



# INDEPENDENT MARKET OPERATOR

Independent Assurance Report: Gas  
Services Information Annual Compliance  
Audit of the IMO

## FINAL REPORT

4 November 2015

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**Version no:**

**FINAL**

# EXECUTIVE SUMMARY

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This independent assurance report sets out the results of the market audit conducted by PA Consulting Group (PA) of:

- The compliance of the IMO's internal procedures and business processes with the GSI Rules
- The IMO's compliance with the GSI Rules and GSI Procedures
- The compliance of the IMO's software systems for the GBB and GSI Fees calculations and software management processes with the GSI Rules and GSI Procedures

## Scope

This market audit has been carried out under GSI Rule 174(2):

*The IMO must ensure that the audit covers such matters as the IMO considers appropriate, which must include:*

- (a) the compliance of the IMO's internal procedures and business processes with the Rules;*
- (b) the IMO's compliance with the Rules and Procedures; and*
- (c) the IMO's software systems for the GBB and the calculation of GSI Fees and processes for software management.*

This year's audit has taken the form of an "incremental" audit. This means that we have focussed on:

- IMO business processes and procedures where:
  - Rules in the GSI Rules are new or amended since last year's annual audit
  - Previous audits and our assessment of the IMO's documented procedures have indicated non-compliance risk
  - There have been substantive systems or resourcing changes
  - Our review of the IMO's Internal Procedures has indicated potential non-compliance risk (e.g. gaps or errors in procedural documentation).
- GSI Procedures or Internal Procedures that:
  - Are new or have been updated since last year's annual audit
  - Have been reviewed in previous audits as containing gaps or being non-compliant with the GSI Rules.

In essence, we have looked primarily at areas that have changed since last year's annual audit or areas, which in light of our previous audit findings, we have deemed to pose some non-compliance risk. We have not assessed in detail or commented on areas where the Internal or GSI Procedures and GSI Rules have not changed, and which previously have been found to comply with the GSI Rules.

## Audit period

The period covered by the audit is 1 August 2014 to 31 July 2015.

## Approach

Our audit has been conducted in accordance with Australian Auditing and Assurance Standards Board's 'Framework for Assurance Engagements', ASAE 3000 'Assurance Engagements Other than Audits and Reviews of Financial Information'.

- We provide reasonable assurance under this standard with respect to our review of the compliance of IMO's:
  - Internal Procedures and GSI Procedures and
  - Software systems for the GBB and GSI Fees calculations
 with the GSI Rules provides limited assurance under this standard.
- We provide limited assurance under this standard with respect to our review of:
  - The IMO's compliance
  - The compliance of the IMO's software management processes
 with the GSI Rules and GSI Procedures.

Our approach is briefly described below:

1. To determine the compliance of IMO's procedures and operational compliance with GSI Rules and GSI Procedures (subrules 174(2)(a)&(b)) we have:
  - a. Undertaken a risk assessment to determine which business function areas we will focus on (where areas of risk were determined on an "incremental" basis as described above).
  - b. Reviewed internal procedures and GSI procedures that have changed during the Audit Period to ensure they still comply with the GSI Rules.
  - c. Sought evidence that IMO is performing those business functions so as to comply with the GSI Rules and GSI Procedures. To obtain this evidence we have performed a variety of audit procedures including sample-based compliance testing and business process walkthroughs.
2. To determine the compliance of IMO's software systems and software management processes with the GSI Rules and GSI Procedures (subrule 174(2)(c)) we have:
  - a. Examined documented processes and interviewed IMO staff and reviewed other pertinent information and documentation to compare these to operational practices to assess compliance with the GSI Rules and GSI Procedures.
  - b. Identified all rule and market system changes implemented since the last audit, and determined whether rule changes have been appropriately implemented in market systems, and whether all system changes have been certified as required by subrule 19(1) of the GSI Rules.

We performed one site visit in August 2015 over a period of two weeks.

## Summary of non-compliance incidents

No material incidents of non-compliance were found to have occurred during the Audit Period. There were non-material breaches relating to subrule 85(c), as listed in the table below and described in the body of this report.

**Table 1: Incidents of non-compliance by the IMO**

Type	Subrule	Issue	Comments
GSI Rules: Part 4, Division 2	85(c)	Incorrect publication of Medium Term Capacity Reports	<ul style="list-style-type: none"> <li>• Multiple incidents</li> <li>• Unlikely to have affected participant decisions</li> <li>• Fixed with release of GBB 1.4 Patch 1</li> </ul>

The IMO has implemented a correction in respect of these incidents that removes potential for this issue to occur in the future.

## Opinions

Our opinions are as follows and are subject to the inherent limitations and qualifications set out in Section 1.3.2.

### **Opinion on the compliance of the IMO's Procedures with the GSI Rules**

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with the GSI Rules in all material respects.

### **Opinion on the IMO's compliance with the GSI Rules and GSI Procedures**

We have not observed anything that causes us to believe that the IMO has not been compliant with the GSI Rules and GSI Procedures during the Audit Period in all material respects. We have observed incidents involving non-material non-compliance by the IMO with subrule 85(c) as described in the body of this report.

### **Opinion on the compliance of the IMO's software management processes with the GSI Rules and GSI Procedures**

We have not observed anything that causes us to believe that the IMO's processes for software management are not compliant with the GSI Rules, in all material respects.

### **Opinion on the compliance of software systems for the GBB and GSI Fees calculations with the GSI Rules and GSI Procedures**

It is our opinion that the software used by the IMO in the operation of the GBB, and in the calculation of GSI Fees, is compliant with the GSI Rules, in all material respects.

#### **PA Consulting Group**



Stephen James Thornton  
Member of PA's Management Group

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# 1 INTRODUCTION

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This independent assurance report sets out the results of the market audit conducted by PA Consulting Group (PA) of:

- The compliance of the IMO's internal procedures and business processes with the GSI Rules
- The IMO's compliance with the GSI Rules and GSI Procedures
- The compliance of the IMO's software systems for the GBB and GSI Fees calculations and software management processes with the GSI Rules and GSI Procedures

## 1.1 Scope of the compliance audit

This compliance audit has been carried out under GSI Rule 174(2) which is set out below:

*The IMO must ensure that the audit covers such matters as the IMO considers appropriate, which must include:*

- (a) the compliance of the IMO's internal procedures and business processes with the Rules;*
- (b) the IMO's compliance with the Rules and Procedures; and*
- (c) the IMO's software systems for the GBB and the calculation of GSI Fees and processes for software management.*

This is the second compliance audit of the IMO's obligations under the GSI Rules. It covers the operation of the Gas Bulletin Board (GBB), the Emergency Management Facility (EMF), the Gas Statement of Opportunities (GSOO), and related systems and processes

## 1.2 Audit period

The period covered by the audit is 1 August 2014 to 31 July 2015.

## 1.3 Market audit process

### 1.3.1 Audit approach

We describe our approach to undertaking the audit under subrules 174(2)(a)&(b) and subrule 174(2)(c) separately below.

We performed one site visit in August 2015 over a period of two weeks.

#### **Compliance audit (subrules 174(2)(a)&(b))**

This year's audit has taken the form of an "incremental" audit. This means that we have focussed on:

- IMO business processes and procedures where:
  - Rules in the GSI Rules are new or amended since last year's annual audit
  - Previous audits and our assessment of the IMO's documented procedures have indicated non-compliance risk

- There have been substantive systems or resourcing changes
- Our review of the IMO's Internal Procedures has indicated potential non-compliance risk (e.g. gaps or errors in procedural documentation).
- GSI Procedures or Internal Procedures that:
  - Are new or have been updated since last year's annual audit
  - Have been reviewed in previous audits as containing gaps or being non-compliant with the GSI Rules.

In essence, we have looked primarily at areas that have changed since last year's annual audit or areas, which in light of our previous audit findings, we have deemed to pose some non-compliance risk. We have not assessed in detail or commented on areas where the Internal or GSI Procedures and GSI Rules have not changed, and which previously have been found to comply with the Market Rules.

In conducting the compliance audit (in accordance with GSI subrule 174(2)(a)&(b)), PA has:

1. Ensured that it is up to date with its understanding of, the GSI Rules and GSI Procedures;
2. Identified new or amended obligations placed on the IMO by amendments to the by the GSI Rules and GSI Procedures that have come into force since the start of the audit period;
3. Mapped those obligations identified in step 2 to the applicable GSI Procedures and the IMO's Internal Procedures (as applicable);
4. Undertaken a risk assessment to determine which procedures and business function areas we will focus on. In practice this has meant:
  - a. Identifying IMO Internal Procedures and business functions that relate to areas of non-compliance identified in the previous audit
  - b. Identifying IMO business functions that we deem to be subject to high compliance risk (as a result of discussions with IMO staff or as a result of audit procedures that we have conducted).
5. Reviewed internal procedures and GSI procedures that have changed during the Audit Period to ensure they still comply with the GSI Rules.
6. Sought evidence that IMO is performing those business functions so as to comply with the GSI Rules and GSI Procedures. To obtain this evidence we have performed a variety of audit procedures<sup>1</sup> including:
  - a. Reviewing the GSI Procedures and Internal Procedures identified in steps 2, 3, and 4 for compliance with the GSI Rules
  - b. Compliance testing of rules obligations based on our risk assessment. This involves requesting data, information and meetings (e.g. market data, reports, emails, system logs, system sighting requests, observing IMO staff perform rule mandated activities, etc.) to determine whether IMO has been operationally compliant with its obligations.
  - c. Business process walkthroughs and interviews with respect to selected business functions to:
    - i. IMO business processes are compliant with the GSI Rules, GSI Procedures and relevant Internal Procedures
    - ii. Assess whether IMO applies adequate controls to manage compliance risk.
7. Held discussions with IMO managers and staff to clarify issues identified.
8. Prepared a draft report setting out our findings followed by a final report.

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<sup>1</sup> We performed one site visit in August 2015 over a period of two weeks.

## **Market software and software management audit (subrule 174(2)(c))**

We have approached the audit of systems and software in two components, respectively examining:

1. The IMO's software management processes and controls; and
2. The software itself, including certification status and changes made to the software.

With respect to the software management processes and controls we have:

- Examined the documented processes for software management
- Compared them to actual operational practices through interviews with IMO staff
- Reviewed the compliance of operational practices with the GSI Rules.

With respect to the software changes, we have:

- Reviewed the certification status of each system
- Reviewed all rule changes commencing since the last audit
- Assessed whether a rule change requires a change to the systems
- Reviewed all system changes implemented during the Audit Period
- Assessed whether those changes have potential for material impact on the submission, calculation, or publication of information on the GBB
- Reviewed whether or not those changes have required certification under the GSI Rules.

### **1.3.2 Auditing standard and level of assurance**

Our audit has been conducted in accordance with the Australian Auditing and Assurance Standards Board's '*Framework for Assurance Engagements*', ASAE 3000 '*Assurance Engagements Other than Audits and Reviews of Financial Information*'.

- We provide reasonable assurance under this standard with respect to our review of the compliance of IMO's:
  - Internal procedures and GSI Procedures and
  - Software systems for the GBB and GSI Fees calculationswith the GSI Rules provides limited assurance under this standard.
- We provide limited assurance under this standard with respect to our review of:
  - The IMO's compliance
  - The compliance of the IMO's software management processeswith the GSI Rules and GSI Procedures.

### **1.3.3 Inherent limitations**

There are limitations to any external audit. Audits are not an absolute guarantee of the truth or reliability of agency information or the effectiveness of internal controls. They may not identify all matters of significance. This is because external audit techniques involve:

- Professional judgement as to "good industry and market operational practice";
- The use of sample testing;
- An assessment of the effectiveness of internal control structures; and
- An assessment of risk.

A compliance audit does not guarantee every procedure and action carried out by the IMO in the operation of the gas services, nor does it examine all evidence and every transaction. However, our audit methodology should identify errors or omissions significant enough to adversely affect the decisions of users of the audit report.

Our opinion in this report is therefore subject to the following caveats:

1. Our audit procedures did not include assessing irregularities such as fraudulent or illegal activities. As such, our audit should not be relied upon to disclose such irregularities. However, in the event that we were to detect any fraudulent or illegal activity, we would report this to the IMO. No such findings have been made during this audit.
2. Our audit is not designed to detect all weaknesses in control procedures as it is not performed continuously throughout the audit period and is performed on a sample basis. Specifically, our business process reviews assessing the use of controls were undertaken after the end of the audit year. As such:
  - a. Although our findings are indicative of IMO's practices during the audit year, they do not constitute definitive evidence that IMO applied those controls during the audit year.
  - b. Projections of our findings to future periods carry the risk that:
    - iii. Controls may become inadequate over time due to changes in the GSI Rules or IMO's business processes, procedures and systems
    - iv. Degree of compliance with the control procedures we have reviewed deteriorate over time.
3. We have undertaken a cursory review of the governance of the IMO's internal procedures, and are satisfied that the change management process is robust. However, we have not tested the IMO's operational compliance against its procedure change management policies and have relied on the IMO's list of documented changes to internal procedures. Therefore, there is a very minor risk that unauthorised changes may have been made to internal procedures that we have not reviewed.

### 1.3.4 Materiality

Where non-compliant procedures or actions are identified, these are classified as being:

- Material, in that they do not comply with the GSI Rules and may affect decisions made by gas market participants or otherwise affect the financial position of one or more market gas participants, or
- Non-material, in that:
  - They do not comply with the wording of the GSI Rules but do comply with the intention of the GSI Rules, or
  - They do not comply with the GSI Rules but they are not likely to affect decisions made by gas market participants or otherwise affect the financial position of one or more gas market participants.

## 1.4 Structure of this report

The remainder of this report is structured as follows:

- Chapters 2 through 12 cover the IMO's compliance with each of the ten Parts of the GSI Rules, and Schedule 3.
- Chapter 13 covers the compliance of the GSI systems and the IMO's software management processes.
- Rule changes that have occurred since the last audit are set out in the Appendix.

## 1.5 Acknowledgements

PA would like to thank the managers and staff of the IMO who willingly provided information and shared in discussions with us while we carried out this annual compliance audit.

## 2 PART 1: INTRODUCTORY AND ADMINISTRATIVE MATTERS

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Part 1 of the GSI Rules sets out the Introduction to the GSI Rules and covers areas such as the objectives of the market, conventions and transitional arrangements.

### 2.1 Compliance of Procedures with Part 1 of the GSI Rules

#### 2.1.1 Rule changes

There have been no amendments to Part 1 of the GSI Rules during the Audit Period.

#### 2.1.2 Procedures

##### GSI Procedures

During the Audit Period, there have been no updates to GSI Procedures that relate to the IMO's obligations under Part 1 of the GSI Rules.

##### Internal Procedures

The following Internal Procedures relating to Part 1 have been updated during the Audit Period:

ID	Title	Updated
4.3.1	Annual Review of Committee Composition	July 2015
4.3.2	Committees and Working Groups Secretariat	July 2015

#### 2.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 1 of the GSI Rules.

### 2.2 Compliance with Part 1 of the GSI Rules

#### 2.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Part 1 of the GSI Rules.

#### 2.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 1 of the GSI Rules.

## 3 PART 2: REGISTRATION

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Part 2 of the GSI Rules covers the registration of participants and facilities, including registration, deregistration, transfers, and exemptions.

### 3.1 Compliance of Procedures with Part 2 of the GSI Rules

#### 3.1.1 Rule changes

The following subrules in Part 2 have been amended since last year's annual audit:

**Table 2: Rule amendments to Part 2**

Date	Rule change	Subrules amended
1-Jan-15	GRC_2014_01	36(3) and 36(4)

#### 3.1.2 Procedures

##### GSI Procedures

The following GSI Procedures relating to Part 2 have been updated during the audit period:

- GSI Procedure: "Registration, Deregistration, Exemptions and Transfer"

##### Internal Procedures

No Internal Procedures relating to Part 2 have been updated since last year's market audit.

#### 3.1.3 Relationship between Rule updates and procedures

The extent to which the Rule changes have been reflected in updates to the IMO's procedures is set out in Table 3.

#### 3.1.4 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 2 of the GSI Rules.

### 3.2 Compliance with Part 2 of the GSI Rules

#### 3.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Part 2 of the GSI Rules.

#### 3.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 2 of the GSI Rules.

### 3.3 Details of procedure changes and non-compliance

#### 3.3.1 Rule changes and procedure updates

**Table 3: Relationship between Rule changes to Part 2 and IMO procedure updates**

Rule change	Subrules amended	Description	Procedure updated?
GRC_2014_01	36(3) and 36(4)	Changes to GSI Fee recovery, now 50% from Shippers and 50% from Production Facility Operators.	The GSI Procedure: "Registration, Deregistration, Exemptions and Transfer" has been updated to reflect the changes to these subrules.

#### 3.3.2 Incidents of non-compliance

N/A

## 4 PART 3: PROVISION OF INFORMATION FOR GBB

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Part 3 of the GSI Rules deals with the GBB information requirements pertaining to Gas Market Participants and the various classes of Facilities.

### 4.1 Compliance of Procedures with Part 3 of the GSI Rules

#### 4.1.1 Rule changes

There have been no amendments to Part 3 of the GSI Rules during the Audit Period.

#### 4.1.2 Procedures

##### GSI Procedures

The following GSI Procedures relating to Part 3 have been updated during the audit period:

- GSI Procedure: “Registration, Deregistration, Exemptions and Transfer”

##### Internal Procedures

There are no Internal Procedures relating to the IMO’s obligations under Part 3 of the GSI Rules.

#### 4.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 3 of the GSI Rules.

### 4.2 Compliance with Part 3 of the GSI Rules

#### 4.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Part 3 of the GSI Rules.

#### 4.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 3 of the GSI Rules.



## 5 PART 4: THE GAS BULLETIN BOARD

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Part 4 of the GSI Rules describes the information that is required to be published on the Gas Bulletin Board.

### 5.1 Compliance of Procedures with Part 4 of the GSI Rules

#### 5.1.1 Rule changes

There have been no amendments to Part 4 of the GSI Rules during the Audit Period.

#### 5.1.2 Procedures

##### GSI Procedures

The following GSI Procedures relating to Part 4 have been updated during the audit period:

- GSI Procedure: Operation of the Gas Bulletin Board and the Emergency Management Facility

##### Internal Procedures

There are no Internal Procedures relating to the IMO's obligations under Part 4 of the GSI Rules.

#### 5.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 4 of the GSI Rules.

### 5.2 Compliance with Part 4 of the GSI Rules

#### 5.2.1 Incidents

Until the release of GBB 1.4 patch 1 on 20 May 2015, the IMO was not correctly publishing medium term capacity report submissions made by participants. Specifically, where a participant made a new submission within the timeframe affected by an existing Medium Term Capacity Reduction (MTCR), the existing MTCR was overwritten, affecting the dates reported for the capacity reduction. This occurred multiple times over the period up to 20 May, and constitutes breaches of subrule 85(c). The issue was fixed with the release of GBB 1.4 patch 1.

We have deemed these incidents to be non-material breaches as it is unlikely that participant decisions would have been affected by the incorrect information.

#### 5.2.2 Opinion

With the exception of the incident noted above, we have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 4 of the GSI Rules.

# 6 PART 5: THE EMERGENCY MANAGEMENT FACILITY

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Part 5 of the GSI Rules describes the operation of the Emergency Management Facility (EMF), the information that is to be published on the EMF, and the access requirements and limitations.

## 6.1 Compliance of Procedures with Part 5 of the GSI Rules

### 6.1.1 Rule changes

There have been no amendments to Part 5 of the GSI Rules during the Audit Period.

### 6.1.2 Procedures

#### GSI Procedures

The following GSI Procedures relating to Part 3 have been updated during the audit period:

- GSI Procedure: Operation of the Gas Bulletin Board and the Emergency Management Facility

#### Internal Procedures

There are no Internal Procedures relating to the IMO's obligations under Part 5 of the GSI Rules.

### 6.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 5 of the GSI Rules.

## 6.2 Compliance with Part 5 of the GSI Rules

### 6.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Part 5 of the GSI Rules.

### 6.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 5 of the GSI Rules.

# 7 PART 6: THE GAS STATEMENT OF OPPORTUNITIES

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Part 6 of the GSI Rules describes the high-level requirements for the publication and content of the Gas Statement of Opportunities (GSOO).

## 7.1 Compliance of Procedures with Part 6 of the GSI Rules

### 7.1.1 Rule changes

There have been no amendments to Part 6 of the GSI Rules during the Audit Period.

### 7.1.2 Procedures

#### GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 6 of the GSI Rules.

#### Internal Procedures

The following Internal Procedures relating to Part 6 have been updated during the Audit Period:

ID	Title	Updated
3.7.1	Gas Statement of Opportunities (GSOO)	30 December 2014
4.1.5	Market Development Reviews	1 July 2015

### 7.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 6 of the GSI Rules.

## 7.2 Compliance with Part 6 of the GSI Rules

### 7.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Part 5 of the GSI Rules.

### 7.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 5 of the GSI Rules.

## 8 PART 7: BUDGET AND FEES

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Part 7 of the GSI Rules covers the IMO's allowable revenue, budget and fees.

### 8.1 Compliance of Procedures with Part 7 of the GSI Rules

#### 8.1.1 Rule changes

The following rules in Part 7 have been amended since last year's annual audit:

**Table 4: Rule amendments to Part 7**

Date	Rule change	Rules amended
1-Jan-15	GRC_2014_01	114, 115A(new), 116, 117(3)(new), 117(4)(new), 118(1), 118(3), 118(4), 119(2), 119(4), 119(5), 119(6), 119(7), 120

#### 8.1.2 Procedures

##### GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 7 of the GSI Rules.

##### Internal Procedures

The following Internal Procedures relating to Part 7 have been updated during the Audit Period:

ID	Title	Updated
1.13	Late Payment of GSI Invoices	3 February 2015

The Late Payment of GSI Invoices Internal Procedure is a new procedure.

#### 8.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 7 of the GSI Rules.

### 8.2 Compliance with Part 7 of the GSI Rules

#### 8.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Part 7 of the GSI Rules.

#### 8.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 7 of the GSI Rules.

## 8.3 Details of procedure changes and non-compliance

### 8.3.1 Rule changes and procedure updates

**Table 5: Relationship between Rule changes to Part 7 and IMO procedure updates**

Rule change	Rules amended	Description	Procedure updated?
GRC_2014_01	114, 115A(new), 116, 117(3)(new), 117(4)(new), 118(1), 118(3), 118(4), 119(2), 119(4), 119(5), 119(6), 119(7), 120	Changes to include Production Facility Operators in GSI Fees calculation.	Internal Procedure 5.3 (Fees) was not updated during the audit period, but was updated shortly thereafter, and now reflects the amended Rules.

### 8.3.2 Incidents of non-compliance

N/A

# 9 PART 8: RULE CHANGES

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Part 8 of the GSI Rules details the process for making changes to the GSI Rules, including rule change proposals, consultations, approvals and timelines.

## 9.1 Compliance of Procedures with Part 8 of the GSI Rules

### 9.1.1 Rule changes

There have been no amendments to Part 8 of the GSI Rules during the Audit Period.

### 9.1.2 Procedures

#### GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 8 of the GSI Rules.

#### Internal Procedures

The following Internal Procedures relating to Part 8 have been updated during the Audit Period:

ID	Title	Updated
4.2.1	Rule Change Process	July 2015

### 9.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 8 of the GSI Rules.

## 9.2 Compliance with Part 8 of the GSI Rules

### 9.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Part 8 of the GSI Rules.

### 9.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 8 of the GSI Rules.

# 10 PART 9: GSI PROCEDURES

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Part 9 of the GSI Rules details the process for developing and changing GSI Procedures, including subject matter, procedure change proposals, consultations, approvals, publication, and timelines.

## 10.1 Compliance of Procedures with Part 9 of the GSI Rules

### 10.1.1 Rule changes

There have been no amendments to Part 9 of the GSI Rules during the Audit Period.

### 10.1.2 Procedures

#### GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 9 of the GSI Rules.

#### Internal Procedures

The following Internal Procedures relating to Part 9 have been updated during the Audit Period:

ID	Title	Updated
4.2.2	Procedure Change Process	July 2015

### 10.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 9 of the GSI Rules.

## 10.2 Compliance with Part 9 of the GSI Rules

### 10.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Part 9 of the GSI Rules.

### 10.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 9 of the GSI Rules.

# 11 PART 10: COMPLIANCE AND ENFORCEMENT

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Part 10 of the GSI Rules describes the responsibilities of the IMO in regards to monitoring, investigating and enforcing the compliance of Gas Market Participants with the GSI Rules and GSI Procedures. It also covers auditing of the IMO's own compliance.

## 11.1 Compliance of Procedures with Part 10 of the GSI Rules

### 11.1.1 Rule changes

There have been no amendments to Part 10 of the GSI Rules during the Audit Period.

### 11.1.2 Procedures

#### GSI Procedures

There are no GSI Procedures relating to the IMO's obligations under Part 10 of the GSI Rules.

#### Internal Procedures

No Internal Procedures relating to Part 10 have been updated since last year's market audit.

### 11.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Part 10 of the GSI Rules.

## 11.2 Compliance with Part 10 of the GSI Rules

### 11.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Part 10 of the GSI Rules.

### 11.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Part 10 of the GSI Rules.



## 12 SCHEDULE 3: TRANSITIONAL RULES

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Schedule 3 of the GSI Rules covers the transitional arrangements leading up to, and for a period after, the date when the GSI Rules took effect.

### 12.1 Compliance of Procedures with Schedule 3 of the GSI Rules

#### 12.1.1 Rule changes

There have been no amendments to Schedule 3 of the GSI Rules during the Audit Period.

#### 12.1.2 Procedures

##### GSI Procedures

The following GSI Procedures relating to Schedule 3 have been updated during the audit period:

- GSI Procedure: Operation of the Gas Bulletin Board and the Emergency Management Facility

##### Internal Procedures

There are no Internal Procedures relating to the IMO's obligations under Schedule 3 of the GSI Rules.

#### 12.1.3 Opinion

It is our opinion that the IMO's GSI Procedures and Internal Procedures comply with Schedule 3 of the GSI Rules.

### 12.2 Compliance with Schedule 3 of the GSI Rules

#### 12.2.1 Incidents

We have not observed any incidents of non-compliance by the IMO associated with Schedule 3 of the GSI Rules.

#### 12.2.2 Opinion

We have not observed anything that causes us to believe that the IMO has not complied with its obligations under Schedule 3 of the GSI Rules.

# 13 GSI SYSTEMS AND SOFTWARE

This chapter covers the compliance of the IMO's software systems for the GBB and GSI Fees calculations and software management processes with the GSI Rules and GSI Procedures, in accordance with subrule 174(2)(c) of the GSI Rules.

- Section 13.1 sets out our review of the IMO's software systems for the GBB and the calculation of GSI Fees
- Section 13.2 sets out our review of the IMO's processes for software management.

## 13.1 Software certification

The software testing and certification process assesses whether the mathematical formulations specified in the GSI Rules and GSI Procedures have been correctly implemented by the software.

The software systems covered by this section of the review are:

- The Gas Bulletin Board (GBB)
- The GSI Fee Calculation Tool

### 13.1.1 Certification of the GBB

The initial version of the GBB was certified by PA on the 26th June 2013, prior to the official start of GBB operations on 1 August 2013. Since that time, a number of minor changes have been made to the GBB systems, none of which, in the IMO's opinion, required certifying under rule 19.

#### *19 Certifying GBB software*

*(1) Subject to this rule, the IMO must ensure that any version of the GBB software used by the IMO has been certified as compliant with the Rules and Procedures by an independent auditor.*

*(2) The IMO may implement changes to the current version of the GBB software without obtaining certification under subrule (1) where the IMO considers that the change will not have a material impact on any one or more of the following:*

- (a) the provision of information to the IMO by Gas Market Participants under the Rules;*
- (b) the processing and publication of information on the GBB or the EMF; or*
- (c) the calculation and processing of GSI Invoices.*

*(3) Where the IMO considers that changes to the current version of the GBB software are urgently required and essential for the efficient operation of the GBB, the IMO may implement the changes to the current version of the GBB software prior to certification under subrule (1), and must obtain that certification as soon as practicable.*

Details of production software changes made prior to this Audit Period are shown in Table 6. Releases with certification status of 'maintained' did not require additional testing, as they did not involve changes that would be expected to have material impact on prices or quantities.

**Table 6: Previous production software changes**

System	Version number	Release date	Material impact under 19(2)?	Certification status
GBB	1.0 ("Initial version")	01/08/2013	Yes	Certified
GBB	1.0.9	20/08/2013	No	Maintained
GBB	1.1.3	11/12/2013	No	Maintained
GBB	1.1.4	19/12/2013	No	Maintained
GBB	1.2.0	23/01/2014	No	Maintained
GBB	1.2.38	30/01/2014	No	Maintained
GBB	1.2-57.7	25/06/2014	No	Maintained

For this audit, we reviewed the release notes for all changes made to the GBB during the Audit Period and assessed the changes in relation to subrule 19(2). In each case, we agreed with the IMO that certification was not required. The details of these changes are shown in Table 7.

**Table 7: Changes to GBB systems in the Audit Period**

System	Version number	Release date	Material impact under 19(2)?	Certification status	Comment
GBB	1.3-145	27/08/2014	No	Maintained	Release note text identifies release as build 142
GBB	1.3-145-3	8/01/2015	No	Maintained	
GBB	1.4-193	18/03/2015	No	Maintained	
GBB	1.4-201	20/05/2015	No	Maintained	

### 13.1.2 Certification of the GSI Fee Calculation Tool

While the GSI Fee Calculation Tool is not specifically required to be certified under the GSI Rules, the calculation of GSI Fees is a part of this compliance audit.

The GSI Fee Calculation Tool has been updated in the audit period to incorporate changes to fee calculations. We tested the version of the tool provided to us by the IMO on 22 July 2015, against the calculations specified in rule 116. Our testing found one minor issue which was brought to the IMO's attention; this did not relate to the core calculation of GSI Fees which was found to be correct.

We have provided a certificate for this version of the GSI Fee Calculation Tool which states that the tool is compliant with the GSI Rules.

We recommend that the IMO place the GSI Fee Calculation Tool under source control, as it has done for other spreadsheet tools.

### 13.1.3 Opinion

It is our opinion that the software used by the IMO in the operation of the GBB, and in the calculation of GSI Fees, is compliant with the GSI Rules, in all material respects.

## 13.2 Software management

The IMO's software management processes were reviewed in a separate audit conducted by PA concurrently with this audit. The results of this review can be viewed in Chapter 2 of the report entitled "Audit 2: Compliance of the IMO's market software systems and processes for software management". While the focus of that report is on the IMO's processes in regards to management of WEM software, the same processes are used in the management of software used in GSI systems.

### 13.2.1 Management of the GBB software

In addition to the Audit 2 report, here we comment specifically on the IMO's software change management performance in relation to the GBB systems. The IMO's obligations in this regard are specified in subrule 18(1) of the GSI Rules.

*18(1) Where the IMO uses software (GBB software) and IT systems (GBB systems) to receive, store, collate and publish information for the operation of the GBB, the IMO must:*

- (a) maintain a record of which version of GBB software was used at each point in time;*
- (b) where changes are made to GBB software, maintain records of the differences between each version and the reasons for the changes between versions;*
- (c) ensure that appropriate testing of new GBB software versions is conducted; and*
- (d) ensure that any version of the GBB software used by the IMO has been certified in accordance with rule 19.*

The changes made to the GBB during the Audit Period are listed in the Table 7 in the previous section.

The IMO's software management processes for the GBB remain sufficient to comply with the market rules:

- With respect to 18(1)(a), the IMO continues to maintain a record of all versions of market software used together with their dates in service, in the form of JIRA records;
- With respect to 18(1)(b), the IMO maintains records of the differences between each version and the reasons for the differences, in the form of release notes and JIRA records;
- With respect to 18(1)(c), the IMO conducts appropriate testing of all new releases of the market software prior to their being placed in service;
- With respect to 18(1)(d), the IMO has ensured that all software versions are covered by an independent certification prior to implementation.

### 13.2.2 Opinion

We have not observed anything that causes us to believe that the IMO's processes for software management are not compliant with the GSI Rules, in all material respects.

# A RULE CHANGES SINCE THE LAST MARKET AUDIT

Table 8 summarises the Rule changes that have taken place since 1 August 2014 (start of Audit Period).

**Table 8: GSI Rule changes 1 August 2014 - 31 July 2015**

Date	RC Ref	Subrules amended	Nature of change
1 January 2015	GRC_2014_01	36(3), 36(4), 114, 115A(new), 115A(1)(new), 115A(2)(new), 115A(3)(new), 116(1), 116(2), 116(3), 117(3)(new), 117(4)(new), 118(1), 118(3), 118(4), 119(2), 119(4), 119(5), 119(6), 119(7), 120(1), 120(2), 120(3), 120(4) and Schedule 1 – Glossary.	Changes to GSI Fee recovery, now 50% from Shippers and 50% from Production Facility Operators.
20 March 2015	GRC_2015_01	Schedule 2 – Zones	Addition of Fortescue River Gas Pipeline to the Pilbara Zone



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