



Electricity Generation Performance Audit Report
&
Asset Management System Review
South West Cogeneration Joint Venture EGL 9

Prepared By Kevan McGill
Date 26 September 2008



Mr Andy Wearmouth
Manager Engineering Services
Verve Energy
Australia Place
William Street
PERTH WA 6000

Dear Mr Wearmouth

Performance Audit & Asset Management System Review Generation Licences EGL 9

The fieldwork on the performance audit and asset management system review of Generation Licence EGL 9 for the audit period 22 June 2006 to 30 June 2008 is complete and I am pleased to submit the report to you.

In my opinion, the licensee maintained, in all material aspects, effective control procedures in relation to the Generation Licence (EGL 9) for the audit period based on the relevant clauses referred to within the scope section of this report.

Yours sincerely

Kevan McGill
Director

26 September 2008

Contents

Executive Summary	5
Overall conclusion	5
Performance audit	5
Ratings	5
Asset Management Review	6
Ratings	6
Performance Audit and Asset Management System Review	7
Performance Audit Objectives	7
Asset Management System Review Objectives	7
Audit period	7
Performance Audit	8
Scope limitation	8
Inherent Limitations	8
Scope of the audit/review	8
1. Risk and materiality assessment	8
2. System analysis, assertion setting and review	8
3. Fieldwork: testing and analysis	8
Audit requirements	9
AUS 806: Performance Auditing	9
Overall conclusion	10
Findings	10
Audit Results and Recommendations	12
Post Audit implementation Plan	12
Asset Management System Review	13
Use of Audit Processes and Practices	13
Overall conclusion	13
Findings	13
Audit priority	14
Asset Management Review Results and Recommendations	15
Post Audit implementation Plan	15
Audit Evidence	16
Audit Time	16
Appendix 1 Performance audit detail results and recommendations	17
Licence obligations Type 2	17
Licence obligations Type NR	21

Metering Code obligations Type 2	23
Metering Code obligations Type NR	32
Appendix II Asset management system review results and recommendations.....	37



Executive Summary

This performance audit and asset management review was conducted in accordance with the guidelines issued by the Economic Regulation Authority (*Authority*) for the audit period (22 June 2006 to 30 June 2008).

Overall conclusion

In my opinion, the licensee maintained, in all material aspects, effective control procedures in relation to the Generation Licence (EGL 9) for the audit period based on the relevant clauses referred to within the scope section (Page 8) of this report.

Performance audit

A summary of the findings of the performance audit is:

Ratings

The *Authority* guidelines for performance audits require that the audit must provide a table that summarises the compliance rating for each licence condition using the 5-point rating scale described below.

Operational/performance compliance rating scale

Compliance status	Rating	Description of compliance
COMPLIANT	5	Compliant with no further action required to maintain compliance
COMPLIANT	4	Compliant apart from minor or immaterial recommendations to improve the strength internal controls to maintain compliance
COMPLIANT	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
NON-COMPLIANT	2	Does not meet minimum requirements
SIGNIFICANTLY NON-COMPLIANT	1	Significant weaknesses and/or serious action required

The results are summarised below.

Assessment	Licence obligations	Audit priority 4	Audit priority 5
Compliant 5	20	9	11
Compliant 4	1	1	
Compliant 3			
Non-compliant 2			
Significantly non compliant 1			
Not rated*	25	20	5

* Note Where an obligation was not exercised in the audit period, it was not possible to form an opinion about compliance and the item was not rated.

Asset Management Review

The findings of the asset management review are summarized as;

Ratings

The effectiveness ratings for each key process in the licensee’s asset management system using the 6-point scale are described below.

Asset management review effectiveness rating scale

Effectiveness	Rating	Description
Continuously improving	5	Continuously improving organisation capability and process effectiveness
Quantitatively controlled	4	Measurable performance goals established and monitored
Well-defined	3	Standard processes documented, performed and coordinated
Planned and tracked	2	Performance is planned, supervised, verified and tracked
Performed informally	1	Base practices are performed
Not performed	0	Not performed (indicate if not applicable)

Asset management effectiveness summary

ASSET MANAGEMENT SYSTEM	Not performed 0	Performed informally 1	Planned and tracked 2	Well defined 3	Quantitatively controlled 4	Continuously improving 5
Process Effectiveness rating	0	1	2	3	4	5
Asset planning						
Asset creation/ acquisition						
Asset disposal						
Environmental analysis						
Asset operations						
Asset maintenance						
Asset Management Information System						
Risk management						
Contingency planning						
Financial planning						
Capital expenditure planning						
Review of AMS						

Performance Audit and Asset Management System Review

Performance Audit Objectives

Under section 13 of the *Electricity Industry Act 2004* (the Act), it is a requirement that every licensee provide the Economic Regulation Authority (*Authority*) not less than once in every period of 2 years with a performance audit conducted by an independent expert acceptable to the *Authority*.

The primary objective of the operational audit is to audit the effectiveness of measures taken by the Licensee to maintain quality and performance standards. The Act states a performance audit is an audit of the effectiveness of measures taken by the licensee to meet the performance criteria specified in the licence. The licence states that performance standards are contained in *applicable legislation*. Performance criteria are defined in the licence as:

- (a) the terms and conditions of the *licence*; and
- (b) any other relevant matter in connection with the *applicable legislation* that the *Authority* determines should form part of the *performance audit*.

The licence also provides for individual licence conditions namely - the *Authority* may prescribe *individual performance standards* in relation to the *licensee* of its obligations under this *licence* or the *applicable legislation* (the Act and subordinate legislation). There are no individual performance standards.

The *Authority* has summarised the performance requirements in various legislation in its Electricity compliance reporting manual (March 2008)¹.

Asset Management System Review Objectives

Under the *Electricity Industry Act 2004* (the Act) section 14, the licensee must develop and maintain an asset management system to manage the significant asset base for ongoing service delivery to its customers. The Act requires a review of the asset management system every two years (or other time approved by the Economic Regulation Authority - *Authority*).

An asset management system is to set out the measures to be taken by the licensee for the proper maintenance of assets used in the generation of electricity and in the operation and maintenance of, and, where relevant, the construction or alteration of, the generator's assets.

McGill Engineering Services Pty Ltd has been engaged to carry out the performance audit and asset management system review for Electricity Generation Licence EGL 9 for the South West Cogeneration Joint Venture (SWCJV).

Audit period

The audit period is 22 June 2006 to 30 June 2008.

¹ Electricity compliance reporting manual, March 2008

Performance Audit

Scope limitation

The review will be undertaken by examination of documents, interviews with key persons and observations and will not be a detailed inspection of physical items.

Inherent Limitations

Because of the inherent limitations of any internal control structure, it is possible that fraud, error or non-compliance with laws and regulations may occur and not be detected.

An audit is not designed to detect all weaknesses in compliance measures as an audit is not performed continuously throughout the period and the audit procedures performed on the compliance measures are undertaken on a test basis.

Any projection of the evaluation of the operating licences to future periods is subject to the risk that the compliance measures in the plans may become inadequate because of changes in conditions or circumstances, or that the degree of compliance with them may deteriorate.

The audit opinion expressed in this report has been formed on the above basis.

Scope of the audit/review

The *Authority* guideline² for performance audits sets out that the audit should be conducted in 3 phases.

1. Risk and materiality assessment

With reference to AS/NZS4360 Risk Management a preliminary assessment was made of the risk and materiality of non-compliance with the required licence conditions in order to focus the audit effort on areas of higher compliance risk and identify areas for testing and analysis.

2. System analysis, assertion setting and review

Through discussion, observation and review, a sample of cases or data was analysed relating to the licensee's quality and performance systems and standards against requirements of the Licence conditions to be audited.

3. Fieldwork: testing and analysis

Using the results of the risk assessment and systems analysis, detailed testing and analysis will be performed to compare those standards maintained by the licensee with the relevant clauses of the Licence.

During this audit the Worsley licence operating area was visited.

There are no actions taken in response to recommendations in previous audit/reviews to follow up as this is the first audit.

The audit provides a full and comprehensive report to the licensee and the *Authority* that clearly expresses the opinion of the auditor in respect of the findings of the audit/review.

² Audit Guidelines: Electricity, Gas and Water Licences, September 2006

The key contacts were:

- Licensee
 - Andy Wearmouth
- McGill Engineering Services Pty Ltd
 - Kevan McGill, John McLoughlin

The audit/review was conducted during August 2008 with the final audit report to be submitted to the Authority by 30 September 2008.

Audit requirements

Compliance with licence conditions is to be examined according to the likely inherent risk and the adequacy of controls to manage that risk.

Nature of audit work conducted

The *Authority* guidelines for performance audits require that the audit considers:

- a) **Process compliance** - the effectiveness of systems and procedures in place throughout the audit period, including the adequacy of internal controls.
- b) **Outcome compliance** – the actual performance against standards prescribed in the licence throughout the audit period.
- c) **Output compliance** – the existence of the output from systems and procedures throughout the audit period (that is, proper records exist to provide assurance that procedures are being consistently followed and controls are being maintained).
- d) **Integrity of performance reporting** – the completeness and accuracy of the performance reporting to the Authority.
- e) **Compliance with any individual licence conditions** - the requirements imposed on the specific licensee by the Authority or specific issues for follow-up that are advised by the Authority.

Stage	Auditor	Standard
1. Risk & Materiality Assessment Outcome - Operational/ Performance Audit Plan	K McGill	ASA 300 replaces AUS 302: Planning ASA 315 replaces AUS 402: Risk Assessments and Internal Controls AUS 808: Planning Performance Audits AS/NZS 4360:2004: Risk Management ERA Guidelines
2. System Analysis	K McGill	AUS 810: Special Purpose Reports on Effectiveness of Control Procedures
3. Fieldwork Assessment and testing of; <ul style="list-style-type: none"> • The control environment • Information system • Compliance procedures • Compliance attitude 	K McGill J McLoughlin	AUS 502: Audit Evidence AUS 806: Performance Auditing

4. Reporting	K McGill	ASA 300 replaces AUS 302 Planning AUS 806: Performance Auditing
--------------	----------	--

Overall conclusion

In my opinion, the licensee maintained, in all material aspects, effective control procedures in relation to the Generation Licence (EGL 9) for the audit period based on the relevant clauses referred to within the scope section (Page 8) of this report.

Findings

The conclusions of each of the elements of the licence are summarised in the following table. The audit risk as determined for each licence condition is also shown. The details of the audit can be seen in Appendix I (Page 17)

Item	Licence obligation	Audit risk assessment	Compliance Rating	
Licence obligations Type 2				
5.1 ³	Pay for interest in land	4	Not rated	
12.2	Amend AMS ⁴ on expansion	4	Not rated	
12.3	Expansion outside licence area	4	Not rated	
13.1	Accounting standards	4	Compliant	4
14.4	Individual performance standards	n/a		
15.2	Audit guidelines	4	Compliant	5
16.1/ 16.2	AMS	4	Compliant	5
16.4	AMS Audit Guidelines	4	Compliant	5
17.1	External Administration	4	Compliant	5
18.1	Information provision	4	Compliant	5
19.2	Publish information	4	Not rated	
20.1	Notices	4	Not rated	
Licence obligations Type NR				
4.1	Licence fees	5	Compliant	5
5.1	Minimise disruption	5	Compliant	5
15.1	Performance audit	5	Compliant	5
16.1	AMS	5	Compliant	5
16.3	AMS Review	5	Compliant	5

³ Licence clause number

⁴ Asset Management System

Metering Code Type 2				
3.5.6 ⁵	Metering installation charges	n/a		
3.11.3	Metering installation outage	4	Not rated	
3.16(5)	Metering Service level agreement	4	Not rated	
3.27	Registered installer	4	Compliant	5
4.5(2)	Notify of inaccuracy	4	Not rated	
5.5(3)	No charge for data	4	Not rated	
5.16	Provide Network operator with data	4	Not rated	
5.17(1)	Provide standing and validated energy data to customer	4	Compliant	5
5.18	Change of energisation status	4	Not rated	
5.19(3)	Notify change of attributes	4	Not rated	
5.19(4)	Notify of sensitive load	4	Not rated	
5.21(5)	Test conditions	4	Not rated	
5.21(6)	Test consistent with access arrangement	4	Not rated	
5.27	Missing customer attribute information	4	Not rated	
6.1(2)	Comply with access contract	4	Not rated	
7.2(4)	New contact details to network operator	4	Not rated	
7.2(5)	Change in contact details to network operator	4	Not rated	
7.5	Confidentiality of information	4	Compliant	5
7.6(1)	Disclosure of permitted confidential information	4	Compliant	5
8.1(4)	Dispute procedures	4	Not rated	
Metering Code Type NR				
4.4(1)	Liaise to resolve discrepancies in energy data	5	Compliant	5
4.5(1)	Registry accuracy	5	Compliant	5
5.4(2)	Provide assistance to network operator	5	Compliant	5
5.19(1)	Collect customer information	5	Compliant	5

⁵ Metering Code Clause number

5.19(2)	Customer attributes for connection point	5	Compliant	5
5.19(6)	Change in customer attributes for connection point	5	Not rated	
7.2(1)	Capacity to receive notices from Network operator	5	Compliant	5
8.1(1)	Dispute procedures	5	Not rated	
8.1(2)	Dispute procedures	5	Not rated	
8.1(3)	Dispute procedures	5	Not rated	
8.3(2)	Dispute resolution	5	Not rated	

Audit Results and Recommendations

There are no significant results to highlight.

Post Audit implementation Plan

There is nothing to implement.

Asset Management System Review

The recommendations identify:

- a) The asset management process.
- b) The effectiveness rating.
- c) The issue(s) identified that have resulted in the nominated effectiveness rating.
- d) The recommended action(s) to improve the effectiveness of the asset management process to an acceptable level.

Use of Audit Processes and Practices

- 1 Accepted audit processes and practices were used to complete the review. These include the sampling techniques associated with process reviews such as interviews to define accountability, observations, document sighting and testing of users.
- 2 The review addressed four key elements of successful delivery of asset management to allow the assessment of the effectiveness of the asset management system. These elements are:
 - Process – the existence of a suitable process for activities
 - Documentation – the existence of a document defining a process
 - Availability/accessibility/understanding – the process is understood, available to those required to use it and accessible to them
 - Use- confirmation the process is used consistently
- 3 The audit priorities were determined and include in the asset management system review plan approved by the *Authority*.

The review was conducted by Kevan McGill and John McLoughlin in August 2008 with the final audit report submitted to the Authority by 30 September 2008.

Overall conclusion

In my opinion, the licensee maintained an effective asset management system in relation to the Electricity Generation Licences (EGL 9) for the audit period based on the relevant clauses referred to within the scope section (Page 8) of this report.

Findings

The conclusions of each of the elements of the licence are summarised in the following table. The audit risk as determined for each licence condition is also shown. The details of the review can be seen in Appendix II (Page 37)

Asset management process	Review risk assessment	Rating	
Asset planning	2	Planned and tracked	2
Asset creation/ acquisition	2	Not performed	0
Asset disposal	4	Planned and tracked	2
Environmental analysis	4	Planned and tracked	2
Asset operations	2	Well defined	3

Asset maintenance	2	Well defined	3
Asset Management Information System	2	Planned and tracked	2
Risk management	4	Planned and tracked	2
Contingency planning	4	Planned and tracked	2
Financial planning	4	Planned and tracked	2
Capital expenditure planning	4	Performed Informally	1
Review of AMS	4	Not Performed	0

The overall effectiveness rating for each licence condition is based on an assessment of the effectiveness of the licensee’s existing control procedures to manage its assets.

The following table is a summary of the review findings.

Audit priority

The *Authority* guideline for asset management system reviews sets out a rating for audit priority based on inherent risk and existing controls. The following priorities were determined in accordance with the guidelines and audit plan and accepted by the licensee.

This gives the review priorities and findings being as follows.

Item	Licence obligation	Inherent Risk	Adequacy of Controls	Review priority	Rating						
					0	1	2	3	4	5	
1	Asset planning	High	Strong	2							
2	Asset creation/ acquisition	High	Strong	2							
3	Asset disposal	Medium	Moderate	4							
4	Environmental analysis	Medium	Moderate	4							
5	Asset operations	High	Strong	2							
6	Asset maintenance	High	Strong	2							
7	Asset Management Information System	High	Strong	2							
8	Risk management	Medium	Moderate	4							
9	Contingency planning	Medium	Moderate	4							
10	Financial planning	Medium	Moderate	4							
11	Capital expenditure planning	Medium	Moderate	4							
12	Review of AMS	Medium	Moderate	4							

Asset Management Review Results and Recommendations

The following summarises the key results and recommendations

Asset Management Item	Recommendation
Asset Creation	Issue 1
	An asset creation process is unlikely to be needed. The licensee is a special purpose joint venture that has a single asset – the generation asset and does not have any identified prospects in the immediate future of needing new assets. Any need for new assets is only likely to arise if the Alumina refinery host needed additional steam. Accordingly, there is no asset creation process
	Recommendation 1
	None
AMS review	Issue 2
	A more formal processes to trigger reviews of the AMS should be put in place rather than rely on implied causes to bring about change.
	Recommendation 2
	The licensee considers a process of scheduled periodic reviews of the AMS.

Post Audit implementation Plan

AMS item	Recommendation	Responsible	When
AMS review	The licensee considers a process of scheduled periodic reviews of the AMS.	Andy Wearmouth	June 2009

Audit Evidence

The following evidence was gathered for the audits and asset management system review.

1. Legislation and standards
 - *Electricity Industry Act 2004*
 - Auditing and Assurance handbook
 - Electricity Generating Licence EGL 9

2. Licensee's documents
 - Electricity licence application
 - Auditors statement
 - Licence fee payment entries
 - Financial reports
 - Joint Venture energy agreement
 - Asset management plan

Audit Time

The audits and asset management review were undertaken by Kevan McGill and John McLoughlin and took approximately 60 hours aggregate for the 2 reviews.

Appendix 1 Performance audit detail results and recommendations

Licence obligations Type 2

Licence obligation 5.1							Compliance rating Not rated		
<i>Electricity Industry Act section 41(6)</i> A licensee must pay the costs of taking an interest in land or an easement over land.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input type="checkbox"/>
As no interest in land or easement over land has occurred in the audit period, no cost payments arose and compliance or otherwise could not be assessed.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 12.2							Compliance rating Compliant - 5		
<i>Electricity Industry Act section 11.</i> A licensee must amend the asset management system before an expansion or reduction in generating works, distribution systems and transmission systems and notify the Authority in the manner prescribed, if the expansion or reduction is not provided for in the asset management system.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
No expansions or reductions of the generating works have occurred and no modification was required.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 12.3							Compliance rating Compliant - 5	
<i>Electricity Industry Act section 11.</i> A licensee must not expand the generating works, distribution systems or transmission systems outside the licence area.								

Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
No expansion of the generating works occurred in the audit period so no expansion occurred outside the licence area.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 13.1									Compliance rating Compliant - 5
<i>Electricity Industry Act section 11.</i> A licensee and any related body corporate must maintain accounting records that comply with the Australian Accounting Standards Board Standards or equivalent International Accounting Standards.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
As an unincorporated joint venture, the applicant entity only produces audited special purpose accounts for submission to its controlling entities in accordance with the Joint Venture Agreement.									
Issues									
The licensee complies with Australian accounting standards consistent with accounts limited to providing information for the joint venturers only.									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 14.4									Compliance rating Not rated
<i>Electricity Industry Act section 11.</i> A licensee must comply with any individual performance standards prescribed by the Authority.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input type="checkbox"/>
No individual performance standards have been applied. As there has been no activity, performance could not be rated.									
Issues									
None									

Recommendations
None
Management Actions
Not applicable

Licence obligation 15.2	Compliance rating Compliant - 5				
<i>Electricity Industry Act section 11.</i> A licensee must comply, and require its auditor to comply, with the <i>Authority's</i> standard audit guidelines dealing with the performance audit.					
Observations					
Process	<input checked="" type="checkbox"/> Outcome	<input checked="" type="checkbox"/> Output	<input checked="" type="checkbox"/> Reporting	<input checked="" type="checkbox"/> Compliance	<input checked="" type="checkbox"/>
This audit is in accordance with the <i>Authority's</i> guidelines.					
Issues					
None					
Recommendations					
None					
Management Actions					
Not applicable					

Licence obligation 16.1& 16.2	Compliance rating Compliant - 5				
<i>Electricity Industry Act section 14(1)(b)</i> A licensee must notify details of the asset management system and any substantial changes to it to the Authority.					
Observations					
Process	<input checked="" type="checkbox"/> Outcome	<input checked="" type="checkbox"/> Output	<input checked="" type="checkbox"/> Reporting	<input checked="" type="checkbox"/> Compliance	<input checked="" type="checkbox"/>
The licensee provided details when the licence was issued. No substantial changes have occurred since.					
Issues					
None					
Recommendations					
None					
Management Actions					
Not applicable					

Licence obligation 16.4	Compliance rating Compliant - 5
<i>Electricity Industry Act section 11.</i> A licensee must comply, and must require the licensee's expert to comply, with the relevant aspects of the Authority's standard guidelines dealing with the asset management system.	

Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
This asset management system review complies with the <i>Authority's</i> guidelines.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 17.1									Compliance rating Compliant - 5
<i>Electricity Industry Act section 11.</i> A licensee must report to the Authority, in the manner prescribed, if a licensee is under external administration or there is a significant change in the circumstances upon which the licence was granted which may affect a licensee's ability to meet its obligations.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
The licensee is not under external administration or has there been a significant change in the circumstances on which the licence was granted and therefore no need to advise the <i>Authority</i> .									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 18.1									Compliance rating Compliant - 5
<i>Electricity Industry Act section 11.</i> A licensee must provide the Authority, in the manner prescribed, any information the Authority requires in connection with its functions under the Electricity Industry Act.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
The licensee has provided the information in the manner prescribed to the <i>Authority</i> .									
Issues									
None									
Recommendations									
None									

Management Actions
Not applicable

Licence obligation 19.2	Compliance rating Not rated								
<i>Electricity Industry Act section 11.</i> A licensee must publish any information it is directed by the Authority to publish, within the timeframes specified.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
The <i>Authority</i> did not direct any information to be published. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 20.1	Compliance rating Not rated								
<i>Electricity Industry Act section 11.</i> Unless otherwise specified, all notices must be in writing									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
No notices were issued and accordingly it could not be observed if notices were in writing.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligations Type NR

Licence obligation 15.1	Compliance rating Compliant - 5
<i>Electricity Industry Act section 13(1)</i> A licensee must, not less than once every 24 months, provide the Authority with a performance audit conducted by an independent expert acceptable to the Authority.	

Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
This audit satisfies the requirement.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 16.1								Compliance rating Compliant - 5	
<i>Electricity Industry Act section 14(1)(a)</i> A licensee must provide for an asset management system.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
This review will examine the asset management system.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 16.3								Compliance rating Compliant - 5	
<i>Electricity Industry Act section 14(1)(c)</i> A licensee must provide the Authority with a report by an independent expert as to the effectiveness of its asset management system every 24 months, or such longer period as determined by the Authority.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
This review satisfies the requirement.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 4.1										Compliance rating Compliant - 5	
<i>Electricity Industry Act section 17(1)</i> A licensee must pay to the Authority the prescribed licence fee within one month after the day of grant or renewal of the licence and within one month after each anniversary of that day during the term of the licence.											
Observations											
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>		
The fees have been paid and on time.											
Issues											
None											
Recommendations											
None											
Management Actions											
Not applicable											

Licence obligation 5.1										Compliance rating Compliant - 5	
<i>Electricity Industry Act section 31(3)</i> A licensee must take reasonable steps to minimise the extent or duration of any interruption, suspension or restriction of the supply of electricity due to an accident, emergency, potential danger or other unavoidable cause.											
Observations											
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>		
The plant availability (due to providing steam for the alumina process) is very high indicating no interruptions or restrictions of supply.											
Issues											
None											
Recommendations											
None											
Management Actions											
Not applicable											

Metering Code obligations Type 2

Licence obligation 5.1										Compliance rating NA	
<i>Electricity Industry Metering Code clause 3.5(6)</i> The requirement is that a network operator may only impose a charge for providing, installing, operating or maintaining a metering installation in accordance with the applicable service level agreement between it and the user.											
Observations											
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input type="checkbox"/>		

This requirement is listed in the Reporting Manual but is an obligation on the network operator and not the licensee.
Issues
None
Recommendations
None
Management Actions
Not applicable

Licence obligation 5.1	Compliance rating Not rated								
<i>Electricity Industry Metering Code clause 3.11(3)</i> The requirement is that a Code participant who becomes aware of an outage or malfunction of a metering installation must advise the network operator as soon as practicable.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
No metering outages or malfunctions have occurred in the audit period. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1	Compliance rating Not rated								
<i>Electricity Industry Metering Code clause 3.16(5)</i> The requirement is that a network operator or a user may require the other to negotiate and enter into a written service level agreement in respect of the matters in the metrology procedure dealt with under clause 3.16(4) of the Code.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
This requirement relates to the conversion of non interval metering to interval metering. All the meters are interval meters (half hour meters) so there is no need for conversion. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									

Management Actions
Not applicable

Licence obligation 5.1	Compliance rating Compliant - 5								
<i>Electricity Industry Metering Code clause 3.27</i> A person must not install a metering installation on a network unless the person is the network operator or a registered metering installation provider for the network operator doing the type of work authorised by its registration.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
The meters were installed by Western Power – the network operator.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1	Compliance rating Not rated								
<i>Electricity Industry Metering Code clause 4.5(2)</i> If a Code participant (other than a network operator) becomes aware of a change to or an inaccuracy in an item of standing data in the registry, then it must notify the network operator and provide details of the change or inaccuracy within the timeframes prescribed.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
The licensee is a Code participant but no issues about standing data have arisen. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1										Compliance rating Not rated	
<i>Electricity Industry Metering Code clause 5.5(3).</i> A user must not impose any charge for the provision of the data under this Code unless it is permitted to do so under another enactment.											
Observations											
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>		
No data has been provided therefore no charges have been made. As there has been no activity, performance could not be rated.											
Issues											
None											
Recommendations											
None											
Management Actions											
Not applicable											

Licence obligation 5.1										Compliance rating Compliant - 5	
<i>Electricity Industry Metering Code clause 5.16.</i> A user that collects or receives energy data from a metering installation must provide the network operator with the energy data (in accordance with the communication rules) within the timeframes prescribed.											
Observations											
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>		
The network operator (Western Power) reads the meters and therefore collects the energy data and not the licensee. As there has been no activity, performance could not be rated.											
Issues											
None											
Recommendations											
None											
Management Actions											
Not applicable											

Licence obligation 5.1										Compliance rating Compliant - 5	
<i>Electricity Industry Metering Code clause 5.17(1).</i> A user must provide standing data and validated (and where necessary substituted or estimated) energy data to the user's customer, to which that information relates, where the user is required by an enactment or an agreement to do so for billing purposes or for the purpose of providing metering services to the customer.											

Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
The licensee provides information to its Customers – Verve and Worsley Alumina. No complaints have been made by Verve or Worsley Alumina.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Not rated
<i>Electricity Industry Metering Code clause 5.18.</i> A user that collects or receives information regarding a change in the energisation status of a metering point must provide the network operator with the prescribed information, including the stated attributes, within the timeframes prescribed.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There has been no change to the energisation state of the meter. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Not rated
<i>Electricity Industry Metering Code clause 5.19(3).</i> A user must, after becoming aware of any change in a site's prescribed attributes, notify the network operator of the change within the timeframes prescribed.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There has been no change in the sites prescribed attributes. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									

Management Actions
Not applicable

Licence obligation 5.1	Compliance rating Not rated								
<i>Electricity Industry Metering Code clause 5.19(4).</i> A user that becomes aware that there is a sensitive load at a customer's site must immediately notify the network operator's Network Operations Control Centre of the fact.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There are no sensitive loads. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1	Compliance rating Not rated								
<i>Electricity Industry Metering Code clause 5.21(5).</i> A Code participant must not request a meter test or audit unless the Code participant is a user and the test or audit relates to a time or times at which the user was the current user or the Code participant is the IMO.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no meter tests or audits. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1	Compliance rating Not rated
<i>Electricity Industry Metering Code clause 5.21(6).</i> A Code participant must not make a test or audit request that is inconsistent with any access arrangement or agreement.	

Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no meter tests or audits. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Not rated
<i>Electricity Industry Metering Code clause 5.27.</i> Upon request, a current user must provide the network operator with customer attribute information that it reasonably believes are missing or incorrect within the timeframes prescribed.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There has been no missing or incorrect customer attributes. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Not rated
<i>Electricity Industry Metering Code clause 6.1(2).</i> A user must in relation to a network on which it has an access contract, comply with the rules, procedures, agreements and criteria prescribed.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
Western Power, the network operator, provides the metering services. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									

Management Actions
Not applicable

Licence obligation 5.1	Compliance rating Not rated								
<i>Electricity Industry Metering Code clause 7.2(4)</i> A Code participant must notify its contact details to a network operator with whom it has entered into an access contract within 3 business days after the network operator's request.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no requests for contact details from the network operator. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1	Compliance rating Not rated								
<i>Electricity Industry Metering Code clause 7.2(5)</i> A Code participant must notify any affected network operator of any change to the contact details it notified to the network operator at least 3 business days before the change takes effect									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There has been no change in contact details. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1	Compliance rating Compliant - 5
<i>Electricity Industry Metering Code clause 7.5</i> A Code participant must not disclose, or permit the disclosure of, confidential information provided to it under or in connection with the Code and may only use or reproduce confidential information for the purpose for which it was disclosed or another purpose	

contemplated by the Code.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
No complaints have risen about disclosure of confidential information.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Compliant - 5
<i>Electricity Industry Metering Code clause 7.6(1)</i> A Code participant must disclose or permit the disclosure of confidential information that is required to be disclosed by the Code.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
No information has been required to be disclosed.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Not rated
<i>Electricity Industry Metering Code clause 8.1(4)</i> If the dispute is resolved by representative negotiations, senior management negotiations or CEO negotiations, the disputing parties must prepare a written and signed record of the resolution and adhere to the resolution.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no metering disputes. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									

Management Actions
Not applicable

Metering Code obligations Type NR

Licence obligation 5.1	Compliance rating Compliant - 5								
<i>Electricity Industry Metering Code clause 4.4(1)</i> A network operator and affected Code participants must liaise together to determine the most appropriate way to resolve a discrepancy between energy data held in a metering installation and data held in the metering database.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no discrepancies in energy data which is read by the network operator anyway.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1	Compliance rating Compliant - 5								
<i>Electricity Industry Metering Code clause 4.5(1)</i> A Code participant must not knowingly permit the registry to be materially inaccurate.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no inaccuracies in the registry which is held by the network operator anyway.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1	Compliance rating Compliant - 5
<i>Electricity Industry Metering Code clause 5.4(2)</i> A user must, when reasonably requested by a network operator, use reasonable endeavours to assist the network operator to comply with the network operator's	

obligation. Meters have to be read at least once per year and if not, has assistance has to be provided to the network operator to read the meter.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
The network operator (Western Power) reads the meters monthly and no assistance has been required by the licensee.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Compliant - 5
<i>Electricity Industry Metering Code clause 5.19(1)</i> A user must, when requested by the network operator acting in accordance with good electricity industry practice, use reasonable endeavours to collect information from customers, if any, that assists the network operator in meeting its obligations described in the Code and elsewhere.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no complaints about the collection of customer information.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Compliant - 5
<i>Electricity Industry Metering Code clause 5.19(2)</i> A user must, to the extent that it is able, collect and maintain a record of the address, site and customer attributes, prescribed in relation to the site of each connection point, with which the user is associated.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There is only one connection point and the network operator has the site and customer (metering) attributes which have not changed.									
Issues									
None									

Recommendations
None
Management Actions
Not applicable

Licence obligation 5.1	Compliance rating Not rated								
<i>Electricity Industry Metering Code clause 5.19(6)</i> A user must use reasonable endeavours to ensure that it does notify the network operator of a change in an attribute that results from the provision of standing data by the network operator to the user.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no changes in (metering) attributes. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1	Compliance rating Compliant - 5								
<i>Electricity Industry Metering Code clause 7.2(1)</i> Code participants must use reasonable endeavours to ensure that they can send and receive a notice by post, facsimile and electronic communication and must notify the network operator of a telephone number for voice communication in connection with the Code.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
The network operator has the current contact details which have been confirmed with Verve. Metering contacts are dealt with on behalf of the SWCJV by the Verve trading group. This provides first point of contact for WP metering. Any queries are referred to facility Manager for resolution. Data is also directly accessed by the trading group from the Western Power metering portal									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Not rated
<i>Electricity Industry Metering Code clause 8.1(1)</i> Representatives of disputing parties must meet within 5 business days after a notice given by a disputing party to the other disputing parties and attempt to resolve the dispute under or in connection with the Electricity Industry Metering Code by negotiations in good faith.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no metering disputes. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Not rated
<i>Electricity Industry Metering Code clause 8.1(2)</i> If a dispute is not resolved within 10 business days after the dispute is referred to representative negotiations, the disputing parties must refer the dispute to a senior management officer of each disputing party who must meet and attempt to resolve the dispute by negotiations in good faith.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no metering disputes. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1									Compliance rating Not rated
<i>Electricity Industry Metering Code clause 8.1(3)</i> If the dispute is not resolved within 10 business days after the dispute is referred to senior management negotiations, the disputing parties must refer the dispute to the senior executive officer of each disputing party who must meet and attempt to resolve									

the dispute by negotiations in good faith.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no metering disputes. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Licence obligation 5.1								Compliance rating Not rated	
<i>Electricity Industry Metering Code clause 8.3(2)</i>									
The disputing parties must at all times conduct themselves in a manner which is directed towards achieving the objective of dispute resolution with as little formality and technicality and with as much expedition as the requirements of Part 8 of the Code and a proper hearing and determination of the dispute, permit.									
Observations									
Process	<input checked="" type="checkbox"/>	Outcome	<input checked="" type="checkbox"/>	Output	<input checked="" type="checkbox"/>	Reporting	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>
There have been no metering disputes. As there has been no activity, performance could not be rated.									
Issues									
None									
Recommendations									
None									
Management Actions									
Not applicable									

Appendix II Asset management system review results and recommendations

Asset Planning							Effectiveness rating Planned and tracked - 2
1. Asset planning Asset planning strategies are focused on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price).							
Observations							
Process	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/> NO
<p>The licensee is a special purpose joint venture that has a single asset – the generation asset. The JV products comprise both electricity (as prescribed in this license) and thermal energy to an Alumina refinery.</p> <p>An asset management plan has been developed for the facility to articulate how the asset (power station) will be managed to meet short term operational requirements whilst maintaining the long term performance and integrity of the assets by:</p> <ul style="list-style-type: none"> • Setting policies and targets for operating & maintaining the assets. • Giving maintenance & operations personnel and contract administrators' broad guidelines as to how the assets should be operated, maintained & managed. • Stating the maintenance regime and outage criteria and setting policies for major plant overhauls and maintenance schedules. • Identifying critical issues, risks and threats to the business. • Providing future requirements for the assets; it is a forward-looking document. 							
Issues							
None.							
Recommendation							
None.							
Rating							
Planned and tracked - 2							

Asset Creation							Effectiveness rating Not performed - 0
Asset creation and acquisition Asset creation/acquisition means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay.							
Observations							
Process	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	NO
The licensee is a special purpose joint venture that has a single asset – the generation							

asset and does not have any identified prospects in the immediate future of needing new assets.
Issues
An asset creation process is only unlikely to be needed. Any need for new assets is likely to arise if the Alumina refinery host needed additional steam.
Recommendation
None
Rating
Not performed - 0

Asset Disposal	Effectiveness rating Planned and tracked - 2
3. Asset disposal Effective asset disposal frameworks incorporate consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets. Alternatives are evaluated in cost-benefit terms.	
Observations	
Process	<input checked="" type="checkbox"/> Documentation <input checked="" type="checkbox"/> Availability <input checked="" type="checkbox"/> Use
	NO ⁶
There is no disposal action in the audit period and none are immediately contemplated. There are disposal processes in the contract. There are very significant issues that can arise for disposal before the assets can be safely removed, sites remediated and/or passed to new owners. Removing the generation plant is unlikely during the life of the Alumina plant. The contract extends to 2015 with an option for an additional 10 years, so short term disposal is unlikely. The contract provides for the option of being an IPP (independent Power Producer) independent of the refinery.	
Issues	
The refinery is currently being extended, so closure is not likely in the short term. There are disposal plans in the contract for that eventuality.	
Recommendation	
None.	
Rating	
Planned and tracked - 2	

Environmental analysis	Effectiveness rating Planned and tracked - 2
4. Environmental analysis Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.	

⁶ No opinion able to be formed

Observations							
Process	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
<p>There are no unresolved issues have arisen with respect to environmental matters. Issues about air and water quality are being managed actively. The host (Worsley) conducts audits of their environmental licence obligations and these licensed assets are embedded in their environmental licence area. No non compliances have been reported.</p> <p>The licensee considers threats to the operation, the principal external threats to the assets being the availability of fuel. Major breakdowns are an internal issue covered under contingencies.</p>							
Issues							
<p>The alumina plant can operate with reduced capacity on coal when gas is short (with the corresponding reduction in steam requirements and the related electricity requirements).</p> <p>Worsley has two gas or oil fired package boilers (each rated 100 T/hr) that are used to offset any loss of steam from the SWCJV. They have standby arrangements to replace electricity via Verve trading group so they are not unnecessarily exposed to the STEM. (Worsley is one of the grandfathered customers Verve is allowed to trade with under the act).</p> <p>The SWCJV purchases its fuel from Verve so the gas is part of the greater Verve portfolio. The SWCJV is a DBNGP T1 tranche shipper for all of its required transport capacity. This gas transport contract is assigned to Verve by the licensee for ease of day to day DBNGP pipeline management.</p> <p>The plant receives preferential supply from within Verve Energy gas portfolio under partial curtailment scenarios.</p> <p>In an extreme gas shortage there will be no gas to run the alumina refinery calcination process resulting in reduced throughput, Under these conditions, curtailment of the licensed plant ceases to be critical for the steam host..</p>							
Rating							
Planned and tracked - 2							

Asset operations						Effectiveness rating Well defined - 3	
5. Asset operations							
Operations functions relate to the day-to-day running of assets and directly affect service levels and costs.							
Observations							
Process	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
<p>The plant operates in full load mode (is rarely operated at substantially less than full load whereas base load may be turned down at system low load periods). Full load mode is a low thermal cycling mode with reduced stresses. The demands of the alumina process dictate continuous generation with Verve taking any excess and alternatively providing support when the plant requires maintenance. The plant has operated with very high availability (>98%). The plant is highly automated.</p> <p>Worsley Alumina operates the plant for the licensee as part of their electricity and steam generation requirements on site. The operating procedures are well documented. Operation is appropriate for the duty.</p>							

Issues
None.
Recommendation
None
Rating
Well defined - 3

Asset Maintenance	Effectiveness rating Well defined - 3
6. Asset maintenance	
Maintenance functions relate to the upkeep of assets and directly affect service levels and costs.	
Observations	
Process	<input checked="" type="checkbox"/> Documentation
	<input checked="" type="checkbox"/> Availability
	<input checked="" type="checkbox"/> Use
<p>First line maintenance is provided by Worsley Alumina and major maintenance by contractors. The major maintenance contractor has a long term contract over full maintenance cycles and includes a performance element related to availability. A resident engineer is present on site.</p> <p>Worsley use an IT system that coordinates tasks, incorporates condition, risk, breakdown and time based maintenance. The German business software SAP is used and has been well tailored to the host's specific maintenance needs.</p>	
Issues	
<p>Currently the plant has a major breakdown. This occurred outside the audit period and the investigation is incomplete. While it is conjecture as to the cause, it is unlikely to relate to operation as the plant is operated in base load with few starts. It is also unlikely to be maintenance as the failed component was replaced during a routine maintenance outage and has only used 16,000 hours of a rated 96,000 hours life.</p> <p>Early corrosion and other problems in the heat recovery boiler have been resolved early in the plant life and no issues have occurred during the audit period.</p> <p>During the audit period the plant had very high availability (>98%).</p>	
Recommendation	
None.	
Rating	
Well defined - 3	

Asset Management Information System	Effectiveness rating Planned and tracked- 2
7. Asset Management Information System (MIS)	
An asset management information system is a combination of processes, data and software that support the asset management functions.	
Observations	
Process	<input checked="" type="checkbox"/> Documentation
	<input checked="" type="checkbox"/> Availability
	<input checked="" type="checkbox"/> Use
The licensee uses Worsley's IT system which is very appropriate for the function. The	

major maintenance contractor has their own IT system.
Issues
None
Rating
Planned and tracked- 2

Risk management	Effectiveness rating Planned and tracked- 2			
8. Risk management				
Risk management involves the identification of risks and their management within an acceptable level of risk.				
Observations				
Process	<input checked="" type="checkbox"/> Documentation	<input checked="" type="checkbox"/> Availability	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/>
The licensee uses Verve's risk management processes. The plant is fully insured. These are appropriate for the operation and maintenance of the plant				
Issues				
None				
Rating				
Planned and Tracked - 2				

Contingency planning	Effectiveness rating Planned and tracked - 2			
9. Contingency planning				
Contingency plans document the steps to deal with the unexpected failure of an asset.				
Observations				
Process	<input checked="" type="checkbox"/> Documentation	<input checked="" type="checkbox"/> Availability	<input checked="" type="checkbox"/> Use	<input checked="" type="checkbox"/>
There are contingent processes for loss of fuel which are discussed under environmental analysis.				
The major maintenance contractor has performance incentives in the contract and has people immediately available to deal with breakdown matters. .				
Issues				
The mode of operation and maintenance together with recommended major service provided should mitigate major breakdowns. The licensee has contracted the plant manufacturer to provide the major maintenance and this contract has performance conditions.				
There however has been a major breakdown (outside the audit period) and subject to the investigations underway, it appears that there is little more that the licensee could do to further reduce the chances of major breakdowns.				
Recommendation				
None.				
Rating				

Planned and tracked - 2

Financial planning	Effectiveness rating Planned and tracked - 2
10. Financial planning	
The financial planning component of the asset management plan brings together the financial elements of the service delivery to ensure its financial viability over the long term.	
Observations	
Process	<input checked="" type="checkbox"/> Documentation <input checked="" type="checkbox"/> Availability <input checked="" type="checkbox"/> Use <input checked="" type="checkbox"/>
The licensee has rolling 5 year budgets for plant operations, maintenance and repairs.	
Issues	
Rating	
Planned and tracked - 2	

Capital expenditure planning	Effectiveness rating Performed informally - 1
11. Capital expenditure planning	
The capital expenditure plan provides a schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure on each over the next five or more years.	
Since capital investments tend to be large and lumpy, projections would normally be expected to cover at least 10 years, preferably longer. Projections over the next five years would usually be based on firm estimates.	
Observations	
Process	<input checked="" type="checkbox"/> Documentation <input checked="" type="checkbox"/> Availability <input checked="" type="checkbox"/> Use <input checked="" type="checkbox"/>
The licensee is not contemplating major investments and outside the financial commitments in their financial planning there is little need for formal capital expenditure planning as the plant is considered mature. What expenditure planning is required is ad hoc.	
Issues	
None.	
Rating	
Performed informally - 1	

Review of AMS	Effectiveness rating Not performed - 0
12. Review of AMS	
The asset management system is regularly reviewed and updated.	
Observations	
Process	<input checked="" type="checkbox"/> Documentation <input checked="" type="checkbox"/> Availability <input checked="" type="checkbox"/> Use <input checked="" type="checkbox"/>
The AMS is simple straightforward system but there are no explicit reviews planned.	

Issues
The licensee needs to periodically review the AMS to see that it is meeting their requirement considering whatever changes in the environment or market that have occurred.
Recommendation
The licensee considers a process of scheduled periodic reviews of the AMS.
Rating
Not performed - 0

