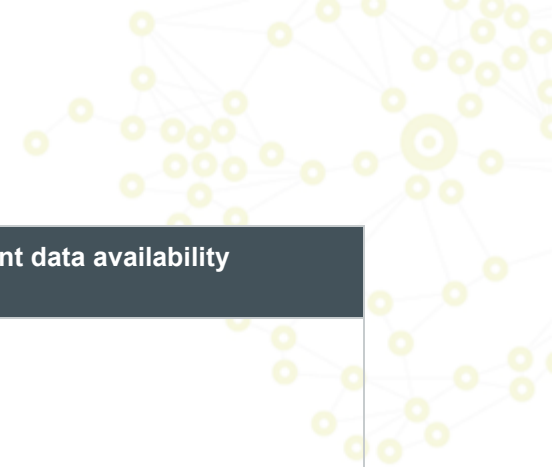
Appendix A. Table of enhancement opportunities

| Opportunities | Comments | Current implications of GSI Rules | Current data availability |
|---|--|---|--|
| Changes can be achieved with no rule changes or new data from Gas Market Participants | | | |
| Publish the Westplan status at the top of the GBB home page. | <p>The feedback from Gas Market Participants on the June 2015 activation of the Emergency Management Facility (EMF) and the Westplan noted confusion between the Linepack Capacity Adequacy (LCA) alert colours and the Westplan status colours. The IMO considers that visibility of the current Westplan status on the GBB would ensure users are able to differentiate between them.</p> <p>The IMO proposes to liaise with the Coordinator of Energy (CoE) and Public Utilities Office (PUO) to determine the likelihood of receiving approval to do this and the consultation required in the event of a change in the Westplan status.</p> | <p>There are no specific GSI Rules preventing the IMO from publishing the Westplan status.</p> <p>Subrule 93(1) allows the CoE to activate the EMF in the event of a changed alert level in the Westplan.</p> | <p>Currently the IMO is advised on a need to know basis by the CoE when the Westplan status has changed.</p> <p>The IMO will need communications and approvals from the PUO to facilitate this change.</p> |
| Changes that require no rule changes but require new data from Gas Market Participants | | | |
| Provide a warning flag on the GBB map where a GBB Facility is on outage or is facing production issues. | At the July GAB meeting. Members discussed the option for Gas Market Participants to voluntarily report on outages and provide additional information, such as the severity of | There is nothing requiring Gas Market Participants to voluntarily provide information on outages under the GSI Rules. Therefore there would not be an associated compliance burden on participants. | The IMO welcomes GAB members' feedback on the potential availability (and usefulness) of information facilitating the publication of a warning flag on the GBB for: |

| Opportunities | Comments | Current implications of GSI Rules | Current data availability |
|---|---|---|--|
| | <p>the outage, for publication on the GBB.</p> <p>Initial investigations indicate that this feature would be most useful for Production and Storage Facilities.</p> | <p>There is also nothing to prevent the IMO from publishing this information on the basis that Gas Market Participants provide it voluntarily.</p> | <ul style="list-style-type: none"> • Production Facilities; • Storage Facilities; and • Pipelines. |
| Changes that require rule changes but no new data from Gas Market Participants | | | |
| <p>Increasing the timeliness of the publication of the GBB reports titled:</p> <ol style="list-style-type: none"> 1. Actual Flows; 2. End User Consumption; 3. Large User Consumption; and 4. Large User Consumption by Category. | <p>At the July 2015 GAB meeting, no concerns over confidentiality were raised with reducing the time lag of data published on the GBB.</p> <p>Submissions to the GBB Zones Review supported reducing the publication lags for the GBB reports. Currently for reports 1 and 2 there is a 30 hour window for Gas Market Participants to provide Daily Actual Flow Data to the IMO, which the IMO then publishes almost immediately. The IMO recommends shortening the submission deadline to 6 hours after the end of the Gas Day.</p> <p>Currently for reports 3 and 4 there is a 2 day window for Gas Market Participants to provide Daily Actual Flow Data to the IMO, after which the IMO waits for five days before publication. The IMO recommends reducing the delay in publication to</p> | <p>The following data is provided to the IMO for Gas Day D on Gas Day D+2:</p> <ul style="list-style-type: none"> • rule 60 - Daily Actual Flow Data for GBB Pipelines; • subrule 68(1) – Daily Actual Flow Data for Storage Facilities; • subrule 73(1) – Daily Actual Flow Data for Production Facilities; and • subrule 78(1) – Daily Actual Consumption Data for Large User Facilities. | <p>The four GBB reports all use Daily Actual Flow Data from submissions provided by Pipeline Operators, and by Facility operators that do not have a data exemption (rules 44 to 47).</p> <p>The IMO compiles the two Large User consumption reports from Daily Actual Consumption Data.</p> <p>No additional data transfers from Gas Market Participants would be necessary. However, a rule change would be necessary:</p> <ul style="list-style-type: none"> • to reduce the submission deadline window for Daily Actual Flow Data by 24 hours to 6 hours; and • to reduce the delay in publication of information under Part 4 of the GSI Rules. |



| Opportunities | Comments | Current implications of GSI Rules | Current data availability |
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| | <p>align the publication of this data with the proposed timeframes for reports 1 and 2</p> <p>The current and proposed publication lags are provided at Appendix B.</p> | | |
| Changes that require rule changes and new data from Gas Market Participants | | | |
| <p>Publishing the Nominated and Forecast Flow Data per Facility.</p> | <p>Currently the IMO publishes the Nominated and Forecast Flow Data aggregated by Zone.</p> <p>Recommendation 2 of the final report of the GBB Zones Review proposes to publish the information by Facility.</p> <p>A rule change would be needed to facilitate the collection of the data by Facility for Large Users and to allow the IMO to publish this information on a per Facility basis.</p> <p>The IMO believes it would be simple to amend the GSI Rules to require Facility-based data to be provided to the IMO and published on the GBB.</p> <p>The IMO has previously noted that Large Users have expressed concerns over the timely release of information. The IMO considers that, in the interests of equitable</p> | <p>Subrules 59 (1) and (2) require that Nominated and Forecast Flow Data for Delivery Points and Receipt Points be provided to the IMO. The IMO publishes this data on receipt, with no lag.</p> | <p>Only minor additional information would need to be collected for instances where more than one Facility is connected to a single delivery or receipt point.</p> <p>The IMO is prevented from publishing Facility-based data at present, and is required to publish data aggregated by GBB Zone.</p> <p>A rule change would be necessary to allow the collection of the missing information, and amendment of rule 83 of the GSI Rules would be required to allow Facility-based data to be published.</p> |



| Opportunities | Comments | Current implications of GSI Rules | Current data availability |
|--|--|--|--|
| | <p>treatment of Gas Market Participants, the publication lags applicable to Large Users Daily Actual Flow Data should be reduced as well as published on a Facility basis.</p> | | |
| <p>Publication of real time gas flow and gas consumption data, provided through the SCADA systems of GBB Pipeline Operators.</p> | <p>At the July GAB meeting, stakeholders expressed an interest in providing real time data to the IMO for the purposes of increasing the timeliness of GBB data and presentation as data visualisations, provided that the Civil Penalty Provisions relating to provision of incorrect data would not apply to real-time data.</p> | <p>The GSI Regulations and GSI Rules currently prohibit publication of data that contains errors or omissions, which are inevitably present in real-time data.</p> <p>The IMO proposes to introduce a rule change to:</p> <ul style="list-style-type: none"> define data in the GSI Rules to provide clear and concise direction to Registered Participants on the parameters for submitting data; and place an obligation on Registered Participants to provide real-time data. <p>The IMO would also liaise with the PUO to ensure that this obligation is not made a Civil Penalty Provision.</p> | <p>Currently the IMO does not receive any real-time data.</p> <p>Gas Market Participants would need to provide real-time data, similar to SCADA data, to the IMO for use in GBB data visualisations.</p> <p>To facilitate this, connection of Registered Participants' server systems to the IMO's servers may be required.</p> <p>The IMO welcomes GAB members' feedback on the costs they would incur if this opportunity is progressed.</p> |

Appendix B. Summary of current and proposed data provision and publication timings

| Data for the Gas Day 8:00 AM Wednesday – 8:00 AM Thursday | Current deadline for Participants provide data to the IMO | Current time published by the IMO | Proposed new deadline/publication by the IMO |
|---|---|--------------------------------------|--|
| Actual flows | 2:00 PM Friday | 2:00 PM Friday | 2:00 PM Thursday |
| End User Consumption | 2:00 PM Friday | 2:00 PM Friday | 2:00 PM Thursday |
| Large User Consumption | 2:00 PM Friday | 2:00 PM Tuesday | 2:00 PM Thursday |
| Large User Consumption by Category | 2:00 PM Friday | 2:00 PM Tuesday | 2:00 PM Thursday |