



ABN 20 009 454 111

Audit Report
Mumbida Wind Farm Electricity Generation Licence
Performance Audit And Asset Management System
Review

May 2014

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Executive Summary

Mumbida Wind Farm Pty Ltd (Mumbida WF) holds an electricity generation licence (EGL24) issued by the Economic Regulation Authority (the Authority) under Sections 7 and 15 of the Electricity Industry Act 2004 (WA) (the Act). The licence enables Mumbida WF to construct and operate the power generating facilities and to supply electricity in accordance with the licence conditions.

Sections 13 and 14 of the Act requires Mumbida WF to provide the Authority with a report by an independent expert on the measures taken by the licensee to meet the performance criteria specified in the licence and on the effectiveness of their Asset Management System. In March 2014 Mumbida WF commissioned Qualeng to carry out the performance audit of their licence compliance and the Asset Management System review for the period 17 March 2011 to 31 March 2014. The audit and review (the audit) have been conducted and this report prepared in accordance with the Authority's "Audit Guidelines: Electricity, Gas and Water Licences (August 2010)" (the guidelines).

THE ASSETS

Mumbida Wind farm is located 40 km South East of Geraldton in Western Australia. The plant is operated by General Electric International Pty Ltd (GE) which has been contracted to provide the operation and maintenance services.

The power station consists of 22 GE 2.5 MW Wind Turbine generators with a total generating capacity of 55 MW. The assets also include the control room with switchboards, SCADA, protection and control equipment, power supply systems, Operation and Maintenance (O&M) building, high voltage switchyard, transformers, three meteorological masts, infrastructure such as roads, drainage, water, sewerage and property leases.

The audit was conducted through meetings at Mumbida WF's offices in Perth and on site, at GE's office and through a document review.

The evaluation of the system effectiveness was carried out through an assessment of the control environment, information system, control procedures, supporting documentation and compliance attitude.

THE REPORT

The final report includes:

- (i) a summary of the objectives, the scope of the task and details of this audit;
- (ii) key findings and recommendations from this audit and
- (iii) a post audit and review implementation plan listing the audit recommendations and the responses and actions proposed by Mumbida WF. Although this plan does not form part of the report, it is included to complete the documentation.

SUMMARY REVIEW OF THE PERFORMANCE AUDIT

At the time of the audit the licensee had not completed the first year of operation and annual reviews had not yet taken place. This has prevented the verification of the implementation of some of the system processes.

On completion of the performance audit, after assessment and testing of the licensee's control environment, risk assessment process, information system, control activities and monitoring, the auditor has formed the opinion that, during the period of 17 March 2011 to 31 March 2014, Mumbida Wind Farm Pty Ltd's operation was in compliance with the licence conditions apart from the area of compliance management:

- there were instances of missing due dates for reporting the asset management system operation, annual performance reporting and payment of fees.

The licensee had taken corrective action on compliance with annual obligations during the audit period, those actions will require monitoring to verify their effectiveness.

PERFORMANCE AUDIT EFFECTIVENESS SUMMARY

The findings of the audit are summarised in Table 1 below, keys to compliance ratings are listed in Table 2, a full report on the audit findings is included in section "2.2 Audit Summary".

Table 1: Performance audit compliance summary

Operating Area	Operating License Reference (Cl.= Clause, Sch.=Schedule)	Consequence (1= minor, 2= Moderate, 3= major)	Likelihood (A= likely, B= probable, C= unlikely)	Inherent Risk (Low, Medium, High)	Adequacy of existing controls (S= Strong, M= Moderate, W= Weak)	Compliance Rating 1-2 Non compliant 3-5 Compliant (Refer to Table 2 for details)						
						1	2	3	4	5	N/A	N/R
SERVICE DELIVERY												
Definitions and interpretation	Cl 1										X	
Grant of licence	Cl.2 (Sch2)	1	C	Low	S					✓		
Term	Cl 3	1	C	Low	S					✓		
Fees	Cl 4	1	C	Low	M				✓			
Compliance	Cl.5	2	C	Med	M			✓				
Transfer of licence	Cl 6											X
Cancellation of licence	Cl 7											X
Surrender of licence	Cl 8											X
Renewal of licence	Cl 9											X
Amendment of licence (licensee)	Cl 10											X
Amendment of licence (Authority)	Cl 11											X
Accounting records	Cl 12	2	C	Med	S					✓		
Individual performance standards	Cl 13										X	
Performance audit	Cl 14	2	C	Med	S					✓		
Reporting a change in circumstances	Cl 15											X
Provision of information	Cl 16	1	C	Low	S			✓				
Publishing information	Cl 17											X
Notices	Cl 18	1	C	Low	S					✓		
Review of the Authority's decisions	Cl 19											X
Asset management system	Cl 20	3	C	High	S				✓			

Table 2: Performance compliance rating scale

Compliance Status	Rating	Description of Compliance
COMPLIANT	5	Compliant with no further action required to maintain compliance.
COMPLIANT	4	Compliant apart from minor or immaterial recommendations to improve the strength of internal controls to maintain compliance.
COMPLIANT	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance.
NON-COMPLIANT	2	Does not meet minimum requirements.
SIGNIFICANTLY NON-COMPLIANT	1	Significant weaknesses and/or serious action required.
NOT APPLICABLE	N/A	Determined that the compliance obligation does not apply to the licensee's business operations
NOT RATED	N/R	No relevant activity took place during the audit period, therefore it is not possible to assess compliance

ASSET MANAGEMENT REVIEW EFFECTIVENESS SUMMARY

At the time of the audit the licensee had not completed the first year of operation and annual reviews of the asset management system had not yet taken place. This has prevented the verification by the auditor of the implementation of some of the system processes.

The review has found that Mumbida WF has an effective asset management system and is committed to continuous improvement and regulatory compliance through its approach to the management of the assets, engagement of a specialist operator to operate and maintain the plant and regular management reporting on the operation of the assets.

The main deficiencies found in the review were:

- the risk management process needs to be reviewed to ensure that there is regular application to the management of the assets;
- a risk register that analyses asset specific failure was not operating in the review period and, consequently did not receive regular reviews;
- actions and their progress are not followed up in risk registers;
- compliance with the licence obligations was not effective during the audit period, the licensee has implemented a corrective action to rectify the issue and its performance will need to be monitored;
- the site back-up procedures should be reviewed in regard to implementation, information and instructions and then updated and implemented;

- the corporate office contingency plan should include for testing;
- the process of review of the financial plan needs to be described in the asset management plan or system.

Opportunities for improvement were identified in some of the system processes:

- commissioning records for the balance of plant should be catalogued;
- Balance of Plant (BOP) inspections would benefit from having a summary check to verify that all BOP has been inspected;
- recommendations arising from inspections of BOP should be identified to ensure that they are completed;
- the business plan or financial plan need to be completed and provide firm predictions of income and a review of forecast costs such as capital expenditure over the next five years;
- management reports should be expanded to monitor licence obligations.

Processes such as annual review of the asset management system and planning to support the asset management plan and assessing opportunities and threats in the system environment had not taken place yet.

Overall the review found that the licensee’s attitude towards compliance was always constructive and cooperative. The review concluded that Mumbida WF asset management system was supported by suitable documentation and that there was an adequate implementation of the system. Where gaps were identified there was commitment to review and improvement.

The review of the Asset Management System is summarised below in Table 3. Definition of the ratings is given in Table 4 and Table 5.

Table 3: Asset management effectiveness summary

ASSET MANAGEMENT SYSTEM	Asset management process and policy definition adequacy ratings	Asset management performance ratings
1. Asset planning	B	2
2. Asset creation/ acquisition	A	2
3. Asset disposal	A	1
4. Environmental analysis	B	2
5. Asset operations	B	2

ASSET MANAGEMENT SYSTEM	Asset management process and policy definition adequacy ratings	Asset management performance ratings
6. Asset maintenance	B	2
7. Asset management information system	A	2
8. Risk management	C	2
9. Contingency planning	C	3
10. Financial planning	B	2
11. Capital expenditure planning	B	2
12. Review of asset management system	B	2

Table 4: Asset management process and policy definition adequacy ratings

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 improvements	<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).

Table 5: Asset management review performance rating scale

Rating	Description	Criteria
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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.

POST AUDIT ACTION PLAN


The audit has resulted, where applicable, in findings and recommendations that require corrective actions by the Licensee.

The recommendations have been listed in the Post Audit Implementation Plan 2014. Responses including actions, responsibilities and dates for completion have been completed by the Licensee. A copy of the plan is attached in Appendix A .

This report is an accurate representation of the findings and opinions of the auditors following the review of the client's conformance to nominated Licence conditions. The audit is reliant on evidence provided by other parties and is subject to limitations due to the nature of the evidence available to the auditor, the sampling process inherent in the audit process, the limitations of internal controls and the need to use judgement in the assessment of evidence. On this basis Qualeng shall not be liable for loss or damage to other parties due to their reliance on the information contained in this report or in its supporting documentation.

The Post Audit Implementation Plan is a document prepared by the licensee in response to the recommendations provided by the audit. As it represent the licensee's views and actions it does not form part of the audit, however it has been included in Appendix A in order to complete the documentation of the audit and in accordance with the Authority's Guidelines.

Approvals

Representation	Name	Signature	Position	Date
Auditor:	M Zammit		Lead Auditor / Projects Director, Qualeng	17 July 2014

Ref:	65/2	
Issue Status		
Issue No	Date	Description
1	12 June 2014	Draft report for issue to Economic Regulation Authority
2	24 June 2014	Draft report for issue to Economic Regulation Authority including licensee's PRIP
3	17 July 2014	Final report

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1 OBJECTIVES AND SCOPE OF REVIEW

1.1 BACKGROUND

Mumbida Wind Farm Pty Ltd (Mumbida WF or the licensee) generates and supplies electricity to the South West Interconnected Network (SWIN) in Western Australia under the EGL24 electricity generation licence (the licence) granted by the Economic Regulation Authority (the Authority) on 17 March 2011 (Licence Version 1).

The licence has been issued under Sections 7 and 15 of the Electricity Industry Act 2004 (WA) (the Act) and enables the licensee to construct and operate the power generating facilities in accordance with the licence conditions.

Mumbida WF's generating facility is located in Western Australia, 40 km south east of Geraldton and approximately 400 km north of Perth. The plant is operated by General Electric International Pty Ltd (GE) which has been contracted to provide the operation and maintenance services for the facility under an Operation and Maintenance Agreement (O&M Agreement).

Power generating capacity consists of 22 GE 2.5 MW Wind Turbine Generators (WTGs) with a total generating capacity of 55 MW. The assets include:

- 22 wind towers
- 22 kV Ring Main Units (RMU), located in the wind turbine basement
- underground 22 kV feeder cable system
- control room with switchboards, SCADA, protection and control equipment, Uninterruptible Power Supply (UPS), AC and DC power supply systems
- 132 kV switchyard, two 132/22kV step up power transformers, two 22kV earthing transformers and one 22kV/415V station auxiliary transformer
- emergency diesel generator and fuel tank
- an Operations and Maintenance (O&M) building
- three meteorological masts and
- infrastructure associated with the plant such as access roads, drainage, water, sewerage and LV power systems.

Under sections 13 and 14 of the Act Mumbida WF's systems must be subject to independent reviews and audits at 24 months intervals to report the licensee compliance against the licence conditions. The first audit was due on 31 March 2013, however, due to the commissioning of the plant taking place in 2013, the Authority granted Mumbida WF an extension of the audit period from 24 to 36 months. Qualeng has been engaged by Mumbida WF to conduct the performance audit and the asset management system review (the audit) for the period 17 March 2011 to 31 March 2014.

The audit has been conducted and this report prepared in accordance with the Authority's "Audit Guidelines: Electricity, Gas and Water Licences (August 2010)" (the guidelines).

1.2 AUDIT OBJECTIVES

The purpose of the performance audit is to:

- *Assess the effectiveness of measures taken by the licensee to meet the obligations of the performance and quality standards referred to in the licence.*

The purpose of the asset management system review is to:

- *Assess the effectiveness of the measures taken by the licensee for the proper management of assets used in the provision and operation of services and, where appropriate, for the construction or alteration of relevant assets.*

1.3 AUDIT SCOPE

1.3.1 Scope of Performance Audit

The scope of the performance audit is to audit the systems and the processes to assess their effectiveness in ensuring compliance with the standards, outputs and outcomes required by the licence, in detail:

- Assess the effectiveness of systems and procedures and the adequacy of internal controls;
- Consider performance against standards prescribed in the licence;
- Provide assurance of compliance to systems and procedures, existence of control and system outputs / records;
- Verify completeness and accuracy of performance reporting to the Authority;
- Verify compliance with any individual licence conditions.

1.3.2 Scope of Asset Management System Review

The scope of the asset management system review includes the assessment of the adequacy and effectiveness of the licensee's asset management system by evaluating the key processes of:

- Asset planning
- Asset creation/acquisition
- Asset disposal
- Environmental analysis
- Asset operations
- Asset maintenance

- Asset management information system
- Risk management
- Contingency planning
- Financial planning
- Capital expenditure planning
- Review of the asset management system.

Each of the system processes was evaluated against effectiveness criteria defined in the guidelines.

1.4 AUDIT PERIOD

The audit covers the three year period from 17 March 2011 to 31 March 2014. The audit was due on 31 March 2013, however, due to the commissioning of the plant taking place in 2013, the Authority granted Mumbida WF an extension of the audit period from 24 to 36 months in order to include some operational time within the audit period.

The audit was carried out between April and May 2014.

1.5 AUDIT METHODOLOGY

The audit followed the methodology defined in the Authority's "Audit Guidelines: Electricity, Gas and Water Licences", August 2010, (the guidelines) including:

- Review of documentation
- Preparation of an audit plan, risk assessment and system analysis;
- Fieldwork including the document review and meetings;
- Reporting.

These activities were supported by additional investigations to further clarify aspects of the procedures.

An audit plan was prepared which outlined the objectives, scope, risk assessment, system analysis, fieldwork plan, the report structure, key contacts and auditing staff.

The audit adopted a risk based approach where a preliminary risk and materiality assessment was carried out for each licence condition to evaluate the risks resulting from non-compliance and/or lack of controls.

The existing controls were rated and an audit priority assigned based on the risk resulting from lack of controls. Tests were also defined for each licence condition to assess the compliance and effectiveness of the current process.

With specific regard to the Asset Management Review, the review followed the methodology outlined above and defined in the guidelines. The risk assessment was carried out on each asset management system (AMS) element.

1.6 LICENSEE'S REPRESENTATION

Licensee representatives that participated in the audit meetings or were requested to clarify aspects of the licensee's operation were:

- Mr James Townsend, Senior Project Developer, Generation Business Unit, Electricity Generation and Retail Corporation trading as Synergy
- Mr Hugh Webster, General Manager, Mumbida Wind Farm Pty Ltd
- Mr Mark Bennett, Site Service Manager (National Wind Service Manager), GE Power & Water Australia, General Electric International Inc
- Mr Keef Siew, Environmental Health & Safety Regional Manager General Electric International Inc
- Mr George Byrne, IT Services Manager, Corporate Shared Services, Electricity Generation and Retail Corporation trading as Synergy.

1.7 LOCATIONS VISITED

The following facilities were visited during the audit / review:

- Mumbida WF head office, Perth
- Mumbida WF generation facilities at Walkaway, near Geraldton.

1.8 AUDITING TEAM

The auditing team members were:

- Mr Mike Zammit, Project Director and Lead Auditor
- Mr Shaun Campbell, Senior Engineer, Document Reviewer and Verifier
- Support staff.

A summary of the resources utilised in the performance of the audit is listed below.

<i>Item</i>	<i>Resource</i>	<i>Description</i>	<i>Hours</i>
1	M Zammit	Project Director and Lead Auditor	112
2	S Campbell	Senior Engineer, Document Reviewer and Verifier	14
3	Support staff	Document control	-

1.9 KEY DOCUMENTS AND INFORMATION

Main documents accessed by the auditors are listed in Appendix B.

1.10 LIMITATIONS AND QUALIFICATIONS

An audit provides a reasonable level of assurance on the effectiveness of control procedures, however there are limitations due to the nature of the evidence available to the auditor, the sampling process inherent in checking the evidence, the limitations of internal controls and the need to use judgement in the assessment of evidence.

In regard to the review process, the reviewer relies on evidence coming to the reviewer's attention showing that the control procedures are not effective, when the initial process and procedures do not provide sufficient evidence to the level that would be required by a review.

As noted above, due to the sampling process, the nature of the evidence available to the auditor, the limitations of internal controls and the need to use judgement in the assessment of evidence there are limitations in the level of accuracy that can be obtained in the audit and in the review and errors and non-compliances may remain undetected.

The Post Audit and Review Implementation Plan (PAIP) is a document prepared by the licensee in response to the recommendations provided by the audit. As it represents the licensee's views and actions it does not form part of the audit, however it has been included in Appendix A in order to complete the documentation of the audit and in accordance with the guidelines.

1.11 ABBREVIATIONS

AMP	Asset Management Plan
AMIS	Asset Management Information System
AMS	Asset Management System
AS	Australian Standard
Authority	Economic Regulation Authority
CAPEX	Capital Expenditure
CEO	Chief Executive Officer
DSOC	Declared Sent Out Capacity
EC	Effectiveness Criteria
EH&S	Environmental Health and Safety
ETAC	Electricity Transfer Access Contract
GE	General Electric International Inc
HV	High voltage
KPI	Key Performance Indicators
LCC	Lifecycle costs
LV	Low voltage

NA	Not applicable
NAA	Network Access Agreement
O&M	Operation and Maintenance
OFI	Opportunity for Improvement
OHSE	Occupational Health, Safety and Environmental
OPEX	Operating Expenditure
PAIP	Post Audit and Review Implementation Plan
SAMP	Strategic Asset Management Plan
SLA	Service Level Agreement
YTD	Year To Date

2 KEY FINDINGS AND RECOMMENDATIONS

2.1 LICENSEE'S RESPONSE TO PREVIOUS AUDIT RECOMMENDATIONS

This audit represents the first audit of the licence and no recommendations are outstanding. This section is not applicable at this time.

2.2 AUDIT SUMMARY

The findings of the performance audit and asset management system review are reported in Table 6 and Table 7 respectively.

Each table separately rates Mumbida Wind Farm Pty Ltd's operational performance and asset management process and policy definition adequacy and performance in accordance with the Authority's performance summary requirements. The guidelines rating definitions are reproduced in Table 2, Table 4 and Table 5.

Where appropriate or where the performance audit has rated compliance obligations as 1, 2, or 3, recommendations are made to address the issue(s) that have resulted in those ratings. Where the adequacy of the asset management process and policy definition is rated C or D, or the asset management performance is rated 3 or 4, recommendations are included to address the issue(s) that have resulted in those ratings. The licensee's corrective actions are included in the Post Audit Implementation Plan, a copy of the plan is attached in Appendix A.

2.3 PERFORMANCE AUDIT SUMMARY TABLE

Key findings and recommendations arising from the Performance Audit are listed in the following table.

Obligation numbers refer either to the obligation number in the Authority's "Electricity Compliance Reporting Manual or to identifiers "L1, L2" etc which are used to cross-reference findings to licence clauses.

The "Licence Reference" column lists the applicable licence clause numbers.

LEGEND

Key	Description
▶	Findings
1. Text	Recommendations
[OFI]	Opportunity for Improvement

Table 6 - Performance Audit Observations and Recommendations

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
L1	Cl 2	Elec Ind Act Cl5	Grant of Licence Licensee is granted a licence for the licence area to construct and operate generating works or operate existing generating works in accordance with the terms and conditions of this licence	Licensee has identified the licence area and is operating the plant in accordance with the conditions of the licence.	5	
L2	Cl.2 (Sch1)		Licence Area The licence area is the area as set out in plan ERA-	Licensee has identified the licence boundaries which	5	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
			EL-125	correspond to the licence information.		
L3	CI 3	EIA CI5	<p>Term Licence commences on the commencement date (17 March 2011) and continues until the earlier of:</p> <p>(a) the cancellation of the licence (clause 7)</p> <p>(b) surrender of licence</p> <p>(c) expiry (16 March 2041)</p>	Licence has been maintained from commencement, there have been no cancellation or surrender of the licence during the audit period.	5	
L4	CI 4, 5.1 etc		NOTE: Licence clauses 4, 5.1, 15 to 29 are covered by obligations 105 onwards, see below, under respective Obligations.	-	-	
L5	CI.5		<p>Compliance Subject to any modifications or exemptions granted pursuant to the Act, the licensee must comply with any applicable legislation.</p>	<p>The licensee has identified obligations arising from legislation in the Mumbida Wind Farm Operation Handbook (or Operational Manual, OM).</p> <p>Synergy provides assistance to Mumbida Wind Farm Pty Ltd (MWF) to maintain compliance with Rules and Regulations. This is supported by a compliance calendar, the "Annual Key Date Planner", which schedules compliance activities.</p> <p>Financial services are also provided by Synergy.</p> <ul style="list-style-type: none"> MWF is a market participant with the IMO. Trading, regulatory and market interaction functions are being provided to MWF by Synergy Wholesale Business Unit (WBU). Compliance with market rules and MWF obligations are defined in "Trading Strategy & Compliance with Electricity Industry (Wholesale Electricity Market) Regulations 2004" (Document System sec 8.3). Compliance with Technical Rules is defined in a 	4	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
				<p>Compliance Monitoring Programme issued to Western Power in 2013.</p> <ul style="list-style-type: none"> Compliance requirements under the Renewable Energy Target (RET) are maintained through Synergy's WBU. Annual OHSE site audits are also in place. 		
L6	CI 6	EIA CI18	<p>Transfer of Licence This licence may be transferred only in accordance with the Act.</p>	There have not been any transfers of the licence in the audit period.	NR	
L7	CI 7	EIA CI35	<p>Cancellation of Licence This licence may be cancelled only in accordance with the Act.</p>	Not applicable (NA) in the audit period.	NR	
L8	CI 8		<p>Surrender of Licence This licence may be surrendered only in accordance with the licence. [as defined in the clause]</p>	NA in the audit period.	NR	
L9	CI 9	EIA CI16	<p>Renewal of Licence This licence may be renewed only in accordance with the Act.</p>	NA in the audit period.	NR	
L10	CI 10	EIA CI21	<p>Amendment of Licence on Application of the Licensee The licensee may apply to the Authority to amend the licence in accordance with the Act.</p>	NA in the audit period.	NR	
L11	CI 11	Elec Ind Act	<p>Amendment of Licence by the Authority The Authority may amend the licence at any time in accordance with this clause.</p>	NA in the audit period.	NR	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
		CI22				
L12	CI 14.3		The licensee may seek a review of any of the requirements of the Authority's standard audit guidelines in accordance with clause 19.1.	NA in the audit period.	NR	
L13	CI 14.4		The performance audit must be conducted by independent auditor approved by the Authority prior to the audit. Covered by Obligation 101	See Obligation 101	-	
L14	CI 19 CI 19.1		Review of the Authority's decisions The licensee may seek a review of a reviewable decision by the Authority pursuant to this licence.	NA in the audit period.	NR	
L15	CI 20.6		The licensee may seek a review of any of the requirements of the Authority's standard audit guidelines dealing with the asset management system in accordance with clause 19.1.	There has been no request by the licensee for a review of the requirements of the guidelines.	NR	
L16	CI 20.7		The review of the asset management system must be conducted by an independent expert approved by the Authority.	The licensee has received the Authority's approval of the nominated independent expert (Authority's letter of the 17 April 2014).	5	
			Individual Obligations follow below:			
SECTION 12 - ELECTRICITY INDUSTRY ACT (EIA) - LICENCE CONDITIONS AND OBLIGATIONS			See below			
101	14.1	EIA CI 13(1)	A licensee must, not less than once every 24 months, provide the Authority with a performance audit conducted by an independent expert	The licensee has commissioned an independent expert to provide the Authority with a performance audit and a report to cover the period of 36 months from 17 March	5	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
			<p>acceptable to the Authority.</p> <p>Lic CI 14.1</p> <p>The licensee must, unless otherwise notified in writing by the Authority, provide the Authority with a performance audit within 24 months after the commencement date, and every 24 months thereafter.</p>	<p>2011 to 31 March 2014.</p> <p>The original audit period was 24 months with the end date being 31 March 2013. However in view of the plant not being commissioned by that date, on 19 March 2013 the Authority granted an extension to the provision of a report and extended the audit and review period to 31 March 2014. The new date for provision of the audit and review report is now 30 June 2014.</p> <p>The licensee requested in writing approval of the auditor due to perform the audit and review on 14 April 2014. The Authority formally approved the auditor on 17 April 2014.</p>		
102	20.1	EIA 14 (1A)	A licensee must provide for an asset management system.	The licensee has implemented an asset management system (AMS) which has been subject to review by an independent auditor.	5	
103	20.2 20.3	EIA 14 (1B)	<p>A licensee must notify details of the asset management system and any substantial changes to it to the Authority.</p> <p>The licensee must notify the Authority of the details of the asset management system within 5 business days from the later of:</p> <p>(a) the commencement date; and</p> <p>(b) the completion of construction of the generating works.</p> <p>The licensee must notify the Authority of any substantial change to the asset management system within 10 business days of such change.</p>	<p>The licensee notified details of the asset management system to the Authority</p> <p>► Details of the asset management system were not notified to the Authority within 5 business days from the completion of construction of the generating works. Advice on the Asset management plan was submitted late, advice letter (undated) was received by the Authority on 12 September 2013, the Asset Management Plan (AMP) however had been finalised on 27 March 2013 and project practical completion achieved on 17 May 2013 (as per OM sec 4.1.1).</p>	3	<p>1. Compliance to licence obligations needs to be monitored effectively. A corrective action has been implemented by the licensee for recurring obligations. The action will need to be expanded to include reporting AMS changes to the Authority as they occur..</p>

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
104	20.4	EIA 14(1)(c)	A licensee must provide the Authority with a report by an independent expert as to the effectiveness of its asset management system every 24 months, or such longer period as determined by the Authority.	The licensee has commissioned an independent expert to provide the Authority with a report on the effectiveness of its AMS to cover a period of 36 months from 17 March 2011 to 31 March 2014. The audit period had been increased to 36 months as reported at Obligation 101.	5	
105	4.1	EIA 17(1)	A licensee must pay to the Authority the prescribed licence fee within one month after the day of grant or renewal of the licence and within one month after each anniversary of that day during the term of the licence.	<p>The licensee was due to pay the licence fees within one month after the anniversary of the day of grant of the licence, which was 17 March 2011:</p> <ul style="list-style-type: none"> • 2011: payment effected by a third party, not MWF, no record was available of date of payment; • 2012: paid on 12 April 2012; • 2013: payment effected from two accounts and paid on 1 May 2013. <p>▶ The 2013 payment was late.</p> <p>Corrective Action by the Licensee Since the issue of the latest report the licensee has linked the compliance obligations to the company's calendar so that prompts are generated when obligations are due.</p>	3	2. Compliance to licence obligations needs to be monitored effectively. A corrective action has been implemented by the licensee, its performance will need to be monitored to ensure that the issue has been resolved.
106	5.1	EIA 31(3)	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.	<p>The licensee has taken reasonable steps to minimise extent and duration of interruptions or restrictions of supply:</p> <ul style="list-style-type: none"> • establishing the Operations and Maintenance (O&M) Agreement with GE International Inc (GE) for the operation and maintenance of the generation facilities at agreed service levels; 	5	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
				<ul style="list-style-type: none"> setting service level performance indicators and monitoring them; ensuring that the operator, GE has established emergency response plans to manage emergencies; risk assessments on business risks; ensuring reporting at corporate level of availability of plant; ensuring that GE has established an Operation Management plan (OM) and inspection regime. 		
107	5.1	EIA 41(6)	A licensee must pay the costs of taking an interest in land or an easement over land.	The licensee has a total of five easements which required upfront payments. Two of the easements require annual payments and there was evidence to show payment of costs.	5	
SECTION 13 - ELECTRICITY LICENCES – LICENCE CONDITIONS AND OBLIGATIONS						
119	12.1	EIA 11	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.	Accounting records have been audited and found in compliance by Ernst & Young.	5	
120	13.4	EIA 11	A licensee must comply with any individual performance standards prescribed by the Authority.	NA, no individual performance standards have been prescribed by the Authority.	NA	
121	14.2	EIA 11	A licensee must comply, and require its auditor to comply, with the Authority's guidelines dealing with the performance audit.	The licensee has specified and the auditor has documented in the Audit Plan its compliance with the Authority's guidelines.	5	
122	20.5	EIA 11	A licensee must comply, and must require the licensee's expert to comply, with the relevant aspects of the Authority's standard guidelines	The licensee has specified and the auditor has documented in the Audit Plan its compliance with the Authority's guidelines.	5	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
			dealing with the asset management system.			
123	15.1	EIA 11	A licensee must report to the Authority, in the manner prescribed, if a licensee is under external administration or there is a significant change in the circumstances upon which the licence was granted which may affect a licensee's ability to meet its obligations.	NA, the licensee has not been under external administration during the audit period and there has been no significant change in the circumstances upon which the licence was granted.	NR	
124	16.1	EIA 11	A licensee must provide the Authority, in the manner prescribed, any information the Authority requires in connection with its functions under the Electricity Industry Act.	<p>The licensee is required to provide the information requested by the Authority under the Electricity Industry Act:</p> <ul style="list-style-type: none"> • Annual Compliance reports covering all of its type 1 and type 2 licence obligations for each reporting year (1 July and ending 30 June) by 31 August immediately following the end of the financial year that is the subject of the report; <p>The audit has sampled the compliance evidence and found that:</p> <ul style="list-style-type: none"> ▶ There have been a number of non-compliances during the audit period: <ul style="list-style-type: none"> ○ The compliance report for the period 2010-2011 was provided to the Authority after the required date; ○ The compliance report for the period 2011-2012 was provided to the Authority after the required date. The report for the year ending 30 June 2012 was due on 31 August 2012, however it was issued on 10 September 2012 and received by the Authority on 11 September 2012; ○ The report for 2011-2012 refers both to the compliance period of 2011-2012 (Title and item 1) 	3	Recommendation 2 of Obligation 105 applies.

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
				<p>and the compliance period of 2010-2011 (item c and reference in Schedule A).</p> <p>Corrective Action by the Licensee Since the issue of the latest report the licensee has linked the compliance obligations to the company's calendar so that prompts are generated when obligations are due.</p>		
125	17.1 and 17.2	EIA 11	A licensee must publish any information it is directed by the Authority to publish, within the timeframes specified.	NR. There were no directions by the Authority to publish any information.	NR	
126	18.1	EIA 11	Unless otherwise specified, all notices must be in writing.	It was confirmed with the Manager MWF that all notices are provided in writing.	5	
SECTION 15 - ELECTRICITY INDUSTRY METERING CODE						
345	5.1	3.3B	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 the 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.	NA during the audit period.	NR	
360	5.1	3.11 (3)	A Code participant who becomes aware of an outage or malfunction of a metering installation must advise the network operator as soon as practicable.	<p>There has been one instance of the licensee being aware of a possible malfunction of the metering installation.</p> <p>The malfunction was reported in September 2013. Advice was provided to the network operator and following investigation the revenue meter was found to be reading 9.85% less power than actual. The Western Power "Meter</p>	5	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
				Multiplier Report" (sect. 7.4.2 of the files) records that this was due to pre-commissioning data with the correct VT winding ratio not being available to Western Power. The network operator introduced a correction factor to the meter readings to rectify the malfunction and previous readings were corrected.		
385	5.1	3.27	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.	The meter installation has been performed by Western Power, the network operator.	5	
392	5.1	4.4 (1)	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	There have been no discrepancies in the metering data except as reported under Obligation 360. It is noted that MWF has been provided with shared network access with Mungarra Power Station. The "Electricity Transfer Access Contract" (ETAC) was established between Verve Energy (now Synergy) and the network operator. Only Synergy, as the meter holder, can view the registry directly. Any request by MWF to access the metering register has to go through Synergy.	NR	
393	5.1	4.5 (1)	A Code participant must not knowingly permit the registry to be materially inaccurate.	As per Obligation 392.	NR	
394	5.1	4.5 (2)	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	As per Obligation 392.	NR	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
			inaccuracy within the timeframes prescribed.			
409	5.1	5.4 (2)	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). [5.4(1) A network operator must, for each meter on its network, at least once in every 12 month period undertake a meter reading that provides an actual value that passes the validation processes in Appendix 2.]	The network operator has access to the meter. No applicable requests were received by the licensee from the network operator in the audit period.	NA	
422	5.1	5.16	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.	NA, the network operator collects the information.	NA	
423	5.1	5.17 (1)	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.	"Offtake Agreement" with MWF's customer includes responsibilities for compliance with all electricity generation licence requirements, including metering and provision of data to the customers. MWF is aware of responsibility.	5	
426	5.1	5.18	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.	NA. The network operator has access to the metering installation. Western Power's System Management has remote access to the site operation under the Market Operating Protocol.	NA	
427	5.1	5.19	A user must, when requested by the network	NA. There have been no requests by the network operator	NR	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
		(1)	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.	to collect information from the customer during the audit period.		
428	5.1	5.19 (2)	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.	NA. The connection point is with the network operator.	NA	
429	5.1	5.19 (3)	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.	NA. The connection point is with the network operator.	NA	
431	5.1	5.19 (6)	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.	NA. The connection point is with the network operator.	NA	
437	5.1	5.21 (5)	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.	NA during the audit period except as noted under Obligation 360.	NA	
438	5.1	5.21 (6)	A Code participant must not make a request under subclause 5.21(1) that is inconsistent with any access arrangement or agreement.	NA during the audit period.	NA	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
456	5.1	5.27	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.	NA. The connection point is with the network operator.	NA	
469	5.1	6.1(2)	A user must, in relation to a network on which it has an access contract, comply with the rules, procedures, agreements and criteria prescribed.	In respect to the Electricity Industry Metering Code there have been no breaches of the rules, procedures, agreements and criteria in the audit period.	5	
"	5.1	7.2(1)	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.	A communication plan, "Market Operating Protocol", is in place and defines the lines of communication between the network operator and the licensee.	5	
474	5.1	7.2 (4)	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.	NR. There was no request by the network operator of code participant contact details.	NR	
475	5.1	7.2 (5)	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.	NR. There was no evidence to show that there had been a change in the code participant contact details during the audit period.	NR	
476	5.1	7.5	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	Confidentiality Agreements are in place to control disclosure of confidential information. There was no evidence to show that there have been breaches of confidentiality during the audit period.	5	

Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
			contemplated by the Code.			
477	5.1	7.6(1)	A Code participant must disclose or permit the disclosure of confidential information that is required to be disclosed by the Code.	It was confirmed during the course of the audit that MWF permits the disclosure of confidential information. MWF provided all requested information during the course of the audit.	5	
478	5.1	8.1(1)	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.	NR: There have been no Code participant disputes during the audit period.	NR	
479	5.1	8.1(2)	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.	NR: NA during the audit period.	NR	
480	5.1	8.1(3)	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.	NR: NA during the audit period.	NR	
481	5.1	8.1(4)	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.	NR: NA during the audit period.	NR	



Oblig No	Lic ref	Act / Code Ref	Licence Conditions	Findings	Compliance* 5,4,3=Y 1,2=N	Recommendations
482	5.1	8.3(2)	The disputing parties must at all times conduct themselves in a manner which is directed towards achieving the objective in subclause 8.3(1).	NR: NA during the audit period. There have been no Code participant disputes during the audit period.	NR	
SECTION 17 ELECTRICITY LICENCES - LICENSEE SPECIFIC CONDITIONS AND OBLIGATIONS						
Not applicable						

2.4 ASSET MANAGEMENT REVIEW SUMMARY TABLE

Key findings and recommendations arising from the Asset Management System Review are listed against their Effectiveness Criteria (EC) in the following table.

LEGEND

Key	Description
▶	Finding
• Text	Recommendations
[OFI]	Opportunity for Improvement

Table 7 Asset Management System Review

EC No.	Asset Management System Element / Criteria	Rating	Review summary (▶ Findings)	Recommendations
1	Asset Planning	Adeq & Perf	Integration of asset strategies into operational or business plans will establish a framework for existing and new assets to be effectively utilised and their service potential optimised.	
1.1	Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning.	B2	<p>The asset long term strategy was formulated at the start of construction and documented in the financial plan and Mumbida Wind Farm Pty Ltd (MWF) "Operational Manual" (OM). The OM identifies the stakeholders and integrates their needs with the plan objectives.</p> <p>Review of the OM is due to take place annually. The site had not completed a full year of operation at the time of the audit, therefore the annual review had not been performed. The OM has been revised and is now at version D.</p>	<ol style="list-style-type: none"> It is recommended that the asset management plan reports on asset life and condition at the next review and that the planning documentation is progressed to completion.

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			<p>Company objectives are documented in section 1.4 of the OM. The objectives are consistent with meeting stakeholders' requirements.</p> <p>A planning document with forecasts over the next five years is in preparation, this is the "Mumbida Wind Farm Business Plan 2014 – 2019", which is to include commercial and financial assumptions that will impact on the operation of the facility and key financial forecasts for the next 5 years.</p> <p>Operational performance of the assets is reported weekly and monthly and enables to licensee to monitor compliance with objectives and stakeholders requirements.</p> <p>One key strategy is for the plant to be operated and maintained under a long term Operations and Maintenance (O&M) Agreement with GE International Inc (GE). The O&M Agreement commenced on 17 May 2013 and is a long term agreement.</p> <p>The operator, GE, have in place a number of plans to document the operational strategies and procedures:</p> <ul style="list-style-type: none"> • GE's "Mumbida Wind Farm Service Execution Plan", this includes the scope of operator services, identifies stakeholders, performance requirements, monthly and weekly reporting, operation information, interaction with Western Power (WP) and organisation reporting; • GE's "Wind Service Simplified Work Plan" (SWP) which is a summary of required Environmental Health and Safety (EH&S) activities including EH&S goals and objectives and compliance reporting; • GE/Leighton "Mumbida Wind Farm Operations and Maintenance Manual" (GE-O&MM) which details the plant; • Operation & Maintenance Agreement between MWF and GE. <p>► It is noted that at present the licensee's plans do not report on the asset life and condition. Asset information is provided in management reports. (Observation only)</p>	
1.2	Service levels are defined.	A1	MWF has a long term agreement in place with its sole customer, the Water Corporation. The "Mumbida Wind Farm Offtake Agreement" (OA) and the "Power	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			<p>Purchase Agreement” (PPA) which commenced on 17 May 2013. The OA is due to run for a period of 15 years and establishes the service levels for the facility, these include:</p> <ul style="list-style-type: none"> • maximising energy generation to the SWIS as determined by the SWIS availability and by wind conditions, all the “Net Sent Out Energy” generated by MWF will be purchased by the customer; • generation of Capacity Credits, RECs and Environmental Rights which will be purchased by the Customer; • provision of reports to the client including meter data; • to maintain the facility in accordance with good industry practice and achieve the plant intended economic life; • planning for the capacity credits a year ahead and achieving required amounts. <p>Reports to the customer were viewed (e.g. Water Corporation Monthly Operations Reports, November 2013) and included power production, capacity credit and Large-scale Generation Certificates (LGC) performance information.</p>	
1.3	Non-asset options (e.g. demand management) are considered.	NA	Not applicable. Due to the operational strategy for electricity generation which requires maximizing of generation, there is no scope for demand management.	
1.4	Lifecycle costs of owning and operating assets are assessed. (also at 2.2)	B2	Lifecycle costs (LCC) for the assets have been calculated in the “Project Reload - Final Financial Model”, which forecasts income and costs up to 31 December 2032. The OM requires that replacement plant will need the completion of a business case which shall include an assessment of the plant life cycle costs.	
1.5	Funding options are evaluated.	B2	Funding sources were identified in the Project Reload - Final Financial Model. The OM provides for the process of initiating business cases for new and replacement plant and for their funding. Due to the plant operating under the long term O&M Agreement and no unusual plant demand there has not been a need for new business cases.	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
1.6	Costs are justified and cost drivers identified.	B2	Cost drivers have been identified in the Project Reload - Final Financial Model. Costs have been covered by the establishment of the O&M Agreement between the licensee and the operator GE.	
1.7	Likelihood and consequences of asset failure are predicted.	C3	<p>Initial business risks were evaluated in the “MWF Risk Register” which included risks arising during construction, commissioning and operation. Risks have also been evaluated in the “MWF-R-0157_RiskRegister_v2” which considers:</p> <ul style="list-style-type: none"> • O&M Agreement risks, • Offtake Agreement risks, • Declared Sent Out Capacity (DSOC) Agreement risks and • Lease & Easements risks. <p>► It is not easily apparent which actions are in progress, which completed. The register should show by which date actions should be completed, completion of actions, the degree of risk after treatment.</p> <p>► No document systematically assessing the likelihood and consequences of asset failures was viewed during the audit.</p> <p>GE has established condition monitoring of the plant, plant status is evaluated from Germany and provides warnings of plant unusual or deteriorating behaviour.</p>	<p>2. The risk register should show by which date actions should be completed, completion of actions, the degree of risk after treatment.</p> <p>3. A risk register systematically assessing the likelihood and consequences of asset failures should be implemented.</p>
1.8	Plans are regularly reviewed and updated.	A2	Review of the Operational Manual (OM) is due to take place annually. The licensee had not completed a full year of operation at the time of the audit, therefore the annual operations review had not been performed, however, the OM has been revised and is now at version D.	
2	Asset Creation and acquisition		A more economic, efficient and cost-effective asset acquisition framework which will reduce demand for new assets, lower service costs and improve service delivery.	
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions.	NR	Not rated. Since the commissioning no new significant assets have been required and no new projects initiated by the licensee. The OM requires that, for significant assets (over \$50,000) and assets outside of the scope of the O&M Agreement, a business case be approved by the company’s board. The business case needs to	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			<p>cover:</p> <ul style="list-style-type: none"> • reasons for new or replacement plant and benefits; • review of alternative options; • capital and operating expenditure • assessment of life cycle costing. 	
2.2	Evaluations include all life-cycle costs.	NR	<p>Not rated. The original plant business case included the calculation of life-cycle costs (LCC) which are part of the Project Reload - Final Financial Model.</p> <p>As noted under criterion 2.1 since the commissioning no new significant assets have been required and no new projects initiated. The OM requires that, for significant assets, a business case be approved by the company's board. The business case needs to include life-cycle costing.</p>	
2.3	Projects reflect sound engineering and business decisions.	NR	Not rated as there have been no new projects since the start of operations.	
2.4	Commissioning tests are documented and completed.	B2	<p>Commissioning tests for the major plant provided by GE are documented both in hard copy and electronically. Records for Wind Turbine Generator (WTG) number 4 were reviewed, including Torque Report of 16/10/2012, GE Converter records and Down Tower commissioning.</p> <p>► Documentation for Balance of Plant was available, however the records need to be registered so that test documents can be readily found. For example records for the step-up transformers were not readily accessible during the review.</p>	4. Commissioning records for the Balance of Plant need to be registered so that test documents can be readily found.
2.5	Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood.	B2	<p>A calendar. "Annual Key Date Planner" is in place listing the legal, environmental, safety and financial obligations for the year by date. The audit reviewed "Key Dates 2014", which is part of the Planner.</p> <p>The operator maintains compliance reminder on EH&S which is received monthly</p>	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			from GE's system "Gensuite". The system process requires the actions to be closed . A reminder for 20/3/2014 was reviewed, which listed all the EH&S actions due at that date.	
3	Asset Disposal		Effective management of the disposal process will minimise holdings of surplus and under-performing assets and will lower service costs.	
3.1	Under-utilised and under-performing assets are identified as part of a regular systematic review process.	A1	<p>There is evidence of continuous monitoring of plant performance through operational reports provided by the operator to the licensee under the O&M Agreement, which drill down to individual assets:</p> <ul style="list-style-type: none"> • "Monthly Reports" including "Site Trend Reports" (e.g. Monthly Report January 2014 and attached "Site Trends Mumbida January 2014") which report on: <ul style="list-style-type: none"> lost production by contributing fault and by WTG; fault counts by contributing fault and by WTG; events, showing fault quantity per WTG, downtime and lost production per WTG; Technical Information Letters (TIL) raised in regard to the site. TILs are part of GE global systems documenting alerts, safety risks, operating risks, improvements that have been identified in relation to the plant and any action required; historical availability graphs; historical fault rates by month and by WTG. • weekly reports report on performance, availability, faults and scheduled maintenance (e.g. Report Week 9 2014). 	
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken.	A1	Monthly reports and weekly reports summarise the WTG faults and performance trends. These are subject to review both by the operator and the licensee. In addition GE monitors WTG operation from its office in Germany.	
3.3	Disposal alternatives are evaluated.	NR	Not rated as there have not been instances of asset disposal. The OM requires that, for significant assets (over \$50,000) and assets outside of the scope of the O&M Agreement, a business case be approved by the company's board. The business	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			<p>case needs to cover:</p> <ul style="list-style-type: none"> • reasons for new or replacement plant and benefits; • review of alternative options; • capital and operating expenditure • assessment of life cycle costing. 	
3.4	There is a replacement strategy for assets.	B1	<p>The OM and the Project Reload - Final Financial Model provide a strategy for operating the assets until end of life and scheduled decommissioning on 17 May 2033. The OM provides for consideration of the plant options within five years from the decommissioning date.</p> <p>In the short term, where required, plant will be replaced by the OM Provider at either its cost under the O&M Agreement or in accordance with the OM contract for unscheduled maintenance.</p> <p>Where plant has to be replaced outside of the OM Agreement a business case will need to be approved by MWF board as noted at criteria 2.1 and 3.3.</p>	
4	Environmental Analysis		The asset management system regularly assesses external opportunities and threats and takes corrective action to maintain requirements.	
4.1	Opportunities and threats in the system environment are assessed.	NR	There is a venue to assess threats and opportunities in the system environment at the annual OM review, however, due to the plant operating for less than 12 months there is no evidence at this point of assessments taking place.	
4.2	Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved.	A1	<p>Performance standards have been defined in the O&M Agreement with the O&M Provider:</p> <ul style="list-style-type: none"> • availability to be 95% in the first year of operation and 97% in following years with incentives for bettering the target and penalties for not achieving it. <p>Reporting is through the Monthly Site Trend Reports. Results for 2013-14 showed the plant availability was in excess of the performance standard for the period May</p>	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			2013 to February 2014 inclusive.	
4.3	Compliance with statutory and regulatory requirements.	B3	<p>Compliance with statutory and regulatory requirements is monitored through the “Annual Key Date Planner” which lists the legal, environmental, safety and financial obligations for the year by date. MWF is assisted by Synergy in order to maintain compliance with requirements, Synergy Wholesale Business Unit is responsible for managing the compliance requirements under the Renewable Energy Target (RET).</p> <p>Directions for compliance are provided in the OM, under section 9, “Trading & Compliance”.</p> <p>► There have been a number of non-compliances during the audit period:</p> <ul style="list-style-type: none"> ◦ The compliance report for the period 2010-2011 was provided to the Authority after the required date; ◦ The compliance report for the period 2011-2012 was provided to the Authority after the required date. The report for the year ending 30 June 2012 was due on 31 August 2012, however it was issued on 10 September 2012 and received by the Authority on 11 September 2012; ◦ The report for 2011-2012 refers both to the compliance period of 2011-2012 (Title and item 1) and the compliance period of 2010-2011 (item c and reference in Schedule A); ◦ Details of the asset management system in respect of the licensee’s assets were not notified to the Authority within 5 business days from the completion of construction of the generating works. Advice on the asset management plan was submitted late, advice letter is undated, it was received by the Authority on 12 September 2013, the AMP however had been finalised on the 27 March 2013; ◦ Late payment of generation fee: the annual licence fee is due one month after the anniversary of the Licence issue. The annual fee for 2013 was due 17 April 2013 and was not paid until 01 May 2013. <p>Corrective Action by the Licensee</p> <p>Since the issue of the latest report the licensee has linked the compliance obligations to the company’s calendar so that prompts are generated when</p>	<p>5. Compliance to licence obligations needs to be monitored effectively. A corrective action for recurring obligations has been implemented by the licensee, its performance will need to be monitored to ensure that the issue has been resolved. (Similar finding and recommendation were made at Obligation 105).</p> <p>6. Monitoring of compliance with licence obligation will need to be expanded to include monitoring and reporting of AMS changes to the Authority as they occur.</p>

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			obligations are due.	
4.4	Achievement of customer service levels.	B2	<p>Customer service levels are set out in the Offtake Agreement with Water Corporation. The service levels are set in terms of:</p> <ul style="list-style-type: none"> operating and maintaining the facility in accordance with good electricity industry practice; achieving the facility's intended economic life and maximising the "Net Sent Out Energy" during the supply period. <p>The service levels are further qualified in the Offtake Agreement. The Offtake Agreement specifically excludes any guarantee of energy output, the continuity of the output and allows for variations of output due to low wind speeds.</p> <p>"Operations Reports" are submitted monthly to the customer showing the performance of the plant monthly and annually. The plant became operational on 17 May 2013 and due to low wind speeds and a blade remediation program in the last quarter of the year, energy production was below forecast for the period ending in 2013. In the first two months of 2014 energy production was just below forecast.</p> <p>Availability was above the performance levels specified to the O&M Provider.</p>	
5	Asset Operations		Operations plans adequately document the processes and knowledge of staff in the operation of assets so that service levels can be consistently achieved.	
5.1	Operational policies and procedures are documented and linked to service levels required.	A1	<p>Operational policies had been set on the basis of a contractor (GE) providing the operation and maintenance services on site under a long term O&M Agreement. Policies and procedures are documented and linked to the required service levels.</p> <p>GE have in place a number of plans to document the operational strategies and procedures:</p> <ul style="list-style-type: none"> GE's "Mumbida Wind Farm Service Execution Plan", this includes the scope of operator services, identifies stakeholders, performance requirements, monthly and weekly reporting, operation information, interaction with Western Power and organisation reporting; GE's "Wind Service Simplified Work Plan" (SWP) which is a summary of required EH&S activities including EH&S goals and objectives and compliance reporting; 	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			<ul style="list-style-type: none"> GE/Leighton “Mumbida Wind Farm Operations and Maintenance Manual” (GE-O&MM) which details the plant and the Operation & Maintenance Agreement between MWF and GE. <p>GE maintains an extensive suite of operational procedures.</p>	
5.2	Risk management is applied to prioritise operations tasks.	B2	<p>GE has established condition monitoring of the plant. Plant status is evaluated from Germany and provides warnings of plant unusual or deteriorating behaviour. The “PulsePOINT Advanced Monitoring and Diagnostic Service” aims to prevent breakdowns through detection of incipient conditions and early diagnostic to predict failures before they happen.</p> <p>A German group named “Top Issues” assesses issues affecting fleet. Technical Information Letters (TIL) are generated to fix issues.</p> <p>TIL’s Priority Code classifies work in 5 categories ranging from “immediate, prior to unit start up or prior to continued operation”, to “optional” - depending on the risk to the plant generated by the condition.</p> <p>Issues found on site are reported to the global group through a “PAC” case which also allocates priorities to work (e.g. Issue of “Loose bolts found on blade on WT26” was found on 6/3/14, was recorded on PAC Case SN25110090, had a priority of “Immediately” and was fixed between the 7/3 and 9/3).</p> <p>In addition EH&S risks on site are monitored through weekly teleconferences and risk are mapped into a Heat Map by “Frequency” and “Consequences”.</p>	
5.3	Assets are documented in an Asset Register including asset type, location, material, plans of components, and an assessment of assets physical/structural condition and accounting data.	B2	<p>A high level asset register exists with MWF for accounting purposes.</p> <p>GE maintains a suite of systems to record asset data and job data: the “Wind Master File” includes component name, serial numbers, vendors, model, installation date and additional identifiers;</p> <p>Changes to the components and jobs identifiers are recorded in a different system, the “E Service Logbook” which links to the paper system by tag numbers.</p> <ul style="list-style-type: none"> ► Information on the asset physical or structural condition can be obtained but the process appeared difficult and inspection information was limited. 	<p>7. (OFI) The AMS documentation should include a system map or guide to assist in identifying and accessing the systems which provide the information required by the AMS. Alternatively system should be reviewed to identify improvements that can be made to ease access to information.</p>

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
5.4	Operational costs are measured and monitored.	A2	<p>Under the current O&M Agreement, operational costs have been fixed and include expected running costs. Unscheduled maintenance costs can be claimed by the operator up to a maximum "Annual Defects Capped Amount".</p> <p>The operator, GE, tracks its costs and manages budgets internally. Costs and details of jobs are available through the E-Service Logbook and its link to the paper system.</p>	
5.5	Staff receive training commensurate with their responsibilities.	A2	<p>A comprehensive training system is in place at GE to provide operational staff with required skills in the operation, maintenance and management of the assets.</p> <p>Training matrix and records of training attendance including certificates of completion of training were viewed in the audit. Local (Australian) identification of qualification and training requirements for job functions were not yet finalised at the time of the audit.</p>	
6	Asset Maintenance		Maintenance plans cover the scheduling and resourcing of the maintenance tasks so that work can be done on time and on cost.	
6.1	Maintenance policies and procedures are documented and linked to service levels required.	A1	<p>Maintenance plans have been established to achieve the plant reliability necessary for whole of life operation. The maintenance plans are broadly broken down into the main wind generation assets and the balance of plant.</p> <p>Comprehensive procedures are available for the GE plant.</p> <p>Balance of plant (BOP) maintenance has been documented in the "Mumbida Wind Farm – Operations & Maintenance Manual" and in checklists drawn up in accordance with the plant O&M Manuals.</p> <p>Performance of the plant is reported weekly and monthly for compliance with required service levels.</p>	
6.2	Regular inspections are undertaken of asset performance and condition.	B3	<p>The maintenance plans for the assets include regular inspections of the plant. These are broadly broken down into the main wind generation assets and the BOP. Wind generation assets are inspected according to GE prescribed plans, which require annual WTG inspections. In addition GE provides the "PulsePOINT Advanced Monitoring and Diagnostic Service" which aims to prevent breakdowns through detection of incipient conditions and early diagnostic to predict failures before they</p>	<p>8. (OFI) BOP inspections are documented in individual checklists. As the plant list is extensive and there is no overall means to check that all individual items of plant have been inspected it will be beneficial</p>

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			<p>happen.</p> <p>BOP is inspected monthly in accordance with checklist drawn up in accordance with the plant O&M Manuals. A sample of inspections were checked and corresponded to requirements.</p> <ul style="list-style-type: none"> ► (OFI) BOP inspections are documented in individual checklists. As the plant list is extensive and there is no overall means for checking that all individual items of plant have been inspected it will be beneficial to introduce a summary list that identifies that all plant has been inspected. ► Actions raised in the BOP inspection are not identified by an identification number or tag so that there is no ready traceability of the action completion. ► BOP Emergency generator check sheet does not include for running of generator in checking list. At present requirement is only noted in the "Further Information" section. 	<p>to introduce a summary list that identifies that all plant has been inspected.</p> <p>9. Actions raised in BOP inspections should be identified by an identification number or tag so that completion of the action can be easily controlled.</p> <p>10. BOP Emergency Generator check sheet should include for running of the generator in checking list.</p>
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule.	B2	<p>As reported at EC No 6.1 maintenance plans are in place for both the main plant supplied by GE and the BOP.</p> <p>Apart from the difficulty in tracking the completion of all scheduled maintenance of BOP and of actions raised in BOP inspections (issues recorded at EC 6.2), the current process provides evidence of completion of maintenance plans in accordance with schedules. Maintenance actions reviewed had been completed on schedule.</p>	
6.4	Failures are analysed and operational/maintenance plans adjusted where necessary.	A1	<p>Failures, actual or potential, are investigated and rectification actions implemented through GE's PAC and TIL systems.</p> <p>A blade remediation program has been initiated on all WTG blades at MWF due to a manufacturing issue discovered on a number of blades manufactured around the same time as the Mumbida blades. The remediation program has been in progress since November 2013.</p>	
6.5	Risk management is applied to prioritise maintenance tasks.	B2	<p>Routine maintenance tasks are performed in accordance with the maintenance schedules both for the main GE plant and the BOP. Unscheduled work arising from TILs is subject to a prioritisation scale.</p>	

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			<p>TIL's Priority Code classifies work in 5 categories ranging from "immediate, prior to unit start up or prior to continued operation" to "optional" - depending on the risk to the plant generated by the condition.</p> <p>Maintenance tasks for unscheduled work for the BOP are prioritised by assigning the job to PAC Service Now" system. The PAC case system will prioritise the urgency according to; personnel safety, equipment safety, consequential damage, loss of production, customer concern etc. Once the PAC Case is approved, a service report is created and staff is dispatched to fix the condition according to the urgency of the PAC case.</p> <p>At site level daily Toolbox Meetings confirm work priority.</p>	
6.6	Maintenance costs are measured and monitored.	B2	<p>The licensee maintenance costs are fixed, with an allowance for unscheduled maintenance. The operator, GE, tracks its costs and manages budgets internally. Costs and details of jobs are available through the E-Service Logbook and its link to the paper system.</p>	
7	Asset Management Information system (MIS)		<p>The asset management information system provides authorised, complete and accurate information for the day-to-date running of the asset management system. The focus of the review is the accuracy of performance information used by the licensee to monitor and report on service standards.</p>	
7.1	Adequate system documentation for users and IT operators.	B2	<p>Several systems provide information on the asset management system. Process was tested and at times access to appropriate documentation was laborious due to the number of systems and different access requirements.</p>	Recommendation 7 of EC 5.3 applies.
7.2	Input controls include appropriate verification and validation of data entered into the system.	B2	<p>Data is loaded into the system either automatically by plant metering and monitoring systems or manually for accounting/financial data and equipment information. A process of verification occurs in both cases in regard to performance information used by the licensee to monitor and report on service standards. Metering data used for managing compliance with customer service levels and financial management is verified by MWF on a monthly basis. A discrepancy in the figure provided by Western Power reading of the revenue meter and MWF power readings was discovered in September 2013. Advice was provided to the network operator and following investigation the revenue meter was found to be reading 9.85% less power that</p>	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			actual due to an incorrectly recorded winding ratio on one of the VTs. The network operator introduced a correction factor to the meter readings to rectify the malfunction and previous readings were corrected.	
7.3	Logical security access controls appear adequate, such as passwords.	A1	Security access to software systems appeared to be strong, with formal process of access approval, password and user control, both in the MWF head office and at the site and operator's facilities.	
7.4	Physical security access controls appear adequate.	A1	Physical security access control appeared to be robust both at the MWF head office and at the site and operator's facilities. Site is secured by fencing and gates which are padlocked at night, office building is locked and alarmed, key access is restricted to authorised personnel and subject to approval and registering. Security alarms are in place at the power generating facility.	
7.5	Data backup procedures appear adequate.	C3	<p>The Mumbida wind Farm operation relies on two main sets of IT systems for its operation: the MWF head office system and the GE's systems on site.</p> <p>The MWF system uses some of Synergy's systems and services for its data backup operation. There are daily incremental/differential backups and weekly full backups. Restore has not been required on MWF systems however Synergy's systems are subject to regular data retrieval. Evidence of restores was viewed. Back ups are off-sited twice a week.</p> <p>► There is a GE documented back up procedure on site, the procedure contains directions on how to perform the back up and how to retrieve the data however review of the procedure and discussion with site personnel indicated that the procedure is generic and lacks specific direction for the Mumbida WF site.</p> <p>The procedure did not identify functions responsible for the control of the process; it did not provide clear indication of what is backed up, the extent of the equipment/software and data that was backed up, the timing of backups and rotation of media.</p> <p>The auditor was advised that there were no spare backup tapes on site. The GE O&M Manual notes that the purchaser can buy additional tapes, a specific back-up procedure will be required based on the number of tapes, to cover issues such as tape rotation, type of backups performed etc.</p>	<p>11. The recommendation is for the licensee (and as required, the operator) to review the current backup procedure(s) on site, check their current implementation and check that there is sufficient information on the systems, software and data that are backed up and direction to enable staff to perform, maintain and reuse the data and software in the event of a failure or emergency, and then update and implement the procedure.</p> <p>Generally items such as noted below should be included in the procedure:</p> <ul style="list-style-type: none"> identifying personnel responsible for tasks under the procedure; the equipment that requires backing up;

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
				<ul style="list-style-type: none"> • what software, settings and data is backed up; • the GE O&M Manual allows the purchaser to buy additional tapes, a specific back-up procedure will be required based on the number of tapes, to cover issues such as tape rotation, type of backups performed etc; • timing of back ups; • where the tapes are stored; • there should be documentary evidence to show that, if tapes are stored on site, storage is fire rated; • there should be allowance for regular testing for backup integrity. <p>This is only a sample of the recommendations arising from the review, the licensee should review the back up procedure in full and determine the full extent of the improvement required and ensure implementation.</p>
7.6	Key computations related to licensee performance reporting are materially accurate.	A1	<p>Licensee's performance reporting appears to be materially accurate. Licence performance is measured and reported by two independent systems. Western Power measures and reports power generated by the wind farm through the revenue meter at the connection point to the Western Power's substation. MWF measures the power generated at the WTGs. The two sets of measurements are then checked by MWF on a monthly basis to identify any errors. The MWF measurements did not match Western Power measurements in August 2013, the figures were checked and an error was found in Western Power settings</p>	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			for the meter as detailed in EC 7.2. This has since been rectified. Apart from the above issue there have been no further instances of discrepancies. Metering accuracy is to be verified at three year intervals.	
7.7	Management reports appear adequate for the licensee to monitor licence obligations.	B2	<p>Management reports are comprehensive and provide up to date information on the plant operating and financial performance. Some of the areas covered by the reports are:</p> <ul style="list-style-type: none"> • production • capacity of the plant • availability of the plant • defects. <p>Whilst licence obligations are monitored in the key planner calendar there is an opportunity for improvement in the system by expanding the reporting to monitor areas such as:</p> <ul style="list-style-type: none"> • Emergency Response: eg. Fire Drills • Audit program • Reporting timetable for compliance. 	<p>12. (OFI) Management reports could be expanded to monitor licence obligations such as:</p> <ul style="list-style-type: none"> - emergency response - audit program - reporting timetable for compliance.
8	Risk Management		An effective risk management framework is applied to manage risks related to the maintenance of service standards.	
8.1	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system.	B3	<p>Risk management policies and procedures are in place and in use. The "Risk Management Policy" and "Risk Management Framework" guide the management of risks affecting the business at corporate level. The RMF requires that a business risk register be prepared and updated and presented to the Board six monthly.</p> <ul style="list-style-type: none"> ► A corporate business risk register exists ("110922 MWF Risk Register") but there is no clear evidence that it has been presented to the Board six-monthly or that it has been regularly updated. 	<p>13. Risk management process should be reviewed to ensure its continuous application to the operation of the assets.</p> <p>14. The corporate business risk register ("110922 MWF Risk Register") should be presented to the Board six-monthly in accordance with the Risk Management Framework.</p>

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
8.2	Risks are documented in a risk register and treatment plans are actioned and monitored.	C2	<p>Business corporate risks have been documented in the “MWF-R-0157_RiskRegister v2”.</p> <ul style="list-style-type: none"> ► It is not clear from the register if the actions have been monitored or completed. ► Plan does not show expected mitigation in risk resulting from treatment plans. ► Other risk registers are also present in the system and it would be best to remove or control them and control the register in use either in the OM or in other suitable document. 	<p>15. Risk register should show status and progress of actions. Planned date for completion of actions and risk rating reduction should be included.</p> <p>16. A few risk registers are present in the system and it would be best to remove or control them and refer to the risk register in use either in the OM or in other suitable documents.</p>
8.3	The probability and consequences of asset failure are regularly assessed.	C3	<ul style="list-style-type: none"> ► There is no documentary evidence that the probability and consequences of asset failures have been regularly assessed. 	<p>17. There should be a new review and an update of the risk register relating to assets, their failure modes, likelihood of failures and consequences. The actions required should be recorded and brought up to date. The register should include responsibilities for actions, dates for completion and progress. The asset risk register should be reviewed regularly.</p>
9	Contingency Planning		Contingency plans have been developed and tested to minimise any significant disruptions to service standards	
9.1	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.	C3	<p>Contingency plans are in place at GE’s site operation.</p> <p>MWF head office operates under Synergy’s crisis management. A crisis management plan, the “MWF-P-0136 Crisis Management Plan” has been prepared.</p> <ul style="list-style-type: none"> ► The plan does not include for testing for confirmation of operability. <p>A succession plan, “MWF-P-0152 Succession Plan” due to be reviewed annually,</p>	<p>18. The contingency plan for MWF’s head office should be reviewed and should include a provision for testing. Reference to the plan should be made in the Operational Manual.</p> <p>19. (OFI) The succession plan should be reviewed with the aim of easing its application.</p>

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			<p>has also been prepared.</p> <ul style="list-style-type: none"> ► (OFI) The succession plan is concise and may need a brief guide to assist with its application. <p>Directions for the development of Contingency Plans for the site are documented in Section 2.11 “Emergency Preparedness and Fire Prevention” of GE’s “Wind Service Simplified Work Plan (SWP). This provides the requirements for preparing a “Site Emergency Response Plan” (ERP), its distribution and its testing.</p> <p>The completed “Emergency Preparedness and Fire Prevention Plan” is included in Appendix 2.11 of the SWP. The plan covers responses to events such as medical emergencies, natural disasters, fire and explosion, earthquakes, hazardous material release etc. The plan requires quarterly testing of responses to emergencies.</p> <p>Evidence of testing was available. Emergency evacuation of 8 January 2014 had two recommendations and both have actions in progress:</p> <ul style="list-style-type: none"> • a base radio to be obtained and • a change required in the emergency response procedure. 	
10	Financial Planning		A financial plan that is reliable and provides for the long-term financial viability of the services.	
10.1	The financial plan states the financial objectives and strategies and actions to achieve the objectives.	B2	<p>A financial plan is in place through a number of documents:</p> <ul style="list-style-type: none"> • the MWF OM provides the overall strategies and financial objectives of the licensee; • the Project Reload - Final Financial Model, has the financial forecasts from construction to operation and end of life; • a planning document with forecasts over the next five years is in preparation, this is the “Mumbida Wind Farm Business Plan 2014 – 2019”, which is to include commercial and financial assumptions that will impact on the operation of the facility and key financial forecasts for the next 5 years. 	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
10.2	The financial plan identifies the source of funds for capital expenditure and recurrent costs.	B2	The Project Reload - Final Financial Model identifies the source of funds from construction to operation and end of life.	
10.3	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets).	A1	Profit and Loss and Balance Sheets are prepared regularly and updated on quarterly Board reports. Variances are shown on each report. Short term projections of cashflow were available to 2016 on "20140311 Mumbida Cashflow Forecast". Longer term projections to 2019 are available on an update of the original financial model "Project Reload - Final Financial Model".	
10.4	The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions beyond this period.	B2	The Project Reload - Final Financial Model, has the financial forecasts from construction to operation and end of life, however the model had been prepared prior to construction. ► The "Mumbida Wind Farm Business Plan 2014 – 2019" is in preparation and is to include commercial and financial assumptions that will impact on the operation of the facility and key financial forecasts for the next 5 years.	20. (OFI) Complete the financial plan including firm predictions on income for the next five years and indicative predictions beyond this period.
10.5	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services.	B2	The Project Reload - Final Financial Model includes for operations and maintenance and administration costs. Allowance for capital expenditure not covered by the O&M Agreement appears to be covered by a provision for unscheduled maintenance for the duration of the O&M Agreement. ► It is noted that the only provision for CAPEX in the cashflow analysis of the financial plan is the unscheduled maintenance provision over the duration of the O&M Agreement. (Observation only)	
10.6	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary.	A1	Profit and Loss and Balance Sheets are prepared regularly and updated on quarterly Board reports. Variances are shown on each report together with reasons for variances.	

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
11	Capital Expenditure Planning		A capital expenditure plan that provides reliable forward estimates of capital expenditure and asset disposal income, supported by documentation of the reasons for the decisions and evaluation of alternatives and options.	
11.1	There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates.	B2	<p>Allowance for capital expenditure not covered by the O&M Agreement appears to be covered in the financial plan "Project Reload - Final Financial Model" by a provision for unscheduled maintenance for the duration of the O&M Agreement. Under the O&M Agreement and when required, plant will be replaced by the O&M Provider at either its cost or in accordance with the O&M conditions for unscheduled maintenance.</p> <p>Where plant has to be replaced outside of the O&M Agreement a business case will need to be approved by MWF board as noted at criteria EC2.1 and 3.3.</p> <p>► It is noted that it does not appear that there is a provision for CAPEX in the cashflow analysis of the financial plan apart from the unscheduled maintenance over the duration of the O&M Agreement. (Observation only)</p>	
11.2	The plan provides reasons for capital expenditure and timing of expenditure.	B2	The plan does not provide reasons for specific capital expenditure and timing of expenditure, rather it provides a monthly allowance for unscheduled maintenance. In view of the age of the plant, the terms of the O&M Agreement appear adequate at present.	
11.3	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan.	B2	At present the financial plan regarding capital expenditure is consistent with the asset life and condition identified in the operating reports.	
11.4	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.	C2	<p>At present the CAPEX is based on the O&M Agreement covering all expenditure except for unscheduled maintenance and variations.</p> <p>There is a provision for "unscheduled maintenance" in the financial model however no other provision is apparent.</p> <p>► The financial model or financial projections will require regular review and updating in regard to CAPEX (and also OPEX), this process is not adequately</p>	21. The financial model or financial projections will require regular review and updating in regard to CAPEX (and also OPEX), this process should be described in the asset management plan or system.

EC No.	Asset Management System Element / Criteria	Rating	Review summary (► Findings)	Recommendations
			described in the asset management plan or system.	
12	Review of AMS		Review of the Asset Management System to ensure the effectiveness of the integration of its components and their currency.	
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.	A2	<p>The OM requires that reviews of the system are carried out annually. The site had not completed a full year of operation at the time of the audit, therefore the annual review had not been performed. The OM has been revised and is now at version D. The OM requires reviews of:</p> <ul style="list-style-type: none"> • system processes • wind farm performance • O&M provider performance and compliance with legal, safety and environmental • lessons log • risk • MWF succession plan. <p>Regular review of system performance takes place through the continuous operational reporting in weekly and monthly operational reports. An annual report is also required to be prepared by the operator summarising the monthly reports.</p>	
12.2	Independent reviews (e.g. internal audit) are performed of the asset management system.	B1	<p>Independent reviews are performed of the asset management system:</p> <p>An Occupational Health Safety and Environmental (OHSE) audit is programmed to be carried out annually on the system. Keef Siew, EH&S Regional Manager GE, conducted an OHSE audit in June 2013.</p> <p>Hideto Seto, Senior Manager Power and Water conducted a Systems and Process audit in June 2013.</p> <p>A site was audit conducted by Hugh Webster, Manager MWF and Mark Bennett, Site manager, GE, on 19 June 2013 generating a Site Inspection Report.</p>	

3 CHANGES TO THE LICENCE

No changes to the licence conditions are recommended.

4 POST AUDIT IMPLEMENTATION PLAN

The Post Audit and Review Implementation Plan (PAIP) is a document prepared by the licensee in response to the recommendations made in the review. As it represents the licensee's views and actions it does not form part of the audit report, however it has been included in Appendix A in order to complete the documentation of the report.

Each key review finding and recommendation has been listed in the PAIP by the auditor. For each recommendation the licensee has recorded responses and corrective actions, responsibility for the actions and a proposed date for completion.

Appendix A - Post Audit Implementation Plan (Recommendations Only)

2014 Performance Audit and Asset Management System Review, Electricity Generation Licence,

POST AUDIT IMPLEMENTATION PLAN (Recommendations Only)

EIA = Electricity Industry Act 2004
 EIMC = Electricity Industry (Metering) Code 2012

PERFORMANCE AUDIT							
Oblig No	Lic CI/ Act	Licence Requirement / Rating	Finding	Recommendation	Action	By Whom	Date
103	CI.20.2 EIA 14 (1B)	<p>The licensee must notify the Authority of the details of the asset management system within 5 business days from the later of:</p> <p>(a) the commencement date; and</p> <p>(b) the completion of construction of the generating works.</p> <p><i>Rating: 3</i></p>	<p>▶ Details of the asset management system were not notified to the Authority within 5 business days from the completion of construction of the generating works. Advice on the Asset management plan was submitted late, advice letter (undated) was received by the Authority on 12 September 2013, the Asset Management Plan (AMP) however had been finalised on 27 March 2013 and project practical completion achieved on 17 May 2013 (as per OM sec 4.1.1).</p>	<p>1. Compliance to licence obligations needs to be monitored effectively. A corrective action has been implemented by the licensee for recurring obligations. The action will need to be expanded to include reporting AMS changes to the Authority as they occur..</p>			
105	CI 4.1 EIA 17(1)	<p>A licensee must pay to the Authority the prescribed licence fee within one month after the day of grant or renewal of the licence and within one month after each anniversary of that day during the term of the licence.</p> <p><i>Rating: 3</i></p>	<p>▶ The licensee was due to pay the licence fees within one month after the anniversary of the day of grant of the licence. The 2013 payment was late. (see below for corrective action implemented by the licensee)</p>	<p>2. Compliance to licence obligations needs to be monitored effectively. A corrective action has been implemented by the licensee, its performance will need to be monitored to ensure that the issue has been resolved.</p>			

PERFORMANCE AUDIT

Oblig No	Lic Cl/ Act	Licence Requirement / Rating	Finding	Recommendation	Action	By Whom	Date
124	CI 16.1 EIA 11	<p>A licensee must provide the Authority, in the manner prescribed, any information the Authority requires in connection with its functions under the Electricity Industry Act.</p> <p><i>Rating: 3</i></p>	<ul style="list-style-type: none"> ▶ The compliance report for the period 2010-2011 was provided to the Authority after the required date; ▶ The compliance report for the period 2011-2012 was provided to the Authority after the required date. The report for the year ending 30 June 2012 was due on 31 August 2012, however it was issued on 10 September 2012 and received by the Authority on 11 September 2012; <p>Corrective Action by the Licensee Since the issue of the latest report the licensee has linked the compliance obligations to the company's calendar so that prompts are generated when obligations are due.</p>	Recommendation 2 of Obligation 105 applies.			

POST REVIEW IMPLEMENTATION PLAN (Recommendations Only)

ASSET MANAGEMENT REVIEW							
Item No	EC Ref	AMS Element Effectiveness Criteria / Rating	Finding	Recommendation	Action	By Whom	Date
	1	Asset Planning					
1	1.1	<p>Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning.</p> <p><i>Rating: B2</i></p>	<p>▶ It is noted that at present the licensee's plans do not report on the asset life and condition. Asset information is provided in management reports. (Observation only). A planning document with forecasts over the next five years is in preparation, this is the "Mumbida Wind Farm Business Plan 2014 – 2019".</p>	<p>1. It is recommended that the asset management plan reports on asset life and condition at the next review and that the planning documentation is progressed to completion.</p>	▶		
2	1.7	<p>Likelihood and consequences of asset failure are predicted.</p> <p><i>Rating: C3</i></p>	<p>▶ It is not easily apparent in the risk register which actions are in progress, which completed. The register should show by which date actions should be completed, completion of actions, the degree of risk after treatment.</p> <p>▶ No document systematically assessing the likelihood and consequences of asset failures was viewed during the audit.</p>	<p>2. The risk register should show by which date actions should be completed, completion of actions, the degree of risk after treatment.</p> <p>3. A risk register systematically assessing the likelihood and consequences of asset failures should be implemented.</p>	▶		
	2	Asset Creation and acquisition					
3	2.4	<p>Commissioning tests are documented and completed.</p>	<p>▶ Documentation for Balance of Plant was available, however the records need to be</p>	<p>4. Commissioning records for the Balance of Plant need to be registered so that test documents can be readily found.</p>	▶		

ASSET MANAGEMENT REVIEW							
Item No	EC Ref	AMS Element Effectiveness Criteria / Rating	Finding	Recommendation	Action	By Whom	Date
		<i>Rating: B2</i>	registered so that test documents can be readily found. For example records for the step-up transformers were not readily accessible during the review.				
	4	Environmental Analysis					
4	4.3	Compliance with statutory and regulatory requirements. <i>Rating: B3</i>	<p>▶ There have been a number of non-compliances during the audit period:</p> <ul style="list-style-type: none"> ◦ The compliance report for the period 2010-2011 was provided to the Authority after the required date; ◦ The compliance report for the period 2011-2012 was provided to the Authority after the required date. The report for the year ending 30 June 2012 was due on 31 August 2012, however it was issued on 10 September 2012 and received by the Authority on 11 September 2012; ◦ The report for 2011-2012 refers both to the compliance period of 2011-2012 (Title and item 1) and the compliance period of 2010-2011 (item c and reference in Schedule A); ◦ Details of the asset management system in 	<p>5. Compliance to licence obligations needs to be monitored effectively. A corrective action has been implemented by the licensee, its performance will need to be monitored to ensure that the issue has been resolved. (Similar finding and recommendation were made at Obligation 105).</p>			

ASSET MANAGEMENT REVIEW							
Item No	EC Ref	AMS Element Effectiveness Criteria / Rating	Finding	Recommendation	Action	By Whom	Date
			<p>respect of the licensee's assets were not notified to the Authority within 5 business days from the completion of construction of the generating works. Advice on the asset management plan was submitted late, advice letter is undated, it was received by the Authority on 12 September 2013, the AMP however had been finalised on the 27 March 2013;</p> <ul style="list-style-type: none"> ◦ Late payment of generation fee: the annual licence fee is due one month after the anniversary of the Licence issue. The annual fee for 2013 was due 17 April 2013 and was not paid until 01 May 2013. <p>▶ Corrective Action by the Licensee Since the issue of the latest report the licensee has linked the compliance obligations to the company's calendar so that prompts are generated when obligations are due.</p>				
			▶ Details of the asset management system in respect	6. Monitoring of compliance with licence obligation will need to be	▶		

ASSET MANAGEMENT REVIEW							
Item No	EC Ref	AMS Element Effectiveness Criteria / Rating	Finding	Recommendation	Action	By Whom	Date
			of the licensee's assets were not notified to the Authority within 5 business days from the completion of construction of the generating works. Advice on the asset management plan was submitted late, advice letter is undated, it was received by the Authority on 12 September 2013, the AMP however had been finalised on the 27 March 2013;	expanded to include monitoring and reporting of AMS changes to the Authority as they occur.			
	5	Asset Operations					
5	5.3	Assets are documented in an Asset Register including asset type, location, material, plans of components, and an assessment of assets physical/structural condition and accounting data.	▶ Information on the asset physical or structural condition can be obtained but the process appeared difficult and inspection information was limited.	7. (OFI) The AMS documentation should include a system map or guide to assist in identifying and accessing the systems which provide the information required by the AMS. Alternatively system should be reviewed to identify improvements that can be made to ease access to information.	▶		
	6	Asset Maintenance					
6	6.2	Regular inspections are undertaken of asset performance and condition. <i>Rating: B3</i>	▶ (OFI) Balance of Plant (BOP) inspections are documented in individual checklists. As the plant list is extensive and there is no overall means for checking that all individual items of plant have been inspected it will be beneficial to introduce a summary list that identifies that all plant has been	8. (OFI) BOP inspections are documented in individual checklists. As the plant list is extensive and there is no overall means to check that all individual items of plant have been inspected it will be beneficial to introduce a summary list that identifies which plant has been inspected.	▶		

ASSET MANAGEMENT REVIEW							
Item No	EC Ref	AMS Element Effectiveness Criteria / Rating	Finding	Recommendation	Action	By Whom	Date
			<p>inspected.</p> <ul style="list-style-type: none"> ▶ Actions raised in the BOP inspection are not identified by an identification number or tag so that there is no ready traceability of the action completion. ▶ BOP Emergency generator check sheet does not include for running of generator in checking list. At present requirement is only noted in the "Further Information" section. 	<p>9. Actions raised in BOP inspections should be identified by an identification number or tag so that completion of the action can be easily controlled.</p>			
				<p>10. BOP Emergency Generator check sheet should include for running of the generator in checking list.</p>			
	7	Asset Management Information System (MIS)					
7	7.5	<p>Data backup procedures appear adequate.</p> <p><i>Rating: C3</i></p>	<ul style="list-style-type: none"> ▶ There is a GE documented back up procedure on site, the procedure contains directions on how to perform the back up and how to retrieve the data however review of the procedure and discussion with site personnel indicated that the procedure is generic and lacks specific direction for the Mumbida WF site. <p>The procedure did not identify functions responsible for the control of the process; it did not provide clear indication of what is backed up, the extent of the equipment/software and data that was backed up, the timing of backups and rotation of media.</p>	<p>11. The recommendation is for the licensee (and as required, the operator) to review the current backup procedure(s) on site, check their current implementation and check that there is sufficient information on the systems, software and data that are backed up and direction to enable staff to perform, maintain and reuse the data and software in the event of a failure or emergency, and then update and implement the procedure. Generally items such as noted below should be included in the procedure:</p> <ul style="list-style-type: none"> • identifying personnel responsible for tasks under the procedure; 			

ASSET MANAGEMENT REVIEW

Item No	EC Ref	AMS Element Effectiveness Criteria / Rating	Finding	Recommendation	Action	By Whom	Date
			<p>The auditor was advised that there were no spare backup tapes on site. The GE O&M Manual notes that the purchaser can buy additional tapes, a specific back-up procedure will be required based on the number of tapes, to cover issues such as tape rotation, type of backups performed etc.</p>	<ul style="list-style-type: none"> • the equipment that requires backing up; • what software, settings and data is backed up; • the GE O&M Manual allows the purchaser to buy additional tapes, a specific back-up procedure will be required based on the number of tapes, to cover issues such as tape rotation, type of backups performed etc; • timing of back ups; • where the tapes are stored; • there should be documentary evidence to show that, if tapes are stored on site, storage is fire rated; • there should be allowance for regular testing for backup integrity. <p>This is only a sample of the recommendations arising from the review, the licensee should review the back up procedure in full and determine the full extent of the improvement required and ensure implementation.</p>			
8	7.7	Management reports appear adequate for the licensee to monitor licence obligations.	<p>▶ Whilst licence obligations are monitored in the key planner calendar there is an opportunity for improvement in the system by expanding the reporting to monitor areas such as:</p>	<p>12. (OFI) Management reports could be expanded to monitor licence obligations such as:</p> <ul style="list-style-type: none"> • emergency response • audit program • reporting timetable for 	▶		

ASSET MANAGEMENT REVIEW							
Item No	EC Ref	AMS Element Effectiveness Criteria / Rating	Finding	Recommendation	Action	By Whom	Date
		<i>Rating: B2</i>	<ul style="list-style-type: none"> ◦ Emergency Response: eg. Fire Drills ◦ Audit program ◦ Reporting timetable for compliance. 	compliance.			
	8	Risk Management					
9	8.1	<p>Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system.</p> <p><i>Rating: B3</i></p>	<ul style="list-style-type: none"> ▶ A corporate business risk register exists ("110922 MWF Risk Register") but there is no clear evidence that it has been presented to the Board six-monthly or that it has been regularly updated. 	<p>13. Risk management process should be reviewed to ensure its continuous application to the operation of the assets.</p>	▶		
				<p>14. The corporate business risk register ("110922 MWF Risk Register") should be presented to the Board six-monthly in accordance with the Risk Management Framework.</p>	▶		
10	8.2	<p>Risks are documented in a risk register and treatment plans are actioned and monitored.</p> <p><i>Rating: C2</i></p>	<p>Business corporate risks have been documented in the "MWF-R-0157_RiskRegister v2".</p> <ul style="list-style-type: none"> ▶ It is not clear from the register if the actions have been monitored or completed. ▶ Plan does not show expected mitigation in risk resulting from treatment plans. ▶ Other risk registers are also present in the system and it would be best to remove or control them and control the register in use either in the OM or in other suitable document. 	<p>15. Risk register should show status and progress of actions. Planned date for completion of actions and risk rating reduction should be included.</p>	▶		
				<p>16. A few risk registers are present in the system and it would be best to remove or control them and refer to the risk register in use either in the OM or in other suitable documents.</p>	▶		

ASSET MANAGEMENT REVIEW							
Item No	EC Ref	AMS Element Effectiveness Criteria / Rating	Finding	Recommendation	Action	By Whom	Date
11	8.3	The probability and consequences of asset failure are regularly assessed. <i>Rating: C3</i>	▶ There is no documentary evidence that the probability and consequences of asset failures have been regularly assessed.	17. There should be a new review and an update of the risk register relating to assets, their failure modes, likelihood of failures and consequences. The actions required should be recorded and brought up to date. The register should include responsibilities for actions, dates for completion and progress. The asset risk register should be reviewed regularly.			
	9	Contingency Planning					
12	9.1	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks. <i>Rating: C3</i>	▶ The “MWF-P-0136 Crisis Management Plan” does not include for testing for confirmation of operability.	18. The contingency plan for MWF’s head office should be reviewed and should include a provision for testing. Reference to the plan should be made in the Operational Manual.			
			▶ (OFI) The succession plan “MWF-P-0152 Succession Plan” is concise and may need a brief guide to assist with its application.	19. (OFI) The succession plan should be reviewed with the aim of easing its application.			
	10	Financial Planning					
13	10.4	The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions beyond this period. <i>Rating: B2</i>	▶ The “Mumbida Wind Farm Business Plan 2014 – 2019” is in preparation and is to include commercial and financial assumptions that will impact on the operation of the facility and key financial forecasts for the next 5 years.	20. (OFI) Complete the financial plan including firm predictions on income for the next five years and indicative predictions beyond this period. .			

ASSET MANAGEMENT REVIEW							
Item No	EC Ref	AMS Element Effectiveness Criteria / Rating	Finding	Recommendation	Action	By Whom	Date
	11	Capital Expenditure Planning					
14	11.4	<p>There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.</p> <p><i>Rating: C2</i></p>	<p>▶ The financial model or financial projections will require regular review and updating in regard to CAPEX (and also OPEX), this process is not adequately described in the asset management plan or system.</p>	<p>21. The financial model or financial projections will require regular review and updating in regard to CAPEX (and also OPEX), this process should be described in the asset management plan or system.</p>	▶		

Appendix B - Documentation reviewed

Key Documentation Reviewed

1. Generation Licence, (Licence Version 1, 17 March 2011)
2. Mumbida Wind Farm Offtake Agreement (OA) (Sect. 2.14 of “project Bible”)
3. Power Purchase Agreement (PPA)
4. Project Reload - Final Financial Model
5. Mumbida Wind Farm Operation Handbook, Version A & D (OM)
6. Mumbida Wind Farm Operations and Maintenance Manual, GE (OMM)
7. Operations and Maintenance Agreement
8. Environmental Management Plan
9. Service Management Plan_MWF FSA 1.3
10. Mumbida Wind Services Simplified Work Plan (SWP)
11. 2013 Aisa Wind GPS Organisation Chart
12. Risk Management Framework (MWF-P-0138)
13. 110922 MWF Risk Register
14. Key Dates 2014
15. Key Parameter Summary
16. Site Trends Mumbida January 2014
17. Monthly Report To Customer January 2014; June 2013
18. Water Corporation Monthly Operations Report, November 2013
19. Market Operating Protocol between MWF and System Management, Version 2
20. Amendment to Electricity Transfer Access Contract, Agreement Number 954
21. IMO Trading Strategy
22. Meter Multiplier Report
23. Performance Jan 2014
24. Plant Efficiency Jan 2014
25. Performance Wk9 [23.02 - 02.03.2014]; 2 June 2013; 1 July 2013
26. Weekly Report, Week 9, Sunday the 23rd of February 2014 to Sunday the 2nd of March 2014; Week 22, Sunday 26th of May to Sunday 2nd of June 2013
27. Plant Efficiency Wk9 23.02 - 02.03.2014; 2 June 2013; 1 July 2013
28. January 2014 (Production and Availability of the Mumbida Wind Farm from May 2013)
29. Operational Data 2 June 2013
30. Rug calculation Spreadsheet

31. Metmast data May and June 2013 Mumbida
32. June Parts tracking
33. Project Reload - Final Financial Model
34. 20140204 Mumbida Cashflow Forecast HW Updated
35. Mumbida Wind Farm Holdings Pty Ltd Group Consolidated Management Accounts December 2013
36. Offtaker reporting and invoice
37. Operation & Maintenance Agreement, Mumbida Wind Farm Pty Ltd General Electric
38. Engineering, procurement, and construction contract for Mumbida wind farm project
39. Energy Control Program Inspection Report Form
40. Lockout / Tag-out Work Instruction
41. SRAs (JSAs)
42. Mumbida Integrated Single Line Diagram