



**COLLGAR WIND FARM PTY LTD
GENERATION LICENCE EGL 22
PERFORMANCE AUDIT
ASSET MANAGEMENT REVIEW REPORT**

**Prepared by Kevan McGill
Date 7 March 2017**



Thomas Scott-Morey
CEO
Collgar Wind Farm Pty Ltd
Murray Street
WEST PERTH WA 6005

Dear Mr Scott-Morey

Performance Audit & Asset Management Review Electricity Licence

The fieldwork on the performance audit of Generation Licence EGL 22 for the audit period (1 May 2013 to 31 Oct 2016) is complete and I am pleased to submit the report to you. The report reflects my findings and opinions.

In my opinion, the Licensee has maintained a good level of compliance with the Licence conditions and integrity with the Licensee's reporting obligations. There are no non-compliances noted.

In my opinion, the Licensee maintained, in all material aspects, control procedures in relation to the Generation licence (EGL 22) for the audit period on the relevant clauses referred to within the scope section of this report.

In my opinion, the Licensee maintained, in all material aspects, effective control procedures and an effective asset management system in relation to the Generation licence (EGL 22) for the review period on the relevant clauses referred to within the scope section of this report.

Yours sincerely

Kevan McGill
Director

Date 7 March 2017

CONTENTS

1	Executive Summary	5
1.1	Overall Conclusion	5
1.2	Summary of significant results.....	5
1.2.1	Audit	5
1.2.2	Asset management system review	5
1.3	Audit period.....	5
1.4	The Licensee	5
1.5	Previous audit non-compliances and recommendations.....	6
1.6	Issues from current audit.....	7
1.6.1	Compliance elements requiring corrective measures	7
1.6.2	Opportunities for improvement	8
1.7	Previous review recommendations.....	8
1.8	Table of Current Review Asset System Deficiencies/ Recommendations.....	12
2	Performance Audit & Asset Management System Review Performance Audit Objectives	13
2.1	Performance Audit Objectives	13
2.2	Review objectives	14
2.3	Scope Limitation	15
2.4	Inherent Limitations.....	15
2.5	Statement of Independence	15
2.6	Scope of the Audit.....	16
2.7	Key Contacts.....	17
2.8	Audit Requirements.....	18
2.9	Overall Conclusion	19
2.10	Findings	19
2.11	Audit compliance and controls rating scales.....	19
2.12	Audit Summary	20
2.13	Review effectiveness	21
2.13.1	Asset Management Review Effectiveness Summary.....	21
2.13.2	Asset management system effectiveness summary	22

2.14	Establishing the Context	24
2.14.1	Audit Results and Recommendations.....	25
2.14.2	Compliance elements requiring Corrective measures	25
2.14.3	Suggestions for improvement.....	25
2.15	Detailed findings	25
2.15.1	Audit work undertaken	25
2.15.2	Further Control Strategies	25
2.16	Post Audit/ post Review Implementation plans	25
2.17	Audit/ review evidence	26
2.18	Detailed audit findings.....	27
2.18.1	Electricity Industry Act – Licence Conditions and Obligations.....	27
2.18.2	Electricity Licence – Licence Conditions and Obligations	30
2.18.3	Electricity Industry Metering Code – Licence Conditions and Obligations (all licence condition Licence clause 5.1)	33
2.19	Asset management system review results and recommendations.....	45
3	Photographs.....	68



1 EXECUTIVE SUMMARY

This performance audit and asset management system review was conducted in accordance with the guidelines issued by the Economic Regulation Authority (ERA) for the audit period (1 May 2013 to 31 Oct 2016).

1.1 OVERALL CONCLUSION

In my opinion, the Licensee has maintained a good level of compliance with the licence conditions. There were no non-compliances requiring corrective actions. There are no issues with the integrity of reporting to the *ERA* or other statutory organisations.

In my opinion, the Licensee maintained, in all material aspects, effective control procedures in relation to the Generation Licence (EGL 22) for the audit period based on the relevant clauses referred to within the scope section of this report.

In my opinion, the Licensee maintained, in all material aspects, effective control procedures and an effective asset management system in relation to the Generation Licence (EGL 22) for the review period on the relevant clauses referred to within the scope section of this report.

1.2 SUMMARY OF SIGNIFICANT RESULTS

1.2.1 AUDIT

While there are no non-compliances.

1.2.2 ASSET MANAGEMENT SYSTEM REVIEW

There are no issues that are required to improve the effectiveness of the asset management system.

1.3 AUDIT PERIOD

This audit covers the period 1 May 2013 to 31 Oct 2016. The previous audit/review period was 30 April 2010 to 30 April 2013.

1.4 THE LICENSEE

Collgar Wind Farm (*Collgar*) holds an Electricity Generation Licence (EGL 22) issued by the Economic Regulation Authority under the Electricity Industry Act 2004. This performance audit was conducted in accordance with the guidelines issued by the Economic Regulation Authority (ERA) to assess Collgar's level of compliance with the licence conditions.

Collgar Wind Farm is located 25 km south east of Merredin in Western Australia. The plant is operated by Vestas Australian Wind Technology Pty Ltd (Vestas) which has been contracted to provide the operation and maintenance services.

The power station consists of 111 Vestas V90 1.86 MW wind turbines with a total generating capacity of 206 MW. The assets also include Operation and Maintenance (O&M) buildings, high voltage switchyard, a 33kV underground / overhead collection facilities and property leases.

The records and areas covered by the Licence were inspected and interviews were also held with key personnel at the Merredin licence area and in the Perth Office.

1.5 PREVIOUS AUDIT NON-COMPLIANCES AND RECOMMENDATIONS

There are no issues from previous audit.

Table of Previous Non-Compliances and Audit Recommendations				
A. Resolved before end of previous audit period				
Reference (no./year)	(Compliance rating/ Legislative Obligation/ details of the issue)	Auditors' Recommendation	Date Resolved	Further action required (Yes/No/Not Applicable) Details of further action required including current recommendation reference if applicable
B. Resolved during current Audit period				
Reference (no./year)	(Compliance rating/ Legislative Obligation/ details of the issue)	Auditors' Recommendation	Date Resolved	Further action required (Yes/No/Not Applicable) Details of further action required including current recommendation reference if applicable
C. Unresolved at end of current Audit period				
Reference (no./year)	(Compliance rating/ Legislative Obligation/ details of the issue)	Auditors' Recommendation	Date Resolved	Further action required (Yes/No/Not Applicable) Details of further action required including current recommendation reference if applicable

Opportunities for Improvement (2013)

Table of Previous Non-Compliances and Audit Recommendations				
A. Resolved before end of previous audit period				
Reference (no./year)	(Compliance rating/ Legislative Obligation/ details of the issue)	Auditors' Recommendation	Date Resolved	Further action required (Yes/No/Not Applicable) Details of further action required including current

				recommendation reference if applicable
1/2013 124	Compliant 4 Electricity Industry Act section 11 Report to ERA in manner prescribed Initial compliance report was late.	None as action to comply had been implemented	2011	No
B. Unresolved at end of current Audit period				
Reference (no./year)	(Compliance rating/ Legislative Obligation/ details of the issue)	Auditors' Recommendation	Date Resolved	Further action required (Yes/No/Not Applicable) Details of further action required including current recommendation reference if applicable

1.6 ISSUES FROM CURRENT AUDIT

There are no issues from current audit.

1.6.1 COMPLIANCE ELEMENTS REQUIRING CORRECTIVE MEASURES

The actions requiring corrective measures are:

Table of Current Audit Non-Compliances/Recommendations			
A. Resolved during current Audit period			
Reference (no./year)	Non-Compliance/Controls improvement (Rating / Legislative Obligation / Details of Non Compliance or inadequacy of controls)	Date Resolved (& management action taken)	Auditors comments
B. Unresolved at end of current Audit period			
Reference (no./year)	Non-Compliance/Controls improvement (Rating / Legislative Obligation / Details of Non	Auditors' Recommendation	Management action taken by end of Audit period

	Compliance or inadequacy of controls)		

1.6.2 OPPORTUNITIES FOR IMPROVEMENT

Table of Current Audit Non-Compliances/Recommendations			
Unresolved at end of current Audit period			
Reference (no./year)	Non-Compliance/Controls improvement (Rating / Legislative Obligation / Details of Non Compliance or inadequacy of controls)	Auditors' Recommendation	Management action taken by end of Audit period

1.7 PREVIOUS REVIEW RECOMMENDATIONS

Recommendations from last review (2013):

Previous review ineffective components recommendations

Table of Previous Review Ineffective Components Recommendations				
A. Resolved before end of previous review period				
Reference (no./year)	(Asset management effectiveness rating/ Asset Management System Component & Criteria / details of the issue)	Auditors' Recommendation or action taken	Date Resolved	Further action required (Yes/No/Not Applicable) & Details of further action required including current recommendation reference if applicable

B. Resolved during current Review period				
Reference (no./year)	(Asset management effectiveness rating/ Asset Management System Component & Criteria / details of the issue)	Auditors' Recommendation	Date Resolved	Further action required (Yes/No/Not Applicable) & Details of further action required including current recommendation reference if applicable
1/2013 2.5	A2 <i>Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood.</i> The initial compliance report was late Audit item 124	None as action to comply had been implemented	2011	No
2/2013 4.2	A2 <i>Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved.</i>	None as action to comply had been implemented	2011	No
3/2013 4.3	A2 <i>Compliance with statutory and regulatory requirements.</i> The initial compliance report was late Audit item 124	None as action to comply had been implemented	2011	No
4/2014 4.4	A2 <i>Achievement of customer service levels.</i> A comprehensive "Operational Report" is prepared monthly by the licensee summarising the operating conditions, availability, generation output, compliance with client's requirements and financial status. As the plant output is dependent upon environmental conditions the plant primary service level is availability rather than power generation. Potential availability is measured in terms of the plant capacity to generate power, for the first four months of 2013 the Potential Availability was over 98.59%, while the minimum Actual Availability was 89.25 in April, due to Western Power shutdown of the connecting 220 kV Transmission line over five days and WP power constraint on one day.	None No recommendations were made	2013	No
5/2013 6.4	A2 <i>Failures are analysed and operational/maintenance plans adjusted where necessary.</i> Failures have been investigated and assessed and have resulted in corrective actions, where applicable corrective actions have resulted in changes to operation. A recording system for failures is in operation. There have been failures of neutral earthing transformers.	None No recommendations were made	2013	No

B. Resolved during current Review period				
Reference (no./year)	(Asset management effectiveness rating/ Asset Management System Component & Criteria / details of the issue)	Auditors' Recommendation	Date Resolved	Further action required (Yes/No/Not Applicable) & Details of further action required including current recommendation reference if applicable
6/2013 7.2	A2 <i>Input controls include appropriate verification and validation of data entered into the system.</i> Input controls of data appear to be satisfactory. Performance standard such as availability form the basis of revenue from the client and payments to the operator. The standards are monitored continually by the Site Service Manager from the SCADA operational performance reports and reported in Monthly reports. The performance is adjusted for owner initiated events, wind turbine yawing, grid issues. Western Power (WP) meter reads are manually downloaded daily from the "Western Power Portal" and are reconciled with the SCADA readings every two weeks. Each week and each month's availability data is signed off by representatives of Collgar and Vestas on a progressive basis to ensure that availability levels are being achieved and that both Collgar and the operator verify the data.	None No recommendations were made	2013	No
7/2013 7.5	A2 <i>Data backup procedures appear adequate.</i> A back up process is in place. Currently site data is backed up to Perth Office and corporate data is backed up off site several times daily.	None	2011	No
8/2013 7.6	A2 <i>Key computations related to licensee performance reporting are materially accurate.</i> Output from the Collgar wind farm site is measured by a generation meter installed by WP at the connection point at the WP's substation on site. A check meter is also installed. The readings are posted by WP on their portal. Independent readings are received from Vestas' SCADA system which are used by the licensee to verify the WP figures.	None No recommendations were made	2013	No

B. Resolved during current Review period				
Reference (no./year)	(Asset management effectiveness rating/ Asset Management System Component & Criteria / details of the issue)	Auditors' Recommendation	Date Resolved	Further action required (Yes/No/Not Applicable) & Details of further action required including current recommendation reference if applicable
9/2013 8.2	B2 <i>Risks are documented in a risk register and treatment plans are actioned and monitored.</i> Risk analysis for likelihood and consequences of asset failure has been performed in the " Collgar Operational Risk Matrix_20130221" which includes actions required to mitigate the risks.	The analysis could be improved by identifying the implementation and completions of actions. 2017 audit update - Mitigations including reference to relevant policies and controls are documented in the risk register. Detailed actions are captured under the Company team action list which is reviewed by management on a monthly basis and if applicable, under the Board action list which is reviewed by the Board and senior management every quarter at the Board meeting.	2014	No
10/2013 10.1	A2 <i>The financial plan states the financial objectives and strategies and actions to achieve the objectives.</i> The licensee has a financial plan, the "Financial Model" which shows lifecycle costs including operating and capital expenditure up to 2037. The Model is updated with actual costs	None	2011	No
11/2013 11.1	A2 <i>There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates.</i> The capital expenditure plan is included in the 25 year Financial Model and contains both the historical costs and forecast nominal provision for capital expenditure to 2037.	None	2011	No
12/2013 11.2	B2 <i>The plan provides reasons for capital expenditure and timing of expenditure.</i> There is evidence of feasibility studies however, as documented in the BP, section 4.4, there is no commitment to major capital expenditure in the near future and no refurbishment fees are expected.	None	2011	No

B. Resolved during current Review period				
Reference (no./year)	(Asset management effectiveness rating/ Asset Management System Component & Criteria / details of the issue)	Auditors' Recommendation	Date Resolved	Further action required (Yes/No/Not Applicable) & Details of further action required including current recommendation reference if applicable
13/2013 11.3	A2 <i>The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan</i> The financial plan is consistent with the asset life and condition identified in the asset system records.	None	2011	No
C. Unresolved at end of current Review period				
Reference (no./year)	(Asset management effectiveness rating/ Asset Management System Component & Criteria / details of the issue)	Auditors' Recommendation	Further action required (Yes/No/Not Applicable) & Details of further action required	

1.8 TABLE OF CURRENT REVIEW ASSET SYSTEM DEFICIENCIES/ RECOMMENDATIONS

Table of Current Review Asset System Deficiencies/Recommendations			
A. Resolved during current Review period			
Reference (no./year)	Asset System Deficiency (Rating/ Asset Management System Component & Effectiveness Criteria / Details of Asset System Deficiency)	Date Resolved (& management action taken)	Auditors comments
B. Unresolved at end of current Review period			
Reference (no./year)	Asset System Deficiency (Rating/ Asset Management System Component & Effectiveness Criteria / Details of Asset System Deficiency)	Auditors Recommendation	Management action taken by end of audit period

2 PERFORMANCE AUDIT & ASSET MANAGEMENT SYSTEM REVIEW PERFORMANCE AUDIT OBJECTIVES

2.1 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 (ERA) not less than once in every period of 2 years or longer as the ERA allows with a performance audit conducted by an independent expert acceptable to the ERA.

The primary objective of the 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 ERA determines should form part of the audit.

The licence also provides for individual licence conditions namely - the ERA 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).

The audit and review are to be conducted in accordance with the prevailing ERA documents “Audit Guidelines: Electricity and Gas Licence (hereinafter “Guidelines”)¹ and the Electricity Compliance Reporting Manual (hereinafter “Manual”)². In particular, the Manual identifies each licence condition and resolves it into a number of obligations (hereinafter “Obligations”), each of which is to be addressed individually by the audit.

The Licensee appointed McGill Engineering Services Pty Ltd to conduct the audit of its Generation Licence with approval from the ERA. A preliminary assessment was conducted with the Licensee’s management to determine the inherent risk and the state of control for each compliance element of the Licence obligation. McGill Engineering Services Pty Ltd then prioritised the audit coverage based on the risk profile of the Licensee with an emphasis on providing greater focus and depth of testing for areas of higher risk to provide reasonable assurance that the Licensee had complied with the standards, outputs and outcomes under the Licence obligations.

¹ Economic Regulation Authority: Audit and Review Guidelines: Electricity and Gas Licences April 2014

² Economic Regulation Authority: Electricity Compliance Reporting Manual September 2014. The audit period was covered by the 2013 manual for a period and the 2014 manual for the majority of the audit period. There are no items in the 2013 manual that are not in the 2014 manual and the 2014 manual is used for the audit. The July 2016 manual has no differences for this licensee. The October 2016 manual also has no differences for this licensee other than item 105 which already can accommodate the change.

The audit was conducted in a manner consistent with Australian Auditing Standards (AUS) 808 “Planning Performance Audits” and AUS 806 “Performance Auditing”. McGill Engineering Services Pty Ltd evaluated the adequacy and effectiveness of the controls and performance by the Licensee relative to the standards referred in the Generation Licence through a combination of enquiries, examination of documents and detailed testing for Generation Licence EGL 22 for the Licensee.

2.2 REVIEW OBJECTIVES

Under the *Electricity Industry Act 2004* (the Act) section 14, the holder of a Generation License must develop an Asset Management System and maintain an asset management system to manage the assets accordingly for delivery of a reliable service to its customers. The Act requires a review of the asset management system every two years (or longer time approved by the ERA).

This report is an impartial review of the Licensee’s asset management effectiveness under the Review Guidelines: Electricity and Gas Licences published by the ERA.

The review conducted between December 2016 to March 2017 examined the asset management processes used by the Licensee in delivering the services to its customers. These services include lifecycle processes for:

- Asset planning;
- Asset creation/acquisition;
- Asset disposal;
- Environmental analysis;
- Asset operations;
- Asset maintenance;
- Asset management information system (AMIS);
- Risk management;
- Contingency planning;
- Financial planning;
- Capital expenditure planning; and
- Review of the asset management system.

As well as the processes, the asset management supporting systems were tested as to their use and effectiveness. Data used by the Licensee was also examined with respect to its effectiveness for asset management and the delivery of outcomes.

Tests were undertaken through interviews and investigation of the processes to assess whether they were being performed as documented.

The Licensee appointed McGill Engineering Services Pty Ltd to conduct the review of its Generation Licence with approval from the ERA. A preliminary assessment was conducted with the Licensee’s management to determine the inherent risk and the state of control for each asset management system lifecycle process. McGill Engineering Services Pty Ltd then prioritised the review coverage based on the risk profile of the

Licensee with an emphasis on providing greater focus and depth of testing for areas of higher risk to provide reasonable assurance that the Licensee has maintained an effective asset management system.

The review was conducted in a manner consistent with ASAE 3000 Assurance standard for engagements to audit other than historical financial information. McGill Engineering Services Pty Ltd evaluated the adequacy and effectiveness of the controls and performance by the Licensee relative to the standards referred in the Generation Licence through a combination of enquiries, examination of documents and detailed testing for Electricity Generation Licence EGL 22 for Collgar Wind Farm Pty Ltd.

2.3 SCOPE LIMITATION

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

2.4 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.

2.5 STATEMENT OF INDEPENDENCE

To the best of my knowledge and belief, there is no basis for contraventions of any professional code of conduct in respect of the audit.

I have not done or contemplate undertaking any other work with the Licensee.

There are no independence threats due to:

- self-interest – as the audit company or a member of the audit team have no financial or non-financial interests in the Licensee or a related entity;
- self-review – no circumstance has occurred:
 - where the audit company or a member of the audit team has undertaken other non-audit work for the Licensee that is being evaluated in relation to the audit/review; or
 - when a member of the audit team was previously an officer or director of the Licensee; or

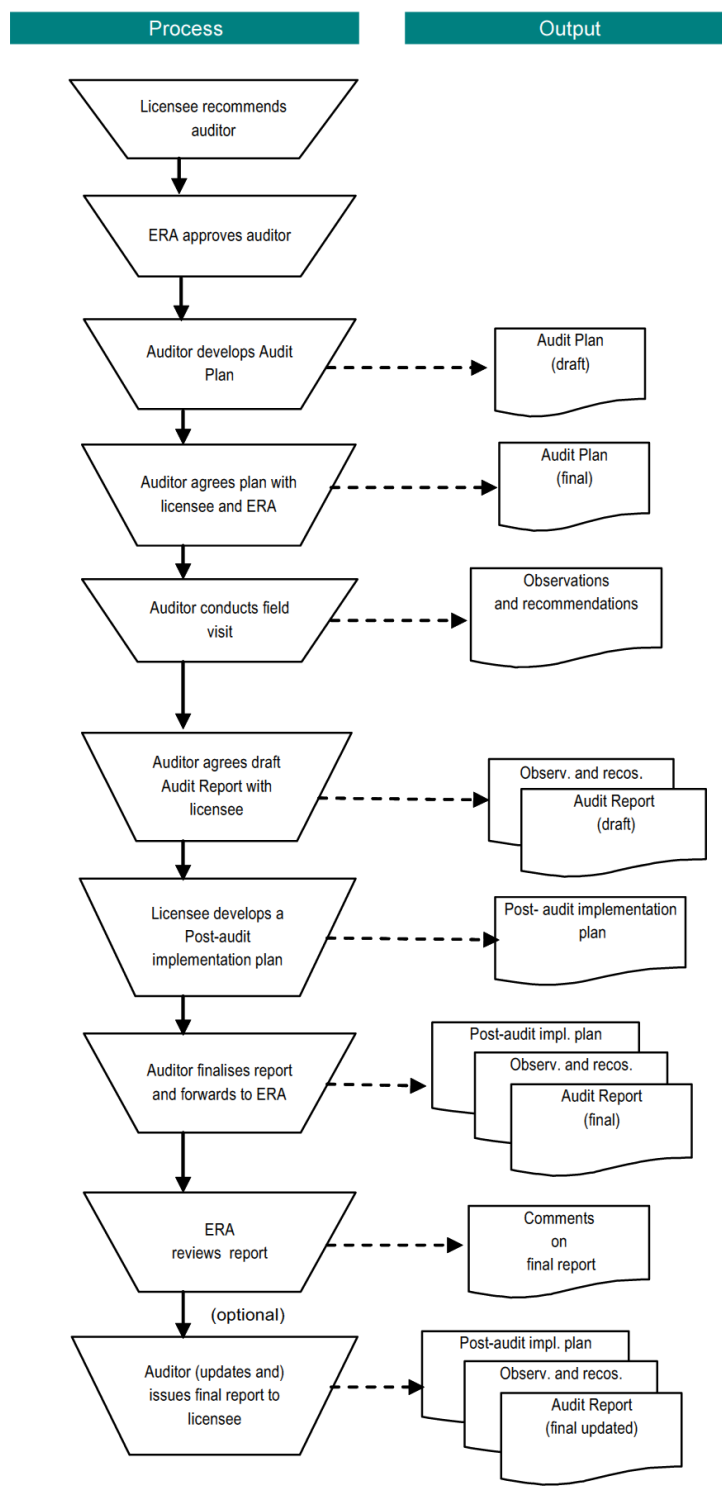
- where a member of the audit team was previously an employee of the Licensee who was in a position to exert direct influence over material that will be subject to audit during an audit/review.

There is no risk of a self-review threat as:

- no work has been undertaken by the auditor, or a member of the audit/review team, for the Licensee within the previous 24 months; or
- the auditor is currently undertaking for the Licensee; or
- the auditor has submitted an offer, or intends to submit an offer, to undertake for the Licensee within the next 6 months; and
- there is no close family relationship with a Licensee, its directors, officers or employees, and
- the auditor is not, nor is perceived to be too sympathetic to the Licensee's interests.

2.6 SCOPE OF THE AUDIT

The audit was conducted in accordance with flow chart:



2.7 KEY CONTACTS

The key contacts were:

- Licensee: The licensee's key people are
 - Thomas Scott-Morey, CEO of Collgar Wind Farm Pty Ltd

- Fan Zhang, CFO of Collgar Wind Farm Pty Ltd
- Barry Sayers, Site Superintendent of Collgar Wind Farm Pty Ltd
- Gina Dodd, Principal Engineer of Collgar Wind Farm Pty Ltd
- Steven Beilken, Site Service Manager Collgar Wind Farm Vestas.
- McGill Engineering Services Pty Ltd:
 - Kevan McGill, John McLoughlin.

The wind farm at Collgar was visited and the Perth Office. Kevan McGill spent 80 hours and John McLoughlin spent 30 hours on the audit/review.

2.8 AUDIT REQUIREMENTS

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

Nature of audit work conducted

The audit considered:

- **process compliance** - the effectiveness of systems and procedures in place throughout the audit period, including the adequacy of internal controls;
- **outcome compliance** – the actual performance against standards prescribed in the licence throughout the audit period;
- **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);
- **integrity of reporting** – the completeness and accuracy of the compliance and performance reports provided to the ERA; and
- **compliance with any individual licence conditions** - the requirements imposed on the specific licensee by the ERA or specific issues that are advised by the ERA.

Stage	Auditor	Standard
1. Risk & Materiality Assessment Outcome - Operational/ Performance Audit Plan	K McGill John McLoughlin	ASA 300 Planning ASA 315: Risk Assessments and Internal Controls ASAE 3000 Assurance standard for engagements to audit other than historical financial information AS/NZS 4360:2004: Risk Management ERA Guidelines
2. System Analysis	K McGill John McLoughlin	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 	K McGill John McLoughlin	AUS 502: Audit Evidence ASAE 3000 Assurance standard for engagements to audit other than historical financial information

<ul style="list-style-type: none"> • Compliance procedures • Compliance attitude 		
4. Reporting	K McGill John McLoughlin	ASA 300 Planning ASAE 3000 Assurance standard for engagements to audit other than historical financial information

2.9 OVERALL CONCLUSION

In my opinion, the Licensee maintained, in all material aspects, effective control procedures in relation to the Generation Licence EGL 22 for the audit period based on the relevant clauses referred to within the scope section of this report.

There are no non-compliances that required corrective actions.

2.10 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 detailed findings on Page 27.

2.11 AUDIT COMPLIANCE AND CONTROLS RATING SCALES

Performance audit compliance and controls rating scales			
Adequacy of Controls Rating		Compliance Rating	
Rating		Rating	Description
A	Adequate controls - no improvement needed	1	Compliant
B	Generally adequate controls – improvement needed	2	Non-compliant – minor impact on customers or third parties
C	Inadequate controls -significant improvement required	3	Non-compliant – moderate impact on customers or third parties
D	No controls evident	4	Non-compliant – major impact on customers or third parties
NP	Not performed	NR	Not Rated

2.12 AUDIT SUMMARY

Item	Licence Clause/Condition reference (Cl.=clause, Sch.=schedule)	Obligations under condition	Licence Type (G - Generation)	Type	Audit Priority	Adequacy of Controls (NP=Not Performed)					Compliance Rating (NR = Not Rated)				
Licence Conditions – Licence Clause – Generation					Priority	Adequacy of controls rating					Compliance Rating				
Obligations- Electricity Industry Act Section						A	B	C	D	NP	1	2	3	4	NR
101.	14.1	s ³ 13(1)	G	NR	5	✓					✓				
102.	20.1	s14(1)(a)	G	NR	5	✓					✓				
103.	20.2 & 20.3	s14(1)(b)	G	2	4	✓					✓				
104.	20.4	s14(1)(c)	G	NR	5	✓					✓				
105.	4.1	s17(1)	G	2	4	✓					✓				
106.	5.1	s31(3)	G	NR	5	✓					✓				
107.	5.1	s41(6)	G	2	4					✓					✓
Licence Conditions – Electricity Industry Act Section					Priority	Adequacy of controls rating					Compliance Rating				
Obligations- Licence Clause – Generation						A	B	C	D	NP	1	2	3	4	NR
119.	s11	12.1	G	2	4	✓					✓				
120.	s11	13.4	G	2	4					✓					✓
121.	s11	14.2	G	2	4	✓					✓				
122.	S22	20.5	G	2	4	✓					✓				
123.	s11	15.1	G	2	4					✓					✓
124.	s11	16.1	G	2	4	✓					✓				
125.	s11	17.1&17.2	G	2	4					✓					✓
126.	s11	18.1	G	2	4	✓					✓				
Licence Conditions – Licence clause Obligations- Electricity Industry Metering Code Clause					Priority	Adequacy of controls rating					Compliance Rating				
						A	B	C	D	NP	1	2	3	4	NR
324.	5.1	3.3B	G	NR	5					✓					✓
339.	5.1	3.11(3)	G	NR	5					✓					✓
364.	5.1	3.27	G	2	4					✓					✓
371.	5.1.	4.4(1)	G	NR	5					✓					✓
372.	5.1	4.5(1)	G	NR	5					✓					✓
373.	5.1	4.5(2)	G	2	4					✓					✓
388.	5.1	5.4(2)	G	2	4					✓					✓

³ s = Section of Act

Licence Conditions – Licence clause Obligations- Electricity Industry Metering Code Clause						Priority	Adequacy of controls rating					Compliance Rating				
							A	B	C	D	NP	1	2	3	4	NR
401.	5.1	5.16	G	2	4					✓					✓	
402.	5.1	5.17(1)	G	2	4					✓					✓	
405.	5.1	5.18	G	2	4					✓					✓	
406.	5.1	5.19(1)	G	NR	5					✓					✓	
407.	5.1	5.19(2)	G	NR	5					✓					✓	
408.	5.1	5.19(3)	G	2	4					✓					✓	
410.	5.1	5.19(6)	G	NR	5					✓					✓	
416.	5.1	5.21(5)	G	2	4					✓					✓	
417.	5.1	5.21(6)	G	NR	4					✓					✓	
435.	5.1	5.27	G	2	4					✓					✓	
448.	5.1	6.1(2)	G	2	4					✓					✓	
451.	5.1	7.2(1)	G	2	4					✓					✓	
453.	5.1	7.2(4)	G	2	4					✓					✓	
454.	5.1	7.2(5)	G	2	4					✓					✓	
455.	5.1	7.5	G	NR	5					✓					✓	
456.	5.1	7.6(1)	G	NR	5					✓					✓	
457.	5.1	8.1(1)	G	NR	5					✓					✓	
458.	5.1	8.1(2)	G	2	4					✓					✓	
459.	5.1	8.1(3)	G	NR	5					✓					✓	
460.	5.1	8.1(4)	G	NR	5					✓					✓	
461.	5.1	8.3(2)	G	NR	5					✓					✓	

2.13 REVIEW EFFECTIVENESS

2.13.1 ASSET MANAGEMENT REVIEW EFFECTIVENESS SUMMARY

The overall effectiveness rating for each asset management process is based on the combination of the process and policy adequacy rating and the performance rating.

Asset management process and policy definition adequacy rating

Rating	Description	Criteria
A	Adequately defined	<ul style="list-style-type: none"> Processes and policies are documented. Processes and policies adequately document the required performance of the assets. Processes and policies are subject to regular reviews, and updated where necessary. The asset management information system(s) are adequate in relation to the assets that are being managed.
B	Requires some improvement	<ul style="list-style-type: none"> Process and policy documentation requires improvement. Processes and policies do not adequately document the required performance of the assets. Reviews of processes and policies are not conducted regularly enough. The asset management information system(s) require minor improvements (taking into consideration the assets that are being managed).

C	Requires significant improvement	<ul style="list-style-type: none"> Process and policy documentation is incomplete or requires significant improvement. Processes and policies do not document the required performance of the assets. Processes and policies are significantly out of date. The asset management information system(s) require significant improvements (taking into consideration the assets that are being managed).
D	Inadequate	<ul style="list-style-type: none"> Processes and policies are not documented. The asset management information system(s) is not fit for purpose (taking into consideration the assets that are being managed).

Asset management performance ratings

Rating	Description	Criteria
1	Performing effectively	<ul style="list-style-type: none"> The performance of the process meets or exceeds the required levels of performance. Process effectiveness is regularly assessed, and corrective action taken where necessary.
2	Opportunity for improvement	<ul style="list-style-type: none"> The performance of the process requires some improvement to meet the required level. Process effectiveness reviews are not performed regularly enough. Process improvement opportunities are not actioned.
3	Corrective action required	<ul style="list-style-type: none"> The performance of the process requires significant improvement to meet the required level. Process effectiveness reviews are performed irregularly, or not at all. Process improvement opportunities are not actioned.
4	Serious action required	<ul style="list-style-type: none"> Process is not performed, or the performance is so poor that the process is considered to be ineffective.

2.13.2 ASSET MANAGEMENT SYSTEM EFFECTIVENESS SUMMARY

ASSET MANAGEMENT SYSTEM COMPONENT & EFFECTIVENESS CRITERIA		Asset management process and policy definition adequacy rating	Asset management performance rating
1	Asset planning	A	NR
1.1	Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning	A	NR
1.2	Service levels are defined	A	NR
1.3	Non-asset options (e.g. demand management) are considered	A	1
1.4	Lifecycle costs of owning and operating assets are assessed	A	1
1.5	Funding options are evaluated	A	NR
1.6	Costs are justified and cost drivers identified	A	NR
1.7	Likelihood and consequences of asset failure are predicted	A	1
1.8	Plans are regularly reviewed and updated	A	1
2.	Asset creation and acquisition	NP	NR
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions	NP	NR
2.2	Evaluations include all life-cycle costs	NP	NR
2.3	Projects reflect sound engineering and business decisions	NP	NR
2.4	Commissioning tests are documented and completed	A	NR

2.5	Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood	A	NR
3.	Asset disposal	NP	NR
3.1	Under-utilised and under-performing assets are identified as part of a regular systematic review process	NP	NR
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	NP	NR
3.3	Disposal alternatives are evaluated	NP	NR
3.4	There is a replacement strategy for assets	A	NR
4.	Environmental analysis	A	1
4.1	Opportunities and threats in the system environment are assessed	A	1
4.2	Performance standards (availability of service, capacity continuity, emergency response, etc.) are measured and achieved	A	1
4.3	Compliance with statutory and regulatory requirements	A	1
4.4	Achievement of customer service levels	A	1
5	Asset operations	A	1
5.1	Operational policies and procedures are documented and linked to service levels required	A	1
5.2	Risk management is applied to prioritise operations tasks	A	1
5.3	Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition and accounting data	A	1
5.4	Operational costs are measured and monitored	A	1
5.5	Staff resources are adequate and staff receive training commensurate with their responsibilities	A	1
6	Asset maintenance	A	1
6.1	Maintenance policies and procedures are documented and linked to service levels required	A	1
6.2	Regular inspections are undertaken of asset performance and condition	A	1
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	A	1
6.4	Failures are analysed and operational/maintenance plans adjusted where necessary	A	1
6.5	Risk management is applied to prioritise maintenance tasks	A	1
6.6	Maintenance costs are measured and monitored	A	1
7	Asset Management Information System (MIS)	A	1
7.1	Adequate system documentation for users and IT operators	A	1
7.2	Input controls include appropriate verification and validation of data entered into the system	A	1
7.3	Logical security access controls appear adequate, such as passwords	A	1
7.4	Physical security access controls appear adequate	A	1
7.5	Data backup procedures appear adequate and backups are tested	A	1
7.6	Key computations related to Licensee performance reporting are materially accurate	A	1
7.7	Management reports appear adequate for the Licensee to monitor licence obligations	A	1
8	Risk management	A	1
8.1	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system	A	1
8.2	Risks are documented in a risk register and treatment plans are actioned and monitored	A	1

8.3	The probability and consequences of asset failure are regularly assessed	A	1
9	Contingency planning	A	1
9.1	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	A	1
10	Financial planning	A	1
10.1	The financial plan states the financial objectives and strategies and actions to achieve the objectives	A	1
10.2	The financial plan identifies the source of funds for capital expenditure and recurrent costs	A	1
10.3	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	A	1
10.4	The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions beyond this period	A	1
10.5	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	A	1
10.6	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary	A	1
11	Capital expenditure planning	A	NR
11.1	There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates	A	NR
11.2	The plan provides reasons for capital expenditure and timing of expenditure	A	Nr
11.3	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	A	1
11.4	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned	A	1
12	Review of AMS	A	1
12.1	A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current	A	1
2.2	Independent reviews (e.g. internal audit) are performed of the asset management system	A	1

2.14 OVERALL CONCLUSION

In my opinion, the Licensee maintained, in all material aspects, effective control procedures and an effective asset management system in relation to the Generation licence (EGL 22) for the review period on the relevant clauses referred to within the scope section of this report.

There are no ineffective issues that required corrective actions.

2.15 ESTABLISHING THE CONTEXT

The key legislation that governs the licensing of providers of Electricity is the Electricity Industry Act 2004. In turn, the compliance elements in the organization's Operating Licence were examined and referred to throughout the audit process.

2.15.1 AUDIT RESULTS AND RECOMMENDATIONS

Summary of significant results

There are no non-compliances.

2.15.2 COMPLIANCE ELEMENTS REQUIRING CORRECTIVE MEASURES

There are no issues requiring corrective action.

2.15.3 SUGGESTIONS FOR IMPROVEMENT

There are no suggestions for improvement.

2.16 DETAILED FINDINGS

The following sets out the audit findings

2.16.1 AUDIT WORK UNDERTAKEN

We conducted interviews and enquiries to:

- Understand the control environment by determining the responsibility matrix and key control points
- Obtain the policies and procedures for managing licensed areas; and
- Identify the information systems and processes employed to manage licensed areas
- Determine the level of understanding of the systems and processes for managing licensed areas
- In reviewing the procedures and protocols for managing provision of services within a licensed area, where applicable, we obtained flowcharts of the processes and assessed the reasonableness of the decision matrix and the adequacy of the control points implemented by the Licensee.

2.16.2 FURTHER CONTROL STRATEGIES

The Licensee has compliance manual to assist compliance with regulatory items and a risk register.

2.17 POST AUDIT/ POST REVIEW IMPLEMENTATION PLANS

This is not applicable as there were no recommendations arising from the current audit and those recommendations from the previous review and audit have all been resolved.

2.18 AUDIT/ REVIEW EVIDENCE

The following was considered in the audit/review.

- Generation Licence V3
- Contact details
- Asset Register
- Spares List
- Collgar Financial reports
- Annual compliance returns
- Licence fees payment details
- WTG layout plans
- Master Environmental Management Plan
- Collgar Flora & Fauna Management Plan
- Collgar Stakeholder Management Plan
- Collgar Mallee fowl Management Plan
- Collgar Best Practice Guidelines
- Shire of Merredin Development approval
- DEC clearing permit
- Business plan
- Western Power Access Agreement
- Collgar Board Action list
- Collgar Finance Action list
- Sample HR employment contracts
- Balance of Plant Master works plan
- Collgar Compliance register
- Collgar Board monthly reports
- HSE and Environment management plan
- Vestas Service agreement
- Vestas service management plan
- Collgar emergency Response plan
- Collgar-Western Power operating agreement
- Collgar site communication plan
- Collgar life asset management plan
- SAP reports and screen shots
- Financial auditor report
- Sample tender documents
- Training certificates

2.19 DETAILED AUDIT FINDINGS

The following sets out the audit findings

2.19.1 ELECTRICITY INDUSTRY ACT – LICENCE CONDITIONS AND OBLIGATIONS

Item 101 Generation Licence condition 14.1	Adequacy of controls rating A	Compliance rating 1
Licence: <i>Generation</i>		
<i>Electricity Industry Act section 13(1)</i> A Licensee must, not less than once every 24 months, provide the ERA with a performance audit conducted by an independent expert acceptable to the ERA.		
Observations		
Documents	<input checked="" type="checkbox"/>	Compliance
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: The Licensee contracted with the auditor to carry out the audit. The documents were forwarded to the ERA as part of the approval of the auditor. Licensee received approval from the ERA for audit scope and appointment of auditor.		
Process	<input checked="" type="checkbox"/>	Outcome
	<input checked="" type="checkbox"/>	Output
	<input checked="" type="checkbox"/>	Reporting
	<input checked="" type="checkbox"/>	Compliance
The Licensee contracted with the auditor to carry out the audit to meet the requirements. The last audit met the requirements.		
Issues		
None		
Recommendations		
None		

Item 102 Generation Licence condition 20.1	Adequacy of controls rating A	Compliance rating 1
Licence: <i>Generation</i>		
<i>Electricity Industry Act section 13(1)</i> A Licensee must provide for an asset management system.		
Observations		
Documents	<input checked="" type="checkbox"/>	Compliance
Evidence: interviewed CEO, Site Superintendent, listed staff. Documents: Include, Business Plan, Risk management policy, SAP Screen shots, Asset Register, Environmental management plans, Environmental Plans and Approvals, Spares List, Collgar Financial reports, Annual compliance returns, Licence fees payment details, WTG layout plans,		
Process	<input checked="" type="checkbox"/>	Outcome
	<input checked="" type="checkbox"/>	Output
	<input checked="" type="checkbox"/>	Reporting
	<input checked="" type="checkbox"/>	Compliance
The Licensee has an asset management system. A copy of the asset management plan was obtained, and maintenance systems reviewed at site. These included maintenance planning modules in SAP supported by Trunk for Balance of plant and spreadsheets. The asset management system includes time based and conditioned based maintenance. The review examined the efficacy of the asset management system.		
Issues		
None		
Recommendations		
None		

Item 103 Generation Licence condition 20.2 & 20.3	Adequacy of controls rating A	Compliance rating 1
Licence: <i>Generation</i>		
<i>Electricity Industry Act section 13(1)</i> A Licensee must notify details of the asset management system and any substantial changes to it to the ERA.		
Observations		
Documents	<input checked="" type="checkbox"/>	Compliance
Evidence: interviewed CEO, Site Superintendent, listed staff. Documents: Include letter to ERA about LAMP. The asset management system was examined in the audit and review.		
Process	<input checked="" type="checkbox"/>	Outcome
Output	<input checked="" type="checkbox"/>	Reporting
Compliance	<input checked="" type="checkbox"/>	
In the licence application, the asset management system was advised to the ERA. There have been no substantial changes that required notifying the ERA other than LAMP which ERA advised was not a change to the AMS .		
Issues		
None		
Recommendations		
None		

Item 104 Generation Licence condition 20.4	Adequacy of controls rating A	Compliance rating 1
Licence: <i>Generation</i>		
<i>Electricity Industry Act section 14(1)(c)</i> A Licensee must provide the ERA 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 ERA.		
Observations		
Documents	<input checked="" type="checkbox"/>	Compliance
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: Include, Asset Management Plan. Approval and Appointment letters for current review.		
Process	<input checked="" type="checkbox"/>	Outcome
Output	<input checked="" type="checkbox"/>	Reporting
Compliance	<input checked="" type="checkbox"/>	
The Licensee contracted McGill Engineering Services, with approval of the ERA, for the review in accordance with the requirements and the review plan documents have been forwarded to the ERA as part of approval of the auditor.		
Issues		
None		
Recommendations		
None		

Item 105 Generation Licence condition 4.1	Adequacy of controls rating A	Compliance rating 1
Licence: <i>Generation</i>		
<i>Electricity Industry Act section 17(1)</i> A Licensee must pay to the ERA 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		
Documents	<input checked="" type="checkbox"/>	Compliance

Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: Include invoices and receipts									
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"/>
Fees were paid on time.									
Issues									
None.									
Recommendations									
None.									

Item 106 Generation Licence condition 5.1	Adequacy of controls rating A	Compliance rating 1
Licence: <i>Generation</i>		
<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		
Documents	<input checked="" type="checkbox"/>	Compliance
Evidence: interviewed CEO, Site Superintendent, listed staff. Documents: Include incident log.		
Process	<input checked="" type="checkbox"/>	Outcome
Output	<input checked="" type="checkbox"/>	Reporting
Compliance	<input checked="" type="checkbox"/>	
There have been no total generation interruptions, there was 1 transformer failure resulting in reduced output. All interruptions were minimized.		
Issues		
None.		
Recommendations		
None.		

Item 107 Generation Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<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		
Documents	<input type="checkbox"/>	Compliance
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: Not applicable		
Process	<input type="checkbox"/>	Outcome
Output	<input type="checkbox"/>	Reporting
Compliance	<input type="checkbox"/>	
No land has been acquired under Part 9 of the Land Administration Act and therefore no costs and expenses for taking an interest in land or an easement over land. There are commercial leases.		
Issues		
None		
Recommendations		
None		

2.19.2 ELECTRICITY LICENCE – LICENCE CONDITIONS AND OBLIGATIONS

Item 119 Electricity Industry Act section 11	Adequacy of controls rating A	Compliance rating 1
Licence: <i>Generation</i>		
<i>Generation Licence condition 12.1</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		
Documents	<input checked="" type="checkbox"/>	Compliance
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: The Collgar annual report declaration by the financial auditor has been sighted. The Collgar financial accounts refer to compliance with the appropriate accounting standards as does business plan.		
Process	<input checked="" type="checkbox"/>	Outcome
Output	<input checked="" type="checkbox"/>	Reporting
Compliance		
The Collgar annual reports/business plan show compliance with accounting standards.		
Issues		
None		
Recommendations		
None		

Item 120 Electricity Industry Act section 11	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<i>Generation Licence condition 13.4</i> A Licensee must comply with any individual performance standards prescribed by the ERA.		
Observations		
Documents	<input type="checkbox"/>	Compliance
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: Not applicable.		
Process	<input type="checkbox"/>	Outcome
Output	<input type="checkbox"/>	Reporting
Compliance		
There are no individual performance standards applied by the ERA to assess compliance.		
Issues		
None		
Recommendations		
None		

Item 121 Electricity Industry Act section 11	Adequacy of controls rating A	Compliance rating 1
Licence: <i>Generation</i>		
<i>Generation Licence condition 14.2</i> A Licensee must comply, and require its auditor to comply, with the ERA's standard audit guidelines dealing with the performance audit.		
Observations		
Documents	<input checked="" type="checkbox"/>	Compliance
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: The audit plan was forwarded to the ERA, approval of the auditor obtained prior to appointment.		
Process	<input checked="" type="checkbox"/>	Outcome
Output	<input checked="" type="checkbox"/>	Reporting
Compliance		

The Licensee has contracted with the auditor to comply with the requirements.
Issues
None
Recommendations
None

Item 122 Electricity Industry Act section 11	Adequacy of controls rating A	Compliance rating 1							
Licence: <i>Generation</i>									
<i>Generation Licence condition 20.5</i> A Licensee must comply, and must require the Licensee's expert to comply, with the relevant aspects of the ERA's standard guidelines dealing with the asset management system review.									
Observations									
Documents	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>						
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: The AMS review plan has been forwarded to the ERA approval of the reviewer obtained prior to appointment.									
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 contracted with the reviewer to comply with the requirements.									
Issues									
None									
Recommendations									
None									

Item 123 Electricity Industry Act section 11	Adequacy of controls rating Not Performed	Compliance rating Not Rated							
Licence: <i>Generation</i>									
<i>Generation Licence condition 15.1</i> A Licensee must report to the ERA, 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									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: Not applicable.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee is not under external administration so not able to assess compliance with advice requirements.									
Issues									
None									
Recommendations									
None									

Item 124 Electricity Industry Act section 11	Adequacy of controls rating A	Compliance rating 1
Licence: <i>Generation</i>		
<i>Generation Licence condition 16.1</i>		

A Licensee must provide the ERA, in the manner prescribed, any information the ERA requires in connection with its functions under the Electricity Industry Act.									
Observations									
Documents	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>						
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. The Site Superintendent advised that there have been no requests for information from the ERA other than the Compliance Report. Documents:									
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 met the reporting requirements.									
Issues									
None.									
Recommendations									
None.									

Item 125 Electricity Industry Act section 11	Adequacy of controls rating Not Performed	Compliance rating Not Rated							
Licence: <i>Generation</i>									
<i>Generation Licence condition 17.1 & 17.2</i> A Licensee must publish any information it is directed by the ERA to publish, within the timeframes specified.									
Observations									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: Not applicable.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The ERA has not directed any information to be published so unable to assess compliance with publishing requirements.									
Issues									
None									
Recommendations									
None									

Item 126 Electricity Industry Act section 11	Adequacy of controls rating A	Compliance rating 1							
Licence: <i>Generation</i>									
<i>Generation Licence condition 18.1</i> Unless otherwise specified, all notices must be in writing.									
Observations									
Documents	<input checked="" type="checkbox"/>	Compliance	<input checked="" type="checkbox"/>						
Evidence: interviewed CEO, CFO, Site Superintendent, listed staff. Documents: Sample communication with ERA sighted.									
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 have been required by the ERA. All material communication with the ERA is in writing.									
Issues									
None									
Recommendations									
None									

2.19.3 ELECTRICITY INDUSTRY METERING CODE – LICENCE CONDITIONS AND OBLIGATIONS (ALL LICENCE CONDITION LICENCE CLAUSE 5.1)

Item 324 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<i>Electricity Industry Metering Code clause 3.3B</i> A user who is aware of bi-directional flows at a metering point which was not previously subject to a bi-directional electricity flows or any changes in a customer's or user's circumstances in a metering point which will result in bi-directional electricity flows must notify the network operator within 2 business days.		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/> Output <input type="checkbox"/> Reporting <input type="checkbox"/> Compliance <input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. The meters are bidirectional with the Licensee consuming power when there is no wind but normally exports power. These meters were always bi-directional and there has been no changes in a customer's or user's circumstances at a metering point.		
Issues		
None		
Recommendations		
None		

Item 360 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<i>Electricity Industry Metering Code clause 3.11(3)</i> 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		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/> Output <input type="checkbox"/> Reporting <input type="checkbox"/> Compliance <input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. The Licensee is not aware of any outage or malfunction to require advice.		
Issues		
None		
Recommendations		
None		

Item 364 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		

<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									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power and installed by them.									
Issues									
None									
Recommendations									
None									

Item 371	Adequacy of controls rating	Compliance rating
Licence condition 5.1	Not Performed	Not Rated
Licence: Generation		
<i>Electricity Industry Metering Code clause 4.4(1)</i> If there is a discrepancy between energy data held in a metering installation and data held in the metering database, the affected Code participants and the network operator must liaise together to determine the most appropriate way to resolve a discrepancy.		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/>
Output	<input type="checkbox"/>	Reporting <input type="checkbox"/>
Compliance	<input type="checkbox"/>	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. The Licensee has no metering database and no metering installation to allow a discrepancy.		
Issues		
None		
Recommendations		
None		

Item 372	Adequacy of controls rating	Compliance rating
Licence condition 5.1	Not Performed	Not Rated
Licence: Generation		
<i>Electricity Industry Metering Code clause 4.5(1)</i> A Code participant must not knowingly permit the registry to be materially inaccurate.		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/>
Output	<input type="checkbox"/>	Reporting <input type="checkbox"/>
Compliance	<input type="checkbox"/>	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. The Licensee is no knowledge of Western Power's registry other than their own details.		
Issues		
None		

Recommendations
None

Item 373 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<i>Electricity Industry Metering Code clause 4.5(2)</i> Subject to subclause 5.19(6), 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		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/>
Output	<input type="checkbox"/>	Reporting <input type="checkbox"/>
Compliance	<input type="checkbox"/>	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. The Licensee has no customers to have any registry data, nor has there been any change to their own data.		
Issues		
None		
Recommendations		
None		

Item 388 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<i>Electricity Industry Metering Code clause 5.4(2)</i> A user must, when reasonably requested by a network operator, assist the network operator to comply with the network operator's obligation under subclause 5.4(1).		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/>
Output	<input type="checkbox"/>	Reporting <input type="checkbox"/>
Compliance	<input type="checkbox"/>	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There have been no requests from Western Power.		
Issues		
None		
Recommendations		
None		

Item 401 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<i>Electricity Industry Metering Code clause 5.16</i> If a user collects or receives energy data from a metering installation then the user must provide the network operator with the energy data (in accordance with the communication rules) within the timeframes prescribed.		

Observations									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. The Licensee does not collect or receive energy data from a metering installation.									
Issues									
None									
Recommendations									
None									

Item 402 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<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		
Documents	<input type="checkbox"/>	Compliance
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome
Output	<input type="checkbox"/>	Reporting
Compliance	<input type="checkbox"/>	
The Licensee has no meters with all metering by Western Power. The Licensee has no requirement by an enactment or an agreement to provide standing data and validated, and where necessary substituted or estimated, energy data to the user's customer to which that information relates.		
Issues		
None		
Recommendations		
None		

Item 405 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<i>Electricity Industry Metering Code clause 5.18</i> If a user collects or receives information regarding a change in the energisation status of a metering point then the user must provide the network operator with the prescribed information, including the stated attributes, within the timeframes prescribed.		
Observations		
Documents	<input type="checkbox"/>	Compliance
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome
Output	<input type="checkbox"/>	Reporting
Compliance	<input type="checkbox"/>	
The Licensee has no meters with all metering by Western Power. The Licensee was not aware of any change of energisation status of a metering point during the audit period.		
Issues		
None		

Recommendations
None

Item 406 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<i>Electricity Industry Metering Code clause 5.19(2)</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, and provide that information to the network operator.		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/>
Output	<input type="checkbox"/>	Reporting <input type="checkbox"/>
Compliance	<input type="checkbox"/>	
The Licensee has no meters with all metering by Western Power. There have been no requests from Western Power.		
Issues		
None		
Recommendations		
None		

Item 407 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<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 prescribed information in relation to the site of each connection point with which the user is associated.		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/>
Output	<input type="checkbox"/>	Reporting <input type="checkbox"/>
Compliance	<input type="checkbox"/>	
The Licensee has no meters with all metering by Western Power. The only connection point is with Western Power (Synergy) so there is no requirement to collect and maintain a record of the prescribed information.		
Issues		
None		
Recommendations		
None		

Item 408 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<i>Electricity Industry Metering Code clause 5.19(3)</i>		

Subject to subclauses 5.19(3A) and 5.19(6), the user must, within 1 business day after becoming aware of any change in an attribute described in subclause 5.19(2), notify the network operator of the change.									
Observations									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. The Licensee is not aware of any changes in attributes.									
Issues									
None									
Recommendations									
None									

Item 410 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated							
Licence: <i>Generation</i>									
<i>Electricity Industry Metering Code clause 5.19(6)</i> The user must use reasonable endeavours to ensure that it does not notify the network operator of a change in an attribute described in subclause 5.19(2) that results from the provision of standing data by the network operator to the user.									
Observations									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There have been no requests from Western Power.									
Issues									
None									
Recommendations									
None									

Item 416 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated							
Licence: <i>Generation</i>									
<i>Electricity Industry Metering Code clause 5.21(5)</i> A Code participant must not request a test or audit under subclause 5.21(1) 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									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There have been no requests for tests or audits.									
Issues									
None									

Recommendations
None

Item 417 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<i>Electricity Industry Metering Code clause 5.21(6)</i> A Code participant must not make a request under subclause 5.21(1) that is inconsistent with any access arrangement or agreement.		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/> Output <input type="checkbox"/> Reporting <input type="checkbox"/> Compliance <input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There have been no requests for tests or audits.		
Issues		
None		
Recommendations		
None		

Item 435 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<i>Electricity Industry Metering Code clause 5.27</i> Upon request from a network operator, the current user for a connection point must provide the network operator with customer attribute information that it reasonably believes are missing or incorrect within the timeframes prescribed.		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/> Output <input type="checkbox"/> Reporting <input type="checkbox"/> Compliance <input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There have been no requests.		
Issues		
None		
Recommendations		
None		

Item 448 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<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									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: Western Power ETAC.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has an access contract with Western Power. There have been no breaches of the rules, procedures, agreements and criteria prescribed.									
Issues									
None									
Recommendations									
None									

Item 451 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated							
Licence: <i>Generation</i>									
<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									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. Western Power has the contact details and the licensee's control room operates 24/7.									
Issues									
None									
Recommendations									
None									

Item 453 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated							
Licence: <i>Generation</i>									
<i>Electricity Industry Metering Code clause 7.2(4)</i> If requested by a network operator with whom it has entered into an access contract, the Code participant must notify its contact details to a network operator within 3 business days after the request.									
Observations									
Documents	<input type="checkbox"/>	Compliance	<input type="checkbox"/>						
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There has been no request. Western Power has the contact details.									
Issues									
None									
Recommendations									
None									

Item 454 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<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 under subclause 7.2(4) at least 3 business days before the change takes effect.		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/> Output <input type="checkbox"/> Reporting <input type="checkbox"/> Compliance <input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There has been no change in the contact details.		
Issues		
None		
Recommendations		
None		

Item 455 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<i>Electricity Industry Metering Code clause 7.5</i> A Code participant must subject to subclauses 5.17A and 7.6 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		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/> Output <input type="checkbox"/> Reporting <input type="checkbox"/> Compliance <input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There has been no confidential information to disclose.		
Issues		
None		
Recommendations		
None		

Item 456 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<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		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>

Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.									
Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There has been no confidential information to disclose.									
Issues									
None									
Recommendations									
None									

Item 457 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<i>Electricity Industry Metering Code clause 8.1(1)</i> If any dispute arises between any Code participants then (subject to subclause 8.2(3)) 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 by negotiations in good faith.		
Observations		
Documents	<input type="checkbox"/>	Compliance
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome
Output	<input type="checkbox"/>	Reporting
Compliance	<input type="checkbox"/>	
The Licensee has no meters with all metering by Western Power. There have been no disputes to resolve.		
Issues		
None		
Recommendations		
None		

Item 458 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: <i>Generation</i>		
<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		
Documents	<input type="checkbox"/>	Compliance
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome
Output	<input type="checkbox"/>	Reporting
Compliance	<input type="checkbox"/>	
The Licensee has no meters with all metering by Western Power. There have been no disputes to resolve.		
Issues		
None		
Recommendations		
None		

Item 459 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<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		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/> Output <input type="checkbox"/> Reporting <input type="checkbox"/> Compliance <input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There have been no disputes to resolve.		
Issues		
None		
Recommendations		
None		

Item 460 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<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		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		
Process	<input type="checkbox"/>	Outcome <input type="checkbox"/> Output <input type="checkbox"/> Reporting <input type="checkbox"/> Compliance <input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There have been no disputes to resolve.		
Issues		
None		
Recommendations		
None		

Item 461 Licence condition 5.1	Adequacy of controls rating Not Performed	Compliance rating Not Rated
Licence: Generation		
<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 in subclause 8.3(1).		
Observations		
Documents	<input type="checkbox"/>	Compliance <input type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff, inspected Generation plant. Documents: n/a.		

Process	<input type="checkbox"/>	Outcome	<input type="checkbox"/>	Output	<input type="checkbox"/>	Reporting	<input type="checkbox"/>	Compliance	<input type="checkbox"/>
The Licensee has no meters with all metering by Western Power. There have been no disputes to resolve.									
Issues									
None									
Recommendations									
None									



2.20 ASSET MANAGEMENT SYSTEM REVIEW RESULTS AND RECOMMENDATIONS

Asset Planning	Process/Policy rating A	Effectiveness rating Not Rated
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		
<p><i>Asset Planning Process/Plan and its currency</i></p> <p>Collgar Wind Farm is located 25 km south east of Merredin in Western Australia. The plant is operated by Vestas Australian Wind Technology Pty Ltd (Vestas) which has been contracted to provide the operation and maintenance services.</p> <p>The power station consists of 111 Vestas V90 1.86 MW wind turbines with a total generating capacity of 206 MW. The assets also include Operation and Maintenance (O&M) buildings, high voltage switchyard, a 33kV underground / overhead collection facilities and property leases.</p> <p>CWF Holdings Pty Ltd and its 100% owned operating subsidiary Collgar Wind Farm Pty Ltd (together, Collgar). CWF Holdings Pty Ltd is owned by the UBS International Infrastructure Fund Holding Cooperative U.A. (UBS) and by the Retail Employees Superannuation Trust (REST). Collgar is a proprietary special purpose entity established to develop, finance, construct, own and operate the Collgar Wind Farm. Collgar's sole business is the generation of electricity from the Collgar Wind Farm and the sale of such energy into the Western Australian Wholesale Electricity Market (the WEM) or directly to its main off-taker, Synergy, by way of bilateral arrangements under the Energy Supply Contract.</p> <p>The Licensee (Collgar Wind Farm Pty Ltd) is an entity established by the owning partners to operate and maintain the plant and accordingly the full scope of asset management is not able to be carried out by the Licensee. The Licensee's role, business model and resources are those consistent with operating and maintaining wind turbine generation plant and does not have the capacity to undertake strategic asset management functions. The licensee would not necessarily be involved in the planning or creation of a new asset. The holding company and not the Licensee would be involved in asset creation. The owning partners are involved in asset planning. The decision to dispose of the licensed assets would be made by the owners and not the Licensee.</p> <p>Service strategies and service standards are set out in asset planning documents.</p> <p>The Licensee has business plan (2016-2020), Maintenance and Environmental plan, life of asset management plan and contracts with manufacturer which constitute the elements of an asset management plan. The plan is appropriate for the scale and nature of the operations and scope undertaken by the Licensee.</p> <p><i>Allocation of responsibilities / statutory obligations</i></p>		

The organisational arrangements allocate responsibilities. There is documentation requiring compliance with statutory obligations.

Evaluation Criteria summary Licensee

- 1.1 *Asset management plan covers key requirements.* **ANR**
 Response: AMP meets this criterion.
- 1.2 *Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning at operational and maintenance level.*
 Response: The AMP meets this criterion and reflects the needs of all stakeholders and is integrated with business planning at operational and maintenance level. No asset planning is undertaken by the Licensee.
- 1.3 *Service levels are defined.* **A1**
 Response: The AMP defines service levels such as availability, performance against the actual wind profile and expected from forecast wind profile.
- 1.4 *Non-asset options (eg demand management) are considered.* **A1**
 Response: The AMS is substantially about utilization of the current assets as new proposals are likely to be outside scope of operations. Further asset options are unlikely at the moment (there is capacity to add additional wind turbine generators) and non-asset options such as better utilization of the current assets will be most likely for capacity increases.
- 1.5 *Lifecycle costs of owning and operating assets are assessed.* **A1**
 Response: The AMP meets this criterion with lifecycle costs of owning and operating assets assessed. The capital cost will be considered and costed in terms of the assets cost viability. Servicing the market is the dominant requirement for the assets with profitability being the major driving force. The Licensee has a life of asset management plan (LAMP) covering operational and maintenance issues.
- 1.6 *Funding options are evaluated.* **ANR**
 Response: Funding is determined by what is necessary to serve generating operational and maintenance functions. Asset planning is outside the scope of operation of the Licensee.
- 1.7 *Costs are justified and cost drivers identified.* **ANR**
 Response: Any proposal would include justification of costs and identification of cost drivers. Asset planning is outside the scope of operation of the Licensee.
- 1.8 *Likelihood and consequences of asset failure are predicted.* **A1**
 Response: The evaluation of risks addressed in the AMP cover the aspects of asset failure and consequences on operation and maintenance. Asset planning is outside the scope of operation of the Licensee.
- 1.9 *Plans are regularly reviewed and updated.* **A1**
 Response: The AMP meets this criterion as the responsibility of review of the AMS is assigned to the Site Superintendent. It was reviewed internally by CEO.

Evaluation Criteria summary Owner

- 1.1 *Asset management plan covers key requirements.* **A1**
 Response: This site's AMP meets this criterion. The business plan provides the owners information on key requirements for this site. As significant investors in the market they will have robust asset management processes as evidenced by the documentation for this site.
- 1.2 *Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning.*
 Response: The AMP meets this criterion and reflects the needs of all stakeholders and is integrated with business planning. The business plan provides the owners

	information on key requirements for this site. As significant investors in the market they will have robust asset management processes as evidenced by the documentation for this site.					
1.3	<i>Service levels are defined.</i>					A1
Response: The AMP defines service levels for this site.						
1.4	<i>Non-asset options (eg demand management) are considered.</i>					A1
Response: The AMS is substantially about utilization of the current assets as new proposals are likely to be separate from the Licensee. Further asset options are unlikely at the moment (there is capacity to add additional wind turbine generators) and non-asset options such as better utilization of the current assets will be most likely for capacity increases.						
1.5	<i>Lifecycle costs of owning and operating assets are assessed.</i>					A1
Response: The AMP meets this criterion with lifecycle costs of owning and operating assets assessed for this site. The capital cost will be considered and costed in terms of the electrical assets cost viability. Servicing the market is the dominant requirement for the assets with profitability being the major driving force.						
1.6	<i>Funding options are evaluated.</i>					A1
Response: Funding is determined by what is necessary to serve generating operational and maintenance functions. Asset planning would not involve the Licensee						
1.7	<i>Costs are justified and cost drivers identified.</i>					A1
Response: Any proposal would include justification of costs and identification of cost drivers including availability and reliability of supply.						
1.8	<i>Likelihood and consequences of asset failure are predicted.</i>					A1
Response: The evaluation of risks addressed in the AMP cover the aspects of asset failure and consequences on operation and maintenance.						
1.9	<i>Plans are regularly reviewed and updated.</i>					A1
Response: The AMP meets this criterion the business plan for this site is reviewed annually.						
Asset management process and policy definition						
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	
Evidence: interviewed Site Superintendent, listed staff. Documents: Generation Licence, Asset Register, Environmental Plans and Approvals, Spares List, Wind Turbine Generators (WTG) layout plan, Asset management plan, Risk management policy, Risk register, business plan						
Asset management performance						
Process	<input type="checkbox"/>	Availability	<input type="checkbox"/>	Use	<input type="checkbox"/>	
Issues						
The Licensee's role, business model and resources are those consistent with operating and maintaining wind turbine generation plant and does not have the capacity to undertake strategic asset management functions. Given this context the plan is appropriate for the scale and nature of the business.						
The internal reviews of the AMP are carried out annually.						

Recommendation
None

Asset Creation	Process/Policy rating Not Performed	Effectiveness rating Not Rated
2. 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		
<p><i>Policies and procedures for asset creation / sample creation activities</i></p> <p>The Licensee (Collgar Wind Farm Pty Ltd) is an entity established by the owning partners to operate and maintain the plant and accordingly the full scope of asset management is not able to be carried out by the Licensee. The Licensee's role, business model and resources are those consistent with operating and maintaining wind turbine generation plant and does not have the capacity to undertake strategic asset management functions. The licensee would not necessarily be involved in the creation of a new asset. The holding company and not the Licensee would be involved in asset creation.</p> <p>Procurement of major generation plant is a very significant exercise taking considerable time. There are documented procedures for creation of fixed assets. There has been no creation in the review period.</p> <p><i>Meeting statutory obligations</i></p> <p>There are documents and policies requiring contractors to comply with statutory obligations. There are HR standards that deal with compliance of these obligations.</p> <p><i>Evaluation Criteria summary Licensee</i></p> <p>2.1 <i>Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions.</i> NPNR Response: Asset creation is outside the scope of operation of the Licensee.</p> <p>2.2 <i>Evaluations include all life-cycle costs</i> NPNR Response: Asset creation is outside the scope of operation of the Licensee.</p> <p>2.3 <i>Projects reflect sound engineering and business decisions</i> NPNR Response: Asset creation is outside the scope of operation of the Licensee. The Licensee has the resources in house and by contract to ensure sound engineering and business decisions. The owners and banks require good quality procurement.</p> <p>2.4 <i>Commissioning tests are documented and completed</i> NPNR Response: Asset creation is outside the scope of operation of the Licensee. The Licensee has the resources in house and by contract to ensure commissioning tests are documented and completed.</p> <p>2.5 <i>Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood</i> ANR Response: The responsibilities of the AMS are assigned to the CEO and Site Superintendent and understood. Legal, environmental and safety are key components of new project work within the organisation.</p> <p><i>Evaluation Criteria summary Owner</i></p>		

<p>2.1 <i>Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions.</i> ANR</p> <p>Response: Full project evaluations will occur for Asset creation. The Banks require good quality procurement.</p>					
<p>2.2 <i>Evaluations include all life-cycle costs</i> ANR</p> <p>Response: Evaluations will occur life cycle costings as occurred for this site.</p>					
<p>2.3 <i>Projects reflect sound engineering and business decisions</i> ANR</p> <p>Response: The owners have the resources to ensure sound engineering and business decisions as occurred for this site.</p>					
<p>2.4 <i>Commissioning tests are documented and completed</i> ANR</p> <p>Response: The owners have the resources to ensure commissioning tests are documented and completed as occurred for this site.</p>					
<p>2.5 <i>Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood</i> ANR</p> <p>Response: The responsibilities of the AMS are assigned to the CEO and understood. Legal, environmental and safety are key components of new project work within the organisation and are specifically required to be addressed in projects.</p>					
Asset management process and policy definition					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
<p>Evidence: interviewed Site Superintendent, listed staff. Documents: Business plan, Asset Register,</p>					
Asset management performance					
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
Issues					
<p>The Licensee's role, business model and resources are those consistent with operating and maintaining wind turbine generation plant and does not have the capacity to undertake strategic asset creation functions. The procurement processes are appropriate for this site.</p>					
Recommendation					
None.					

Asset Disposal	Process/Policy rating Not Performed	Effectiveness rating Not Rated
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		
<p><i>Policies and procedures for asset disposal / sample disposal activities</i></p> <p>The Licensee (Collgar Wind Farm Pty Ltd) is an entity established by the owning partners to operate and maintain the plant and accordingly the full scope of asset management is not able to be carried out by the Licensee. The Licensee's role, business model and resources are those consistent with operating and maintaining wind turbine generation plant and does not have the capacity to undertake strategic asset management functions. The decision to dispose of the licensed assets would be made by the owners and not the Licensee.</p> <p>There was no disposal action in the review period.</p> <p><i>Evaluation Criteria summary Licensee</i></p> <p>3.1 <i>Under-utilised and under-performing assets are identified as part of a regular systematic review process</i> NPNR Response: Asset disposal is outside the scope of operation of the Licensee. There are make good requirements in land leases and in the Environmental approval for this site.</p> <p>3.2 <i>The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken</i> NPNR Response: Asset disposal is outside the scope of operation of the Licensee. For this site the most likely issue is plant failures and these are critically examined. There is unlikely to be disposal of the asset but components will be disposed as they become unserviceable.</p> <p>3.3 <i>Disposal alternatives are evaluated</i> NPNR Response: Asset disposal is outside the scope of operation of the Licensee.</p> <p>3.4 <i>There is a replacement strategy for assets</i> NPNR Response: Asset disposal is outside the scope of operation of the Licensee. For this site, replacement will be determined by expansion need or a finding from condition based maintenance. There are make good requirements in land leases and in the Environmental approval for disposal.</p> <p><i>Evaluation Criteria summary Owner</i></p> <p>3.1 <i>Under-utilised and under-performing assets are identified as part of a regular systematic review process</i> ANR Response: There is little likelihood of disposal of the system or portions thereof for this site. There are make good requirements in land leases and in the Environmental approval for make good/disposal.</p> <p>3.2 <i>The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken</i> ANR Response: The most likely issue is plant failures and these are critically examined. There is unlikely to be disposal of the asset but components will be disposed as they become unserviceable.</p> <p>3.3 <i>Disposal alternatives are evaluated</i> ANR</p>		

Response: There is little likelihood of disposal of the system or portions thereof for this site.

3.4 *There is a replacement strategy for assets*

ANR

Response: Replacement will be determined by expansion need or a finding from condition based maintenance.

Asset management process and policy definition

Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
---------	-------------------------------------	--------	-------------------------------------	---------------	-------------------------------------

Evidence: interviewed Site Superintendent, listed staff. Documents: WTG location plans, Business plan

Asset management performance

Process	<input type="checkbox"/>	Availability	<input type="checkbox"/>	Use	<input type="checkbox"/>
---------	--------------------------	--------------	--------------------------	-----	--------------------------

Issues

The Licensee's role, business model and resources are those consistent with operating and maintaining wind turbine generation plant and does not have the capacity to undertake strategic asset disposal functions.

Recommendation

None

Environmental analysis	Process/Policy rating A	Effectiveness rating 1
4 Environmental analysis Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.		
Observations		
<i>Standards / monitoring / reporting / breaches</i> The Licensee (Collgar Wind Farm Pty Ltd) is an entity established by the owning partners to operate and maintain the plant and accordingly the full scope of asset management is not able to be carried out by the Licensee. The Licensee's role, business model and resources are those consistent with operating and maintaining wind turbine generation plant and does not have the capacity to undertake strategic asset management functions. Assessing opportunities and threats in system environment would be made by the owners and not the Licensee. The Licensee has an Environmental Management Plan (EMP). Reporting and monitoring tools are appropriate. The Licensee has a number of environmental licences and no unresolved issues have arisen with respect to environmental matters. No non-compliances have been reported. The principal external threats to the assets relate to bush fires and lightning. The plant has the capacity to withstand any likely wind condition for this site and has a good lightning protection system. The capability to meet customer capacity requirements is part of the asset management plan.		
<i>Evaluation Criteria summary Licensee</i> 4.1 <i>Opportunities and threats in the system environment are assessed</i> NPNR Response: Assessing opportunities and threats in system environment would be made by the owners and not the Licensee. This facility is subject to SWIN network threats such as outages, voltage, frequency, fault and stability performance. This generation should improve the stability of the Western Power 220kV line.		
4.2 <i>Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved</i> A1 Response: The AMS meets this criterion with service standards defined for this site.		
4.3 <i>Compliance with statutory and regulatory requirements</i> A1 Response: The Licensee's HR policy documents require compliance with statutory and regulatory obligations. There have been no noted environmental breaches for the assets covered by the licence during the review period. Procedures at site require environmental approval for new projects, clearing of ground, protection of threatened birdlife and other activities that impact the environment. Policy documents were sighted.		
4.4 <i>Achievement of customer service levels</i> A1 Response: The AMP defines the customer service levels for this site. Environmental requirements are met. There are no external customers to consider as part of the environment and outages.		
<i>Evaluation Criteria summary Owner</i> 4.1 <i>Opportunities and threats in the system environment are assessed</i> A1		

Response: Assessing opportunities and threats in system environment would be made by the owners. Change in Western Australian market may have an effect on such developments. This facility is subject to SWIN network threats such as outages, voltage, frequency, fault and stability performance.

4.2 *Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved* **A1**

Response: The AMS meets this criterion with service standards defined for this site.

4.3 *Compliance with statutory and regulatory requirements* **A1**

Response: For this site the Licensee's HR documents require compliance with statutory and regulatory obligations. There have been no noted environmental breaches for the assets covered by the licence during the review period.

Procedures at site require environmental approval for new projects, clearing of ground, protection of threaten birdlife and other activities that impact the environment. Policy documents were sighted.

4.4 *Achievement of customer service levels* **A1**

Response: The AMP defines the customer service levels for this site.

Environmental requirements are met. Renewable energy requirements are met as are obligations to shareholders.

Asset management process and policy definition

Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
---------	-------------------------------------	--------	-------------------------------------	---------------	-------------------------------------

Evidence: interviewed Site Superintendent, listed staff and staff on site listed.
Documents: Environmental Plans and Approvals, WTG layout plans, business plan, Risk management policy, Risk register.

Asset management performance

Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
---------	-------------------------------------	--------------	-------------------------------------	-----	-------------------------------------

Issues

Assessing opportunities and threats in system environment would be made by the owners and not the Licensee. For this site, there are no environmental non-compliances reported. Collgar monitors and considers the environment in which it operates.

Recommendation

None

Asset operations	Process/Policy rating A	Effectiveness rating 1
5 Asset operations Operations functions relate to the day-to-day running of assets and directly affect service levels and costs.		
Observations		
<i>Policies and procedures for asset operation / sample activities</i> The system is operated by Western Power from SWIS system control. The asset operation is appropriate for the duty. The Licensee records outages automatically on SCADA. Performance is closely monitored. The service levels are defined. The asset register is part of the maintenance system and supported by spread sheets and standard procedures. <i>Training/ resources / exceptions</i> Western Power operates the plant and the Licensee controls the plant, mainly for maintenance requirements. The resourcing is considered appropriate for the size of the plant and ongoing training is evident, as are the operating procedures and practices. Plant operation and related maintenance appears to take due allowance of any possible faults or operating requirements in the licensed plant. <i>Evaluation Criteria summary</i> 5.1 <i>Operational policies and procedures are documented and linked to service levels required</i> A1 Response: The AMS meets this criterion with service standards defined. Planned maintenance takes place at low wind forecast times. The Generation system is operated from system control outside maintenance/fault switching. Operational policies are substantially maintenance/reliability matters and those dictated by SWIN system requirements. 5.2 <i>Risk management is applied to prioritise operations tasks</i> A1 Response: There is very little operational control at site other than maintenance requirements. Risk analysis is applied by developing a task hazard analysis for all tasks on the site. 5.3 <i>Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets physical/structural condition and accounting data</i> A1 Response: Asset registers are contained with the appropriate information in the SAP system with each WTG listed as an asset. Balance of plant (BoP) asset register on cloud based systems. Current database for BoP is Trunk. 5.4 <i>Operational costs are measured and monitored</i> A1 Response: Operational costs – staffing, contracts and materials are measured and monitored. 5.5 <i>Staff resources are adequate and staff receive training commensurate with their responsibilities</i> A1 Response: The staff receives training commensurate with their responsibilities. Personnel undergo HV Operator training for switching operations at established training centres.		

Staff are adequate for effective operation of the plant.					
Asset management process and policy definition					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff and staff on site listed. Documents: Asset Register, Environmental Plans and Approvals, Spares List, WTG layout plans, business plan, Risk management policy, Risk register, training certificates.					
Asset management performance					
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
Issues					
The asset operation is appropriate for the duty.					
Recommendation					
None					

Asset Maintenance	Process/Policy rating A	Effectiveness rating 1
6 Asset maintenance Maintenance functions relate to the upkeep of assets and directly affect service levels and costs.		
Observations		
<i>Policies and procedures for asset maintenance / sample activities</i> The SAP business application is used by Collgar for WTG and Trunk for BoP. The business plan contains performance measures and the Service Availability Agreement (SAA) with Vestas contains significant maintenance requirements. BoP maintenance requirement are scheduled well in advance. The Licensee engages Vestas to undertake their maintenance. Condition inspection of the plant is routinely carried out. Inventory of critical spares has been developed. <i>Training / resources / exceptions</i> Maintenance is scheduled well into the future (eg 7 months for WTG) and these actions are appropriate for the type of equipment. The resourcing is appropriate and ongoing training is evident as are the operating procedures and practices. High Voltage training occurs at Registered Training Organisations. HSE requirements are addressed (eg working at heights). Plant maintenance appears to take account of any expected failures in the licensed plant. <i>Evaluation Criteria summary</i> 6.1 <i>Maintenance policies and procedures are documented and linked to service levels required</i> A1 Response: Policies and procedures are documented. The business plan supports this criterion with service standards defined. The Life of Asset Management Plan (LAMP) sets out requirements for BoP. SAP manages inventory for WTGs. A spreadsheet manages inventory for BoP. SAP reports overdue maintenance which is used to improve asset management controls. 6.2 <i>Regular inspections are undertaken of asset performance and condition</i> A1 Response: The SAP maintenance planning system fulfils this criterion by regular scheduling of inspections to assess condition. Time based schedules are set up for physical inspection, testing and collection of samples for condition based analysis (eg oil sampling, coolant and hydraulics on WTG etc). 6.3 <i>Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule</i> A1 Response: Corrective (condition based) and preventative maintenance plans can be recorded in the SAP system. Each WTG has maintenance scheduled. The generators have condition monitoring and vibration analysis on WTG with the active monitoring leading to more repairs but less failures. Preventative maintenance is scheduled at forecast low wind periods. BoP is time based maintenance and is moving to condition based maintenance. The maintenance planners run the maintenance process. 6.4 <i>Failures are analysed and operational/maintenance plans adjusted where necessary</i> A1 Response: Failures are analysed locally, by Vestas engineering in Melbourne and if required in Denmark. There have been lightning strikes on blades (~3/year) but no damage occurred. There have been cable termination		

faults with these being caused by poor workmanship on original installation. The joints have been reworked. There was no evidence of significant failure warranting adjustment of the plans within the review period.

6.5 Risk management is applied to prioritise maintenance tasks A1

Response: Maintenance tasks and frequencies have been developed over a period of time using local experience, industry and world standards.

6.6 Maintenance costs are measured and monitored

Response: Maintenance costs are recorded, measured and monitored by the site to reduce the likely impact of repairs.

The performance of the fleet is compared to the performance of Vestas fleet worldwide.

Asset management process and policy definition

Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	
---------	-------------------------------------	--------	-------------------------------------	---------------	-------------------------------------	--

Evidence: interviewed Site Superintendent, listed staff and staff on site listed.
Documents: Asset Register, Environmental Plans and Approvals, Spares List, Commissioning Plans, WTG layout plans, Business plan, Risk management policy, Risk register

Asset management performance

Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>	
---------	-------------------------------------	--------------	-------------------------------------	-----	-------------------------------------	--

Issues

None.

Recommendation

None

Asset Management Information System	Process/Policy rating A	Effectiveness rating 1
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		
<i>Policies and procedures</i> The Licensee has a competent asset management information system with a number of elements. The maintenance management system based on the SAP business software system SAP 7400.1.3.1103/Trunk V1.1 (described in section 6 above). The system allows for both time based and condition based activities. The system was viewed. The Licensee uses standard financial packages. The maintenance system links project management to scheduled tasks to standard work plans, asset register and parts inventory by SAP for WTG and spreadsheet for BoP. Documentation and familiarity of the system appears appropriate. Access to write to the database is controlled (passwords) and changes are tracked. There is good documentation for data recovery procedures which include operating on the office server and backing up the servers to ensure data integrity. The reliability of the plant is evidence of good maintenances practices and that exceptions are being followed up.		
<i>Evaluation Criteria summary</i>		
7.1 Adequate system documentation for users and IT operators		A1
Response: The IT system is well documented. The system is intuitive with online assistance and documentation is rarely required. The viewing of Historic data is also intuitive.		
7.2 Input controls include appropriate verification and validation of data entered into the system		A1
Response: The system is easy to use with a maintenance focus rather than a database focus and includes appropriate verification and validation of data entered into the system.		
7.3 Logical security access controls appear adequate, such as passwords		A1
Response: Logical control is adequate with hierarchical access by password. Personnel are automatically logged out of computer systems after periods of inactivity.		
7.4 Physical security access controls appear adequate		A1
Response: Physical security is adequate with the system on access controlled site. Server room for SAP in office is locked. Server for SCADA is in substation which is secured. Backup tapes are held in safe.		
7.5 Data backup procedures appear adequate and backups are tested		A1
Response: Data backup is carried out daily and weekly on all servers. Backups are tested 3 monthly.		
7.6 Key computations related to Licensee performance reporting are materially accurate		A1

Response: There is minimal regular licence compliance computation work. Key computations related to Licensee performance reporting are materially accurate, to the extent possible to assess with visual inspection.

7.7 Management reports appear adequate for the Licensee to monitor licence obligations **A1**

Response: No detailed management reports are generated by the SAP system which would assist to monitor licence obligations. The key reports are for performance monitoring.

Asset management process and policy definition

Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
---------	-------------------------------------	--------	-------------------------------------	---------------	-------------------------------------

Evidence: interviewed Site Superintendent, listed staff and staff on site listed. Documents: Collgar Mining energy budget, Asset management plan, Viewed SAP, viewing of Historical database.

Asset management performance

Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
---------	-------------------------------------	--------------	-------------------------------------	-----	-------------------------------------

Issues

None

Recommendation

None

Risk management	Process/Policy rating A	Effectiveness rating 1
8 Risk management Risk management involves the identification of risks and their management within an acceptable level of risk.		
Observations		
<i>Policies and procedures</i> The Licensee has a documented risk management procedure and there is evidence that risk based approaches is being carried out. The Licensee has assessed and prioritised the threats to specific plant and developed contingencies for these threats which are based on assessment of risks.		
<i>Training</i> There is evidence of training and awareness by staff of risk based approaches.		
<i>Evaluation Criteria summary</i> 8.1 <i>Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system.</i> A1 Response: The AMS meets this criterion. The risk management section of the plan set out risks, risk assessment and risk mitigation. There is a risk register and compliance register. There are spares (including spare blades, cables, DVAR parts and other equipment) on site for immediate use considered as critical for the WTG or balance of plant and in Melbourne for lower likely frequency/consequence events.		
8.2 <i>Risks are documented in a risk register and treatment plans are actioned and monitored.</i> A1 Response: The risk process is set out in the AMP. There is a risk register. The risk register is reviewed annually internally and externally. The mitigation control outcomes are shown in the risk register but mitigation control actions are actioned business operations and then reflected in the risk register. The Licensee concluded that the risk register was not the best tool to manage risk controls.		
8.3 <i>The probability and consequences of asset failure are regularly assessed</i> A1 Response: During the review period, the risks of asset failures have been assessed based on probability and consequence parameters. Forced outage events are studied to reduce the likely frequency /consequences of future events.		
Asset management process and policy definition		
Process	<input checked="" type="checkbox"/>	Policy
	<input checked="" type="checkbox"/>	Documentation
	<input checked="" type="checkbox"/>	
Evidence: interviewed Site Superintendent, listed staff and staff on site listed. Documents: Asset Register, Environmental Plans and Approvals, Spares List, Commissioning Plans, WTG layout plans, Business plan, Risk management policy, Risk register, Risk Engineering report, HSE audit		
Asset management performance		
Process	<input checked="" type="checkbox"/>	Availability
	<input checked="" type="checkbox"/>	Use
	<input checked="" type="checkbox"/>	

Issues
None
Recommendation
None



Contingency planning	Process/Policy rating A	Effectiveness rating 1
9 Contingency planning Contingency plans document the steps to deal with the unexpected failure of an asset.		
Observations		
<i>Development of contingency plans / currency</i> The Licensee has good documentation of its data recovery plans. The Licensee has documented the threats to specific plant but not yet developed contingencies for these threats. An inventory of spare parts has been acquired. The Licensee has detailed maintenance scheduled out for several years, with minor and major shutdowns allowed to deal with potential issues. Maintenance is partly conducted on condition based maintenance which monitors critical items for indicators of future failure. The maintenance regime is geared to keeping the plant operational without forced outages. <i>Evaluation Criteria summary</i> 9.1 <i>Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks</i> A1 Response: The AMS meets this criterion despite there being no explicit contingency plan there is an emergency response plan and infrastructure risks through a risk engineering plan. Critical spares are identified and acquired including spare WTG blades. Standard spares are on site and lower frequency items in Melbourne. The emergency response plan has been tested by a real bushfire. Some changes to procedures were made following analysis of this incident. Routine testing is scheduled, with one emergency exercise per year and 2 emergency fire drills per year.		
Asset management process and policy definition		
Process	<input checked="" type="checkbox"/>	Policy
	<input checked="" type="checkbox"/>	Documentation
	<input checked="" type="checkbox"/>	
Evidence: interviewed Site Superintendent, listed staff and staff on site listed. Documents: Emergency response plan, risk engineering plan.		
Asset management performance		
Process	<input checked="" type="checkbox"/>	Availability
	<input checked="" type="checkbox"/>	Use
	<input checked="" type="checkbox"/>	
Issues		
None		
Recommendation		
None		

Financial planning	Process/Policy rating A	Effectiveness rating 1			
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					
<i>Financial planning process / plans</i> The Licensee carries out budgeting and monitoring processes. These are on 1 year and 5 year cycles and upgraded year by year. Costs are accrued monthly and estimates updated quarterly. The expenditure reports go to the parent body's executives. There is a business plan which includes a financial philosophy document together with the budget.					
<i>Evaluation Criteria summary</i>					
10.1 <i>The financial plan states the financial objectives and strategies and actions to achieve the objectives</i> A1 Response: There is a financial budget which is a financial plan given the simplicity of the financial model.					
10.2 <i>The financial plan identifies the source of funds for capital expenditure and recurrent costs</i> A1 Response: The overall budget identifies the source of funds for recurrent costs. There are no capital costs forecast.					
10.3 <i>The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)</i> A1 Response: The Licensed assets have operating statements (profit and loss) and statement of financial position (balance sheets) and monitors costs with respect to budgets.					
10.4 <i>The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions beyond this period</i> A1 Response: The licensee predicts income for each year and for rolling 5-year outlook.					
10.5 <i>The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services</i> A1 Response: The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the plant.					
10.6 <i>Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary</i> A1 Response: When significant variation in expenditure or budget are noted this is investigated.					
Asset management process and policy definition					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff and staff on site listed. Documents: Business plan, finance action list					
Asset management performance					

Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>	
Issues						
None						
Recommendation						
None						



Capital expenditure planning	Process/Policy rating A	Effectiveness rating NR			
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					
<i>Capital expenditure process / plans</i> The Licensee has budgeting and monitoring processes. These are on 1 year and 5-year cycles and upgraded year by year. Long ranges forecasting provides business outlook over the next 5 to 25 years. Capital requirements would be put to owners based on the business case for the item such as expansion of the wind farm. No capital expenditure is currently forecast although there is future (not committed) capability to add WTG to the site.					
<i>Evaluation Criteria summary</i> 11.1 <i>There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates</i> Response: The business plan has provisions for capital expenditure but there is no significant expenditure planned. 11.2 <i>The plan provides reasons for capital expenditure and timing of expenditure</i> Response: The business plan does not set out “capital expenditure” values as these are unlikely in the near future. 11.3 <i>The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan</i> Response: The business plan sets out that the asset life. The plan responds to asset condition. 11.4 <i>There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned</i> Response: The business plan sets out a review process. Collgar has financial review processes.					
Asset management process and policy definition					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
Evidence: interviewed Site Superintendent, listed staff and staff on site listed. Documents: Business plan					
Asset management performance					
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>

Issues
None.
Recommendation
None



Review of AMS	Process/Policy rating A	Effectiveness rating 1
12 Review of AMS The asset management system is regularly reviewed and updated.		
Observations		
As a supplier of electricity, the service delivery is heavily asset based and needs an AMS. There is ongoing review of the asset management plan.		
<i>Evaluation Criteria summary</i>		
12.1 <i>A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current</i> A1		
Response: The AMP assigns responsibility for review of the business plan to the CEO. A review process is in place to ensure that the business plan and the asset management system described therein are kept current.		
12.2 <i>Independent reviews (eg internal review) are performed of the asset management system</i> A1		
Response: The business plan is reviewed internally annually and reported to the owners.		
Asset management process and policy definition		
Process	<input checked="" type="checkbox"/>	Policy
	<input checked="" type="checkbox"/>	Documentation
	<input checked="" type="checkbox"/>	
Evidence: interviewed Site Superintendent, listed staff and staff on site listed. Documents: Generation Licence, Asset Register, Environmental Plans and Approvals, Spares List, Financial reports, WTG layout plans, business plan, Risk management policy, Risk register		
Asset management performance		
Process	<input checked="" type="checkbox"/>	Availability
	<input checked="" type="checkbox"/>	Use
	<input checked="" type="checkbox"/>	
Issues		
None		
Recommendation		
None		

3 PHOTOGRAPHS



Spare Blade



Substation & Wind turbine Generators