
ABN 20 009 454 111

# Review Report

# Western Energy Electricity Licence Performance Audit and Asset Management System Review

**December 2012**


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# Executive Summary

Western Energy PL holds an electricity generation licence (EGL19) issued by the Economic Regulation Authority (the Authority) under Sections 7 and 15(2) of the Electricity Industry Act 2004 (WA) (the Act). The licence enables Western Energy to construct and operate electricity generation facilities in accordance with the licence conditions.

Sections 13 and 14 of the Act requires Western Energy 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 September 2012 Western Energy commissioned Qualeng to carry out the performance audit of their licence compliance and the Asset Management System review for the period 15 September 2008 to 30 September 2012. 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

Western Energy supplies power through a 120 MW open cycle gas turbine power station located at Mason Road in Kwinana. The plant was initially operated by CTEC which had been contracted to provide the operation and maintenance services for the facility. Western Energy has now taken over those functions.

The power station consists of two 60 MW FT8 "Swiftpac" gas turbine generators supplied by Pratt and Whitney Power Systems (PWPS). Each Swiftpac includes two PWPS 30 MW aero derivative gas turbines driving a central 60 MW Brush generator. The facility also includes:

- a control building
- high voltage switchyard

- water treatment plant and storage tanks
- diesel fuel storage tanks and fuel receival, treatment and forwarding facility.

The power station is connected via a short transmission line to the Western Power grid.

## THE AUDIT

The audit was conducted through meetings at Western Energy's Perth head office, Kwinana Power Station site 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 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, responses and actions proposed by Western Energy. Although this plan does not form part of the report, it is included to complete the documentation.

## SUMMARY REVIEW OF THE PERFORMANCE AUDIT

On completion of the performance audit the auditor has formed the opinion that, during the period of 15 September 2008 to 30 September 2012 Western Energy's operation was in compliance with the licence conditions apart from minor observations including:

- maintenance of compliance with licence obligations requires improvement, actions are already in place to address this issue;
- formally exchange contact details with network operator.

## 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 "2.1 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) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SERVICE DELIVERY | | | | | | 1 | 2 | 3 | 4 | 5 | N/A | N/R |
| 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 | S | | | | | ✓ | | |
| Compliance | Cl.5 | 2 | C | Med | S | | | ✓ | | | | |
| 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

Western Energy has demonstrated to have an effective plan to manage the different aspects of the asset management systems and has shown that is committed to continuous improvement and regulatory compliance through its various improvement actions.

The review has found that Western Energy has recently introduced a new electronic asset management system which will allow better integration of accounting and operating systems. Further work is required in some of the areas of the asset management system, actions are already in progress in most of these areas:

- implement procedures for asset creation and acquisition and asset disposal;
- continue with the stability testing to enable full acceptance of plant performance;
- improve the management of compliance with licence obligations;
- update the maintenance policies to reflect the current approach;
- improve the failure tracking system;
- update the generation risk register;
- implement the new emergency response plan and contingency testing;
- update the capital expenditure plan and the related procedures.

Overall the review found that the licensee's attitude towards compliance was always constructive and cooperative. The review concluded that Western Energy asset management system was supported by comprehensive documentation and that there was an effective implementation of the system. Where gaps were identified there was commitment to review and improvement through corrective actions.

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 | **A** | **1** |
| 2. Asset creation/ acquisition | **B** | **2** |
| 3. Asset disposal | **B** | **2** |
| 4. Environmental analysis | **B** | **2** |
| 5. Asset operations | **B** | **2** |
| 6. Asset maintenance | **B** | **2** |
| 7. Asset management information system | **B** | **2** |
| 8. Risk management | **B** | **2** |
| 9. Contingency planning | **B** | **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 | • Processes and policies are documented.<br>• Processes and policies adequately document the required performance of the assets.<br>• Processes and policies are subject to regular reviews, and updated where necessary.<br>• The asset management information system(s) are adequate in relation to the assets that are being managed. |

| Rating | Description | Criteria |
|---|---|---|
| B | Requires some improvement | • Process and policy documentation requires improvement.<br>• Processes and policies do not adequately document the required performance of the assets.<br>• Reviews of processes and policies are not conducted regularly enough.<br>• The asset management information system(s) require minor improvements (taking into consideration the assets that are being managed). |
| C | Requires significant improvements | • Process and policy documentation is incomplete or requires significant improvement.<br>• Processes and policies do not document the required performance of the assets.<br>• Processes and policies are significantly out of date.<br>• The asset management information system(s) require significant improvements (taking into consideration the assets that are being managed). |
| D | Inadequate | • Processes and policies are not documented.<br>• 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 |
|---|---|---|
| 1 | Performing effectively | • The performance of the process meets or exceeds the required levels of performance.<br>• Process effectiveness is regularly assessed, and corrective action taken where necessary. |
| 2 | Opportunity for improvement | • The performance of the process requires some improvement to meet the required level.<br>• Process effectiveness reviews are not performed regularly enough.<br>• Process improvement opportunities are not actioned. |
| 3 | Corrective action required | • The performance of the process requires significant improvement to meet the required level.<br>• Process effectiveness reviews are performed irregularly, or not at all.<br>• Process improvement opportunities are not actioned. |
| 4 | Serious action required | • Process is not performed, or the performance is so poor that the process is considered to be ineffective. |

## POST AUDIT ACTION PLAN

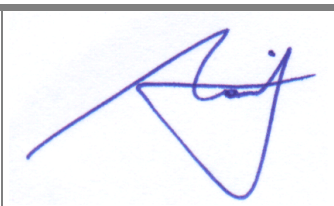
The audit has resulted, where applicable, in findings and recommendations that require corrective actions by the Licensee.

The recommendations have been listed in the Post audit Implementation Plan 2012. 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 | 18 December 2012 |

| Ref: | 36/9/7 | |
|---|---|---|
| **Issue Status** | | |
| **Issue No** | **Date** | **Description** |
| A | 14 December 2012 | Draft Issue |
| B | 18 December 2012 | Second draft issue |
| 1 | 1 March 2013 | Final Issue |

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# 1 OBJECTIVES AND SCOPE OF REVIEW

## 1.1 BACKGROUND

Western Energy supplies electricity to the West Australia's South West Interconnected System (SWIS) under the EGL019 electricity generation licence (the licence) granted by the Economic Regulation Authority (the Authority) on 15 September 2008 and amended on 29 January 2009 and on 13 January 2011.

The licence has been issued under Sections 7 and 15(2) 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.

Power is supplied through a 120 MW open cycle gas turbine power station located at Mason Road in Kwinana. The plant was initially operated by CTEC which had been contracted to provide the operation and maintenance services for the facility. Western Energy has now taken over those functions.

The power station consists of two 60 MW FT8 “Swiftpac” gas turbine generators supplied by Pratt and Whitney Power Systems (PWPS). Each Swiftpac includes two PWPS 30 MW aero derivative gas turbines driving a central 60 MW Brush generator. The facility also includes:

- a control building
- high voltage switchyard
- water treatment plant and storage tanks
- diesel fuel storage tanks and fuel receival, treatment and forwarding facility.

The power station is connected by a short transmission line to the Western Power grid.

Under sections 13 and 14 of the Act Western Energy's systems must be subject to independent reviews and audits at specified intervals to report the licensee compliance against the licence conditions. Qualeng has been engaged by Western Energy to conduct the performance audit and the asset management system review (the audit) for the period 15 September 2008 to 30 September 2012.

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;
- Completeness and accuracy of performance reporting to the Authority;
- 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 15 September 2008 to 30 September 2012. The audit was carried out between September and December 2012.

## 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

Key contacts for the audit were:

- Mr Patrick Peake, General Manager, Western Energy
- Mr James Heng, Asset Manager.

Other Western Energy representatives that participated in the audit meetings or were requested to clarify aspects of the licensee's operation are listed in Appendix C.

## 1.7 AUDITING TEAM

The auditing team members were:

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

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

| *Item* | *Resource* | *Description* | *Hours* |
|---|---|---|---|
| 1 | M Zammit | Project Director and Lead Auditor | 123 |
| 2 | S Campbell | Senior Engineer, Document Reviewer and Verifier | 10 |

## 1.8 KEY DOCUMENTS AND INFORMATION

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

## 1.9 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.

## 1.10 ABBREVIATIONS

| | |
|---|---|
| AMP | Asset Management Plan |
| AMIS | Asset Management Information System |
| AMS | Asset Management System |
| AS | Australian Standard |
| Authority | Economic Regulation Authority |
| CAPEX | Capital Expenditure |
| EC | Effectiveness Criteria |

| | |
|---|---|
| ETA | Estimated Time of Arrival |
| GT | Gas Turbine |
| HV | High voltage |
| ICMS | Integrated Control and Monitoring System |
| NAA | Network Access Agreement |
| NGER | National Greenhouse and Energy Reporting |
| O&M | Operation and Maintenance |
| OFI | Opportunity for Improvement |
| OPEX | Operating Expenditure |
| PAIP | Post Audit and Review Implementation Plan |
| WEPL | Western Energy P L |
| YTD | Year To Date |

# 2 KEY FINDINGS AND RECOMMENDATIONS

## 2.1 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 Western Energy'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.

## 2.2 PERFORMANCE AUDIT SUMMARY TABLE

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

Item 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**

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| L1 | Cl 2 | **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 licence boundaries which correspond to licence information. Licensee 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 licence boundaries which correspond to licence information. | 5 | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| | | EL-115 | | | |
| L3 | Cl 3 | **Term**<br>Licence commences on the commencement date (15 September 2008) and continues until the earlier of:<br>(a) the cancellation of the licence (clause 7)<br>(b) surrender of licence<br>(c) expiry (14 September 2038) | Licence has been maintained from commencement, there have been no changes in the term of the licence. | 5 | |
| 105 L4 | Cl 4 **Fees** | Electricity Industry Act section 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. | Initial licence granted on 15 September 2008. Initial invoice by Authority was number 086, dated 4 July 2008 and was paid on 11 July 2008.<br>Payment of fee noted for:<br>• 2012: Invoice issued by Authority 6 Sep 2012, approved for payment, paid 9 October 2012<br>• 2011, paid 30 September 2011<br>• 2010 paid 13 October 2011. | 5 | |
| | Cl 4.1 | The licensee must pay the applicable fees in accordance with the Regulations | | | |
| L5 | Cl.5 | **Compliance**:<br>The licensee must comply with all applicable legislation. | The licensee has prepared a compliance spreadsheet to manage obligations under applicable legislation.<br>▸ There has been one non-compliance which has been recorded under item 124 below and at the Asset Management System (AMS) Review, item 4.3. | 3 | Recommendation recorded under AMS Review, item 4.3. |
| 106 | Cl 5.1 | **Electricity Industry Act section 31(3)**<br>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. | There was evidence to show that the licensee has taken reasonable steps to minimise the extent and duration of interruptions and reductions in the supply of electricity by instituting:<br>• Service Agreement with CTEC for the operation and maintenance of the power station at agreed service | 5 | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| | | | levels;<br>• setting service level objectives and monitoring availability;<br>• establishing emergency response plans to manage emergencies;<br>• risk assessment at corporate level,<br>• reporting at corporate level through Quantate risk report of status of risks, controls and actions;<br>• generation risk assessment, however this is in need of review (reference item 8.1 in AMS Review);<br>• asset management system and inspection regime with daily inspection;<br>• safety systems. | | |
| 107 | Cl 5.1 | **Electricity Industry Act section 41(6)**<br>A licensee must pay the costs of taking an interest in land or an easement over land | The licensee rents the land from Landcorp and pays rent and taxes as required by Landcorp. There was sufficient documentation to show payment of fees, shire rates and taxes over the review period. | 5 | |
| L6 | Cl 6 | **Transfer of Licence**<br>This licence may be transferred only in accordance with the Act. | There have not been any transfers of the licence in the audit period. | NR | |
| L7 | Cl 7 | **Cancellation of Licence**<br>This licence may be cancelled only in accordance with the Act. | Not applicable (NA) in the audit period. | NR | |
| L8 | Cl 8 | **Surrender of Licence**<br>This licence may be surrendered only in accordance with the Act | NA in the audit period. | NR | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| | | [and as defined in the clause] | | | |
| L9 | Cl 9 | **Renewal of Licence**<br>This licence may be renewed only in accordance with the Act. | NA in the audit period. | NR | |
| L10 | Cl 10 | **Amendment of Licence on Application of the Licensee**<br>The licensee may apply to the Authority to amend the licence in accordance with the Act. | NA in the audit period. | NR | |
| L11 | Cl 11 | **Amendment of Licence by the Authority**<br>the Authority may amend the licence at any time in accordance with this clause. | There were two licence amendments in the audit period: .<br>• 29 January 2009, and<br>• 13 January 2011. | NR | |
| L12 See item 119 | Cl 12 | **Accounting Records**<br>See item 119 below | See item 119. | NR | |
| 119 | Cl 12.1 | **Accounting records:**<br>Electricity Industry Act section 11<br>The licensee must maintain accounting records that comply with the Australian Accounting Standards Board Standards or equivalent International Accounting Standards. | The licensee has maintained accounting records which, on the basis of evidence of independent auditing firm KPMG complies with Australian Accounting Standards.<br>The licensee has produced special purpose financial reports (viewed "Special Purpose Financial Report 31 March 2011") which have been prepared in accordance with the Corporations Act 2001 and the recognition, measurement and classification aspects of all applicable Australian Accounting Standards.<br>Accounting records provided by the licensee have been audited by KPMG who have noted that the financial report presents fairly, in all material respects, the financial position of Western Energy in respect of the standards | 5 | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| | | | noted above. | | |
| 120 | Cl 13<br>Cl 13.4 | **Individual Performance Standards**<br>Electricity Industry Act section 11<br>A licensee must comply with any individual performance standards prescribed by the Authority. | NA in the audit period. | NA | |
| L14 | Cl 14 | **Performance Audit**<br>see items 101, 121 below. | - | NR | |
| 101 | Cl14.1 | **Electricity Industry Act section 13(1)**<br>A licensee must, not less than once every 24 months, provide the Authority with a performance audit conducted by an independent expert acceptable to the Authority.<br>Cl 14.1<br>The licensee must, unless otherwise notified in writing by the Authority, provide the Authority with an performance audit within 24 months after the commencement date, and every 24 months thereafter. | Licence was granted on 15 September 2008. The due date for the first performance audit and asset management system review was 15 September 2010, however the period for the report issue was extended by the Authority by 24 months to 31 December 2012, as per the Authority's letter of 15 September 2010. | NR | |
| 121 | Cl 14.2 | **Electricity Industry Act section 11**<br>A licensee must comply, and require its auditor to comply, with the Authority's standard audit guidelines dealing with the performance audit. | Licensee has requested the auditor to comply with the Authority's standard audit guidelines dealing with the performance audit. The auditor proposal and plan include statement of intent to comply with the Authority's standard audit guidelines. | 5 | |
| L15 | Cl 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 | |
| L16 | Cl 14.4 | The independent auditor must be approved by the | The independent auditor was approved by the Authority on | 5 | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| | | Authority prior to the audit. | 13 September 2012. | | |
| 123 | Cl 15 | **Reporting a Change in Circumstances**<br>Electricity Industry Act section 11<br>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. | See item 103 below. | NR | |
| L17 | Cl 15.1 | The licensee must report to the Authority:<br>(a) if the licensee is under external administration<br>(b) if the licensee experiences a change in the licensee's corporate, financial or technical circumstances upon which this licence was granted which may affect the licensee's ability to meet its obligations under this licence within 10 business days of the change occurring or<br>(c) if the:(i-iii) licensee's name; licensee's ABN; licensee's address;<br>(iv) description of the generating works; or<br>(v) nameplate capacity of the generating works,<br>change, within 10 business days of the change occurring. | NA in the audit period. | NR | |
| 124 | Cl 16<br>Cl 16.1 | **Provision of information**<br>Electricity Industry Act section 11<br>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. | ▸ The licensee has provided the information required by the Authority in the manner prescribed however there has been one non-compliance relating to the submission of a compliance report two weeks after the required date for the period 1 July 2011 to 30 June 2012. The non-compliance has been noted under item 4.3 of the Asset Management System Review and | 3 | Recommendation recorded in AMS Review, under item 4.3. |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| | | | recommendations have been noted in that section. | | |
| 125 | CL 17<br>Cl 17.1 | **Publishing information**<br>Electricity Industry Act section 11<br>A licensee must publish any information it is directed by the Authority to publish, within the timeframes specified. | There has been no direction from the Authority to publish information in connection with its functions under the Electricity Industry Act during the audit period. | NR | |
| 126 | Cl 18<br>Cl 18.1 | **Notices**<br>Electricity Industry Act section 11<br>Unless otherwise specified, all notices must be in writing. | Notices viewed were in writing. | 5 | |
| L19 | Cl 19<br>Cl 19.1 | **Review of the Authority's decisions**<br>The licensee may seek a review of a reviewable decision by the Authority pursuant to this licence. | NA in the audit period. | NR | |
| L20 | Cl 20 | **Asset Management System** | | - | |
| 102 | Cl 20.1 | **Electricity Industry Act section 14(1)(a)**<br>A licensee must provide for an asset management system.<br>Cl 20.1<br>The licensee must provide for an asset management system in respect of the licensee's assets. | The licensee has implemented an asset management system (AMS). Evidence of compliance is reviewed in section 2.3 of the report. | 5 | |
| 103 | | **Electricity Industry Act section 14(1)(b)**<br>A licensee must notify details of the asset management system and any substantial changes to it to the Authority. | Notification of the details of the asset management system were provided to the Authority on 10 September 2010 following the completion of construction of the generating works on 8 September 2010, and accepted by the Authority on 15 September 2010. | 5 | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| L21 | Cl 20.2 | The licensee must notify the Authority of the details of the asset management system within 5 business days from the later of:<br>(a) the commencement date; and<br>(b) the completion of construction of the generating works. | | | |
| L22 | Cl 20.3 | The licensee must notify the Authority of any substantial change to the asset management system within 10 business days of such change | The licensee has provided notification to the Authority of changes to the AMS.<br>Advice of change to the AMS was provided to the Authority on 5 September 2012 with the transition of the AMS electronic system from MEX to the asset management module of the TechnologyOne software package. | 5 | |
| 104 | Cl 20.4 | **Electricity Industry Act section 14(1)(c)**<br>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. | A report by an independent expert on the effectiveness of WEPL's AMS has been commissioned. The period for the report issue had been extended by the Authority by 24 months to 31 December 2012, as per the Authority's letter of 15 September 2010. | 5 | |
| 122 | Cl 20.5 | **Electricity Industry Act section 11**<br>A licensee must comply, and must require the licensee's expert to comply, with the relevant aspects of the Authority's standard guidelines dealing with the asset management system. | The auditor appointed by the licensee has been required to comply with the Authority's standard guidelines dealing with the AMS, as documented in the Audit Plan. | 5 | |
| L23 | Cl 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 | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| L24 | Cl 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 13 September 2012). | 5 | |
| 349 | Cl 5.1 | **Electricity Industry Metering Code clause 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. | The Code participant was not aware of any malfunctions or outages of the metering installation during the audit period. | 5 | |
| 361 | Cl 5.1 | **Electricity Industry Metering Code clause 3.16(5)** A network operator or a user may require the other to negotiate and enter into a written service level agreement in respect of the matters in the metrology procedure dealt with under clause 3.16(4) of the Code. | An Interconnection Works Contract and an Electricity Transfer Access Contract were signed off on 1 August 2008 defining the connection and the electricity transfer arrangement between the license and the network operator. | - | |
| 372 | Cl 5.1 | **Electricity Industry Metering Code clause 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 network operator has installed the metering installation. | 5 | |
| 379 | Cl 5.1 | **Electricity Industry Metering Code clause 4.4(1)** A network operator and affected Code participants must liaise together to determine the most appropriate way to resolve a discrepancy between energy data held in a metering installation and data held in the metering database. | There have been no discrepancies in the audit period. | NR | |
| 380 | Cl 5.1 | **Electricity Industry Metering Code clause 4.5(1)** A Code participant must not knowingly permit the registry to be materially inaccurate. | The Licensee did not encounter any instances where the registry was noted to be materially inaccurate in terms of energy and standing data during the audit period. | 5 | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| 381 | Cl 5.1 | **Electricity Industry Metering Code clause 4.5(2)** If a Code participant (other than a network operator) becomes aware of a change to or an inaccuracy in an item of standing data in the registry, then it must notify the network operator and provide details of the change or inaccuracy within the timeframes prescribed. | NA in the audit period. | NR | |
| 393 | Cl 5.1 | **Electricity Industry Metering Code clause 5.4(2)** A user must, when reasonably requested by a network operator, use reasonable endeavours to assist the network operator to comply with the network operator's obligation. | Network operator has access both to site, to metering installation and to switchyard independently of WEPL.<br>No applicable requests were received by the licensee from the network operator in the audit period. | NR | |
| 395 | Cl 5.1 | **Electricity Industry Metering Code clause 5.5(3)** A user must not impose any charge for the provision of the data under this Code unless it is permitted to do so under another enactment. | No charge was imposed in the audit period. | 5 | |
| 406 | Cl 5.1 | **Electricity Industry Metering Code clause 5.16** A user that collects or receives energy data from a metering installation must provide the network operator with the energy data (in accordance with the communication rules) within the timeframes prescribed. | NA, the network operator collects the information. | NR | |
| 407 | Cl 5.1 | **Electricity Industry Metering Code clause 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. | NA, the network operator provides all the required meter data to the user's customer (IMO). | NR | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| 408 | Cl 5.1 | **Electricity Industry Metering Code clause 5.18** A user that collects or receives information regarding a change in the energisation status of a metering point must provide the network operator with the prescribed information, including the stated attributes, within the timeframes prescribed. | NA. The network operator has access and controls the metering installation. | NR | |
| 409 | Cl 5.1 | **Electricity Industry Metering Code clause 5.19(1)** A user must, when requested by the network operator acting in accordance with good electricity industry practice, use reasonable endeavours to collect information from customers, if any, that assists the network operator in meeting its obligations described in the Code and elsewhere. | NA. There have been no requests by the network operator during the audit period. | NR | |
| 410 | Cl 5.1 | **Electricity Industry Metering Code clause 5.19(2)** A user must, to the extent that it is able, collect and maintain a record of the address, site and customer attributes, prescribed in relation to the site of each connection point, with which the user is associated. | NA. The connection point is with the network operator | NR | |
| 411 | Cl 5.1 | **Electricity Industry Metering Code clause 5.19(3)** A user must, after becoming aware of any change in a site's prescribed attributes, notify the network operator of the change within the timeframes prescribed. | NA. There have been no changes to the site's prescribed attributes. Not applicable in the audit period. | NR | |
| 412 | Cl 5.1 | **Electricity Industry Metering Code clause 5.19(4)** A user that becomes aware that there is a sensitive load at a customer's site must immediately notify the network operator's Network Operations Control Centre of the fact. | NA to the licensee during the audit period. | NA | |
| 413 | Cl 5,.1 | **Electricity Industry Metering Code clause 5.19(5)** A network operator must give notice to a user, or (if there is a different current user) the current user, acknowledging receipt of any customer, site or | A number of formal agreements are in place between the user and the network operator which detail the site attributes: | 4 | 1. Formally provide customer, site and address attributes to the network operator and request a formal acknowledgement which needs to be retained as a compliance record. |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| | | address attributes from the user within the timeframes prescribed. | • the Interconnection Works Contract;<br>• the Electricity Transfer Access Contract, signed off on 1 August 2008.<br>The user has had constant communication and meetings with the network operator. The network operator also has accessed the site by request to the user. During the site audit the network operator representative visited the site and accessed the metering facilities.<br>▸ No formal record was available at the user, during the audit, of official acknowledgement by the network operator of receipt of customer, site and address attributes. | | |
| 414 | Cl 5.1 | **Electricity Industry Metering Code clause 5.19(6)** A user must use reasonable endeavours to ensure that it does not notify the network operator of a change in an attribute that results from the provision of standing data by the network operator to the user. | NA during the audit period. | NR | |
| 420 | Cl 5.1 | **Electricity Industry Metering Code clause 5.21(5)** A Code participant must not request a test or audit unless the Code participant is a user and the test or audit relates to a time or times at which the user was the current user or the Code participant is the IMO. | NA during the audit period. | NR | |
| 421 | Cl 5.1 | **Electricity Industry Metering Code clause 5.21(6)** A Code participant must not make a test or audit request that is inconsistent with any access arrangement or agreement. | NA during the audit period. | NR | |
| 439 | Cl 5.1 | **Electricity Industry Metering Code clause 5.27** Upon request, a current user must provide the network operator with customer attribute information that it reasonably believes are missing or incorrect within the timeframes prescribed. | NA to the licensee's business operation. | NA | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| 446 | Cl 5.1 | **Electricity Industry Metering Code clause 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. | Except as noted elsewhere in this report, there have been no breaches of the rules, procedures, agreements and criteria in the audit period.<br>The licensee is using a spreadsheet to monitor compliance. There have been meetings with the network operator to set the operation protocol including meetings on the black start protocol. A set of procedures, the Asset Operations Procedure, has been prepared to document the protocol. Procedures are still in draft as the network operator is introducing a new remote operation facility which will be used by the licensee. | 3 | |
| 448 | Cl 5.1 | **Electricity Industry Metering Code clause 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. | ▸ Whilst there was evidence of communication between the code participant and the network operator, there was no formal record of notification of contacts between the network operator and code participant. | 3 | **2.** Arrange formal notification to the network operator of a telephone number for voice communication in connection with the code. [Action responding to this recommendation was completed on 18 December 2012]<br>**3.** Contact information of both the network operator and the code participant should be included in a joint communication protocol. The communication protocol should include:<br>**3.1.** the customer, site or address attributes<br>**3.2.** contact details for both the network operator and the code participant,<br>**3.3.** reference to communication responsibilities of both the network operator and the code participant<br>**3.4.** requirements for maintaining the currency of those details and<br>**3.5.** for the notification of changes of contact details to the other party. |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| 449 | Cl 5.1 | **Electricity Industry Metering Code clause 7.2(2)** A network operator must notify each Code participant of its initial contact details and of any change to its contact details at least 3 business days before the change takes effect. | ▸ Whilst there was evidence of communication between the code participant and the network operator, there was no formal record of notification of contacts between the network operator and code participant. | 3 | Recommendation as at item 448. |
| 450 | Cl 5.1 | **Electricity Industry Metering Code clause 7.2(4)** A Code participant must notify its contact details to a network operator with whom it has entered into an access contract within 3 business days after the network operator's request. | There was no request by the network operator of code participant contact details. | NR | |
| 451 | Cl 5.1 | **Electricity Industry Metering Code clause 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 at least 3 business days before the change takes effect | There was no evidence to show that there had been a change in the code participant contact details during the audit period.<br>▸ Whilst there was evidence of communication between the code participant and the network operator, there was no formal record of notification of contacts between the network operator and code participant and of a documented process for maintaining the currency of the details. | NR | Recommendation as at item 448. |
| 452 | Cl 5.1 | **Electricity Industry Metering Code clause 7.5** A Code participant must not disclose, or permit the disclosure of, confidential information provided to it under or in connection with the Code and may only use or reproduce confidential information for the purpose for which it was disclosed or another purpose contemplated by the Code. | There was no evidence that there have been breaches of confidentiality during the audit period.<br>The Operations and Maintenance Agreement between the Operation and Maintenance Service Provider, CTEC, and the licensee required the parties not to disclose "any Confidential Information". Confidentiality clauses exist in the licensee's staff employment contracts. | 5 | |
| 453 | Cl 5.1 | **Electricity Industry Metering Code clause 7.6(1)** A Code participant must disclose or permit the disclosure of confidential information that is required to be disclosed by the Code. | Confidential information is disclosed by the licensee on as required basis. | 5 | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| 454 | Cl 5.1 | **Electricity Industry Metering Code clause 8.1(1)** Representatives of disputing parties must meet within 5 business days after a notice given by a disputing party to the other disputing parties and attempt to resolve the dispute under or in connection with the Electricity Industry Metering Code by negotiations in good faith. | NA in the audit period. | NR | |
| 455 | Cl 5.1 | **Electricity Industry Metering Code clause 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. | NA in the audit period. | NR | |
| 456 | Cl 5.1 | **Electricity Industry Metering Code clause 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. | NA in the audit period. | NR | |
| 457 | Cl 5.1 | **Electricity Industry Metering Code clause 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. | NA in the audit period. | NR | |
| 458 | Cl 5.1 | Electricity Industry Metering Code clause 8.3(2) The disputing parties must at all times conduct themselves in a manner which is directed towards achieving the objective of dispute resolution with as little formality and technicality and with as much | NA in the audit period. | NR | |

| Item | Lic ref | Licence Conditions | Findings | Compliance* 5,4,3=Y 1,2=N | Recommendations |
|---|---|---|---|---|---|
| | | expedition as the requirements of Part 8 of the Code and a proper hearing and determination of the dispute permit. | | | |

## 2.3 ASSET MANAGEMENT REVIEW SUMMARY TABLE

Key findings and recommendations arising from the Asset Management System Review are listed in the following table.

### LEGEND

| Key | Description |
|---|---|
| ▸ | Finding |
| 1. Text | Recommendations |
| [**OFI**] | Opportunity for Improvement |

**Table 7 Asset Management System Review**

| 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 | The planning process is comprehensive as it relies on consultation with stakeholders, preliminary studies, business plan approval when substantial fund commitment is required, documented progress review at meetings, final approval and is aligned with business planning.<br>▸ At present the process has been documented in a draft procedure on asset acquisition/creation. Whilst a paper trail exists this procedure will need to be fully implemented. A recommendation has been noted at item 11.2 below.<br>An asset management plan (AMP) was prepared in 2010 to document Western | Recommendation recorded under item 11.2, recommendation 15. |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
|---|---|---|---|---|
| | | | Energy's (WEPL) objectives, policies and strategies. The AMP objectives are consistent with meeting stakeholders' requirements.<br><br>Business planning is developed/monitored/followed up through management meetings and reports. There is indication of a process through reference in current documentation. The process is described in the "Solution Design Detail Document - Asset Management (TechnologyOne)" (SDDD).<br><br>"Generation Project Status" reports show that creation of new assets will require preparation of business cases, business model and applicable feasibility studies. | |
| 1.2 | Service levels are defined. | A1 | The document "Kwinana Swift Power Station - Operating Philosophy" outlines:<br>• the main objectives of the operation, including:<br>  ◦ power station availability (98.5%);<br>  ◦ minimisation of refunds to IMO (arising from unscheduled outages);<br>  ◦ high starting reliability (98%);<br>  ◦ capability to operate to full certified capacity;<br>  ◦ full compliance with operating IMO requirements, including ability to operate 14 hours/day, five days a week in summer;<br>  ◦ compliance with environmental requirements, including noise and emissions;<br>• operational regime;<br>• control.<br><br>The objectives and service levels are further expanded in the AMP. Asset operation has to meet the Network Operator Technical Rules and market rules and procedures set out by the Independent Market Operator (IMO). | |
| 1.3 | Non-asset options (e.g. demand management) are considered. | NR | Not applicable to this operation. The operation relies on supplying maximum power at commercially viable rates or dispatches power on demand from the customer (IMO). The assets are geared to supply as much power as the customer demands within the plant capacity, therefore there is no demand management as such. | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
|---|---|---|---|---|
| 1.4 | Lifecycle costs of owning and operating assets are assessed. (also at 2.2) | A1 | Asset costs and revenue have been calculated for the period 2010 to 2040.<br>Viewed supporting documents:<br>• the "Bank Model K1 V32 Oct update use for Sept12 Qtr Rpt KL"<br>• September 2012 Quarterly Report;<br>• Forecast Update (October 2012) for the period to September 2012; this report covers both the Perth Energy Group of companies and Western Energy.<br>The above documents showed reporting and review of asset costs. | |
| 1.5 | Funding options are evaluated. | A1 | Sources of funding have been reviewed during the review period and evaluation of funding options is part of regular reporting.<br>Evidence was provided by reports such as the "Forecast Update (October 2012)" for the period to September 2012. | |
| 1.6 | Costs are justified and cost drivers identified. | A1 | Cost drivers are identified in regular reports and are subject to review:<br>Monthly Operating Reports, (e.g. "Monthly Operating Report September 2012") indicate that the main cost drivers are operating and maintenance, unscheduled repairs and debt financing. | |
| 1.7 | Likelihood and consequences of asset failure are predicted. | A1 | Asset failure modes were analysed in a Generation Risk Register (2010) including likelihood and consequences of failure and actions required to mitigate the risks.<br>Quantate Risk Reports review the status of risks and actions across the Perth Energy Group. The top WEPL asset risks are individually identified in the report. | |
| 1.8 | Plans are regularly reviewed and updated. | B2 | There is a continuous review of plans through formal review, meetings and regular reports.<br>• The AMP was issued in September 2010 and last reviewed in June 2011.<br>• "Generation project status" meetings are held every week, attended by the General Manager Western Energy, the asset manager, the manager finance and key operation personnel. The meetings result in the updated status of asset management system activities which are recorded on a series of spreadsheets.<br>• An operation and maintenance meeting is held weekly with operation site personnel. | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (▸ Findings) | Recommendations |
|---|---|---|---|---|
| | | | ▸ The AMP review is now due (AMP is due to be reviewed yearly). The AMP requires further updating, for example it still refers to the MEX Work Management System, however this system has been retired and replaced by the TechOne asset management system. | 1. [OFI] The AMP needs to be reviewed and brought up to date (AMP is due to be reviewed yearly). |
| | | | ▸ In places the documentation supporting the system is fragmented. An initiative is in place to introduce a new document management system which will assist in bringing together and consolidating the asset management system (AMS) documentation. | 2. Continue with the implementation of a document management system. Documentation should preferably be collected in a single area that is easily identifiable and accessible by all staff. |
| **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. | C2 | There has been replacement of some assets due to failure however, while the possibility of acquiring or creating new assets has been considered there has been no actual commitment to the creation or acquisition of new assets.<br>"Generation Project Status" reports show that creation of new assets will require preparation of business cases, business model and applicable feasibility studies. | |
| 2.2 | Evaluations include all life-cycle costs. | A1 | Life cycle costs have been identified for the plant (e.g. "Bank Model K1 V32 Oct update use for Sept12 Qtr Rpt KL") however to date there has not been a requirement for creating or acquiring new assets. | |
| 2.3 | Projects reflect sound engineering and business decisions. | B2 | The process used in the initiation and implementation of projects follows these steps:<br>• project identified<br>• scope defined<br>• cost estimated<br>• business case prepared and approved by CEO and board as appropriate, leading to project start.<br>The Solution Design Detail Document - Asset Management (TechnologyOne) | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
|---|---|---|---|---|
| | | | (SDDD) provides an outline of the process. The process appears to be sound however there were no instances of use at this point. | |
| 2.4 | Commissioning tests are documented and completed. | B2 | Commissioning tests records are available and indicate that tests have been completed and results documented.<br>Viewed "Western Energy Kwinana OCGT Power Station Interconnection - Technical Compliance Final Report, August 2010" detailing the compliance of commissioning test results with both specifications and WP's Technical Rules.<br>‣ A non-compliance was identified in the review of the commissioning results. The non-compliance was in regard to the Technical Rules, Cl 3.2.5.4 (c) and (e) [now 3.3.4.5 (a) (3)]: not complying with "maintaining adequate generating unit stability under all operating conditions". It was noted that the "Testing data showed poor damping (less than the required 0.5), the user proceeding to fine-tuning the unit to improve damping towards compliance". The Network Operator [System Management] has been involved in the resolution which has been documented in the "Generation Project Status" reports. Further tests will be required in view of some of the manufacturer incorrect inertia calculations. Tests should take place in early 2013. There was a submission for an exemption on 15 June 2011; Western Power has indicated that it will be favourable to an exemption after completion of the tests which are due to confirm the final generator parameters. | **3.** Continue with the performance of new tests leading to acceptance of the stability condition found during commissioning. |
| 2.5 | Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood. | B2 | There is a process for managing the legal/environmental/safety compliance of the asset operation and responsibilities for compliance have been assigned.<br>Generally compliance with the above obligations has been well managed, however there has been a non-compliance against a licence obligation which has been noted under item 4.3, "Compliance with statutory and regulatory requirements". The non-compliance is the responsibility of the General Manager of Western Energy.<br>A number of documents support compliance:<br>• Operation Environmental Management Plan shows all tests required for the annual compliance.<br>• Insurance Test Plan to meet insurance obligation.<br>• List of minor works planned for implementation, scheduled by quarter together with expenditure. Progress updated as required. | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
|---|---|---|---|---|
| | | | • A list of legal compliance is available to maintain compliance with legal obligations and responsibilities are well defined. It will be beneficial to review the list and adapt it to give practical assistance in managing compliance.<br>• Environmental Licence compliance is effected through regular emission tests which are documented in reports.<br>• There are procedures and evidence of implementation at the power station site for compliance with safety obligations. | |
| **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 | Continuous monitoring and review meetings identify poorly performing assets.<br>There is a continuous and regular review of asset performance through:<br>• daily and scheduled site asset inspections<br>• regular asset tests<br>• review meetings<br>• reporting.<br>Daily inspections and monthly tests enable highlighting of inadequate performance.<br>All communications on asset issues and records are captured in separate e-mail directories.<br>Lists of actions by major assets, both minor and general, are tracked in the Generation Project Status Report. | |
| 3.2 | The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken. | B2 | There is continuous follow up of plant poor performance or malfunction, usually initiated from site inspections. There is no formal documented procedure, however there is a significant document trail on failure identification and investigation.<br>Major failures, such as suspected blown seal on GT200A and GT100B which have resulted in forced outages are reported monthly in Generation Project Status reports and are supported by both internal investigations and external consultant reports.<br>‣ Data for forced outages is captured for every outage together with trips, however whilst recorded by frequency monthly on "Monthly Operating Report", it is not | 4. **[OFI]**: Consider the introduction of charting of some of the critical operational parameters to enable trending analysis.<br>5. **[OFI]**: Consider reporting of performance by generating unit within the Generation group. |

| No. | Asset Management System Element / Criteria | Rating | Review summary (▸ Findings) | Recommendations |
|---|---|---|---|---|
| | | | logged with causes, dates, actions, responsibilities etc in a register. There is no evident analysis of trends. At this early stage of the plant operation this may not provide clear results however charting of trends will assist in the long term.<br>▸ "Monthly Operations Summaries for the Board 2012-13" calculates all the data that is then reported in the Monthly Reports, using data reported by the site. Main data is not reported by unit but by the overall facility. There may be a benefit to check trends, within the Generation Group, by generating unit. | |
| 3.3 | Disposal alternatives are evaluated. | B2 | At this stage of the operation there has been a negligible requirement for disposal of assets.<br>Minor plant failures have resulted in replacement of parts or equipment which have then been retained for spare parts recovery. | |
| 3.4 | There is a replacement strategy for assets. | B2 | The assets have been designed to run for 25 years and at present there is no replacement option. | |
| **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. | A1 | Opportunities and threats in the system environment are assessed through monthly and annual meetings and through risk analysis and the risk committee meetings.<br>"Quantate Risk Report: Perth Energy (including WE) (as at 15 Oct 2012)" reported on corporate risks, for the period ending 30 September 2012. The risks are reviewed monthly by the risk owners.<br>The range of risks in consideration includes:<br>• impact of carbon tax<br>• reduction in payments received via MRCP<br>• curtailment of fuel supplies.<br>Performance is monitored through site reports, monthly operations reports and the plant operation is adjusted to suit changing conditions and planned improvements in operation.<br>There have been changes in operation due to external factors which are in progress: | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
|---|---|---|---|---|
| | | | • Western Power System Management (East Perth Control Centre - EPCC) was initially tasked with the day to day dispatch (remote operation) of the power station for providing power to the grid. (E-mail 21 June 2012 "Operations and Maintenance Agreement with CTEC 2012 June 21 - Draft Response to Frank Safi"). This changed in July 2011 due to changes to the IMO Market Rules with Western Power System Management reviewing its operation and transferring the remote operation of the power station to Western Energy;<br>• CTEC were contracted to provide the operation and maintenance services for the power station on a two year initial period; Western Energy has identified an opportunity for improvement and has now taken over the O&M of the power station and increased its resources to perform the new functions. | |
| 4.2 | Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved. | B2 | Performance is measured and reported:<br>• from site in monthly "Operations Records" (e.g. Operation Record 2012 September) which lists the plant main performance figures such as starts, MWh exported and imported, fuel used;<br>• on Monthly Operation Report Summaries for the Board (reporting on annual performance).<br>The performance is also reported and reviewed in the "Bank Model K1 V32 Oct update use for Sept12 Qtr Rpt KL - Sheet K1".<br><br>Not all performance standards were achieved. A number of indicators were below target:<br>• Availability in April and May 2012 were 68.6 and 79.9% respectively, much lower than target. Reasons for low performance was the failure of GT2 (GT200A), followed up by the failure of GT1 (GT100B) likely due to a seal failure. The failures are currently under investigation. | |
| 4.3 | Compliance with statutory and regulatory requirements. | B3 | Compliance with statutory and regulatory requirements is maintained through compliance spreadsheet, allocation of responsibilities, task entry into the work management system, regular meetings and reviews.<br>Compliance has been addressed in two high risk identifiers, as risk number 10, "breach of regulatory requirements" and risk number 36, "generation licence | **6.** Continue with the implementation of corrective actions to address the non-compliance against licence obligations. |

| No. | Asset Management System Element / Criteria | Rating | Review summary (▸ Findings) | Recommendations |
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| | | | regulation non-compliance". Controls include:<br>• regular audits<br>• documented business process manual<br>• sound asset management system<br>• tracking reports.<br>▸ Noted a non-compliance against licence obligation no. 124, Cl 16.1 of EGL19, letter to the Authority of 5 September 2012: "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: compliance report was submitted two weeks after the required date." for the period 1 July 2011 to 30 June 2012.<br>The non-compliance has been addressed by taking the following actions:<br>• adding reminders to calendars to prompt actions required for the compliance and operation of the licence;<br>• to introduce a document management system which will control documentation and issue of documentation required by the licence;<br>• to upload tasks required for compliance to the new asset management system, TechOne.<br>Actions are still in progress, funds have been allocated for the implementation of the document management system and progress is being followed up in the Generation Project Status monthly reports. | |
| 4.4 | Achievement of customer service levels.<br>• Review achievement of service standards over the audit period | B2 | Due to the low demand and level of operation the station has been operated mainly for short operational period or in compliance tests, either for emission or for market rules compliance. In each case the power station has complied with its service levels.<br>In regard to its operational performance the facility has to meet IMO requirements for starting up, ramp up to power and meeting the production plan which has been agreed. Breaches of these criteria result in the IMO imposing fines. | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (▸ Findings) | Recommendations |
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| **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. | B1 | Operational policies and many operational procedures are documented however some procedures are still missing and additional work is required to integrate the documents in a consolidated system.<br>The operational regime is aimed at the supply of all the productive hours committed in the Resource Plans submitted to the IMO and at meeting all compliance testing.<br>A suite of procedures, the "Asset Operations Procedure", was completed in September 2012 and includes procedures on the operation of the dispatch regime, remote dispatch, management of outages, testing for reserve capacity, environmental and commissioning, grid restart services, risk mitigation and response procedures, asset management, reporting of costs and training.<br>▸ Some of the operational procedures are not available including an asset disposal procedure. | **7.** Continue with the preparation of operation procedures including an asset disposal procedure. |
| 5.2 | Risk management is applied to prioritise operations tasks. | B2 | Risk management is addressed in the AMP and in the Asset Operations Procedure and has resulted in the identification of risk mitigation actions which are applied in the operation of the assets. | |
| 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 | Western Energy has asset registers that record the details of the assets, including accounting data and data on asset maintenance and inspection.<br>Two asset registers exist:<br>• a fixed asset register (financial);<br>• an operating asset register in Perth Energy's "Power Plant asset system"<br>The operating asset register is based on the power plant systems, with each system broken down into sub-systems etc.<br>Western Energy Fixed Assets are registered in TechOne. Reports can be generated:<br>• viewed "WE Fixed Assets Tech1 Report at Sept12" which lists current asset cost and current depreciation;<br>▸ viewed spare parts register by CTEC; noted that some of the parts still show ETA 13 October and 19 December 2010, “Spare Parts Register” (CTEC) needs to be | **8.** Update the Spare Parts Register (CTEC). |

| No. | Asset Management System Element / Criteria | Rating | Review summary (▸ Findings) | Recommendations |
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| | | | updated.<br>At present the fixed asset register and the operating asset register are not linked. The financial system asset hierarchy stops at a higher level than the operating register, with two hierarchical levels classification against four for the operating register. With the completion of the TechOne AMS there will be better integration of the two systems. | |
| 5.4 | Operational costs are measured and monitored. | A2 | The operational costs are entered and tracked through the AMS (TechOne) and the accounting system.<br>The new AMS records operational costs under a standing work order (SDDD, Project Financial Transaction Interaction, P45); cost reports are generated by the TechOne system. Costs are reported in Monthly Operating Reports.<br>Overall costs are reported in the "Bank Model K1 V32 Oct update use for Sept12 Qtr Rpt KL". The Model presents costing of asset from inception to end of life in 2040 and includes costs as reported by Operations.<br>Operations and Maintenance (O&M) Budget of the previous O&M Contractor (CTEC PL) were viewed. | |
| 5.5 | Staff receive training commensurate with their responsibilities. | B1 | There are policies for the training of staff and evidence of site training plans and induction processes. Several members of staff have been trained in the start, stop, control and monitoring of the generating facility. | |
| **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. | B2 | Maintenance policies had been initially set on the basis of a contractor providing the operation and maintenance services on site (CTEC), and on the basis of a more intensive production regime. However with the lighter plant operation the maintenance requirements have lessened and there has been a realisation that not all time scheduled maintenance is warranted. This at the moment has been left to the operating staff on site to manage, however there should be formal direction and a reflection in the operating and maintenance policies of the revised approach to maintenance. | **9.** [**OFI**] Document the current policy for plant maintenance. |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
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| | | | ‣ In practice the issue is that some of the maintenance is required on the basis of operation (number of running hours), other maintenance is "period" based, e.g. every three/six/12 months. Because of the low operating demand, periodic maintenance can be uneconomical and the decision on running the maintenance tasks is left with the site operator, who, on the basis of the inspections and assessment of plant condition determines the maintenance requirements. Whilst the maintenance is recorded in the asset management system and maintenance "model" schedules are available, there is no clear high level view of the programmed or actual maintenance over the year.<br><br>As far as plant maintenance procedures, a detailed suite of operating and maintenance manuals are available both in printed and electronic form.<br><br>Procedures identified in the asset management system:<br>• daily routine inspections, in accordance with monthly generated inspection worksheets;<br>• scheduled maintenance, as per monthly generated maintenance worksheets;<br>• unscheduled maintenance: corrective (inspection initiated to respond to faults or defects identified during inspections);<br>• unscheduled maintenance, reactive (breakdown);<br>• operating events management such as scheduled test runs;<br>• incident management, such as unscheduled trips;<br>• spare part management;<br>• ICMS performance data upload. | |
| 6.2 | Regular inspections are undertaken of asset performance and condition. | A1 | Inspections are performed daily, reading data from ICMS and equipment meters, around 120 records are read (SDDD). Data is recorded daily and reported in monthly reports to management.<br>Inspection schedules are identified in SDDD. | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (▸ Findings) | Recommendations |
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| 6.3 | Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule. | B2 | Maintenance schedules are identified in WEPL documentation (e.g. SDDD) and loaded into the asset management system (TechOne). Schedules sighted were all interval based, i.e. maintenance at monthly, quarterly and yearly intervals, no separate procedure was noted for maintenance at operational points (i.e. at 100, 1000 hours etc), this was provided in assets' Maintenance Manuals. Due to the low operating demand it has become evident that better value may be achieved by setting maintenance intervals to reflect both time intervals and running time. Therefore current maintenance is a mixture of condition based, period based and running time maintenance.<br>Previously operation and maintenance was carried out by a contractor and was time based. The Operation and Maintenance (O&M) Budget of the O&M Contractor (CTEC PL) included preventive, corrective and fixed maintenance.<br>The list of maintenance tasks entered into the AMS was viewed. The planned maintenance program is printed monthly in reports which list the jobs due for each month. Each job is entered as a work order and job data is entered into the system once the job is completed. | As per item 6.1, recommendation number 9, maintenance policies need to be updated to reflect new maintenance approach. |
| 6.4 | Failures are analysed and operational/maintenance plans adjusted where necessary. | B2 | Failures have been investigated and assessed and have resulted in corrective actions, where applicable corrective actions have resulted in changes to operation. A recording system for failures exists at present however it is in need of improvement and updating:<br>▸ The failure recording system needs minor improvement:<br>◦ to better track the details of each event, including identification of plant, causes, documentation, actions, dates<br>◦ to enable better reporting at operational meetings and<br>◦ provide an historical view of the asset performance.<br>This should include more transparent reporting of items such as failures to start or engine trips.<br><br>A number of failures have been encountered in the operation of the plant. Failures such as "Probable seal failure of GT200A (GT171)" in February-March 2012 and GT100B (GT169) in May-June 2012 have been investigated in three Pratt & Withney (PW) Reports, "PE Review of PW's Report on GT 169 and 171" plus in independent | **10.** [**OFI**] Consider the revision and updating of the failure recording system to better track the details of each event, including identification of plant, causes, documentation, actions, dates. This will enable better reporting at operational meetings and will provide an historical view of the asset performance. This should include more transparent reporting of items such as failures to start or engine trips. |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
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| | | | engineer report. Investigations are in progress. | |
| 6.5 | Risk management is applied to prioritise maintenance tasks. | A1 | There was documentary evidence and staff understanding of prioritisation of tasks on the basis of risk.<br>Maintenance tasks are covered by work orders which are classified by Priority Codes, going from:<br>• P1, for proposed outage, due in 3 years to 1 week; to<br>• P4, for maintenance due in less than 24 hours; and to<br>• P5, for unplanned outages. | |
| 6.6 | Maintenance costs are measured and monitored. | A2 | Maintenance costs are recorded through the asset management system and reported in Monthly Operating Reports.<br>Maintenance tasks entered in the asset management system record both hours expended and material costs. Monthly costs are reported against budget for the month and year to date in Monthly Operating Reports. Costs are then presented in the Bank Model quarterly report where actuals are compared to forecasts. | |
| **7** | **Asset Management Information system (MIS)** | | 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. | |
| 7.1 | Adequate system documentation for users and IT operators. | B2 | There is extensive documentation of systems and asset operation.<br>Reference lists such as the "Operational Readiness Index" (CTEC) and the "Documentation Index - Manuals" (CTEC) record the relevant documentation.<br>A new Asset Management System is being implemented, TechOne, replacing the previous Work Management System, MEX. MEX is still being kept for reference purposes however it is not used operationally. TechOne provides both an accounting system and an operational system. The SDDD outlines the aspects of the application (TechOne) which delivers the electronic asset management system. The system went live on 1 April 2012, its full implementation is in progress, it includes:<br>• asset maintenance and cost information<br>• management of scheduled/preventive maintenance program | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
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| | | | • management of work orders, where work orders manage tasks on site<br>• history of maintenance performed<br>• asset operational data (e.g. heat rates)<br>• incident information (e.g. trips, test details)<br>• assistance in managing legislative requirements<br>• reporting. | |
| 7.2 | Input controls include appropriate verification and validation of data entered into the system. | B2 | Input controls of data appear satisfactory. Inspection data is entered from ICMS and equipment meters. The new system is going to take ICMS data directly from the control and monitoring system.<br>Daily inspection measurements allow early identification of drift or errors in readings;<br>Power metering is effected through a primary meter and a check meter which allow verification of data. | |
| 7.3 | Logical security access controls appear adequate, such as passwords. | A1 | Access to the asset management system appears adequate. Access is controlled by user identification, passwords for operating system access and separate passwords to the asset management system. | |
| 7.4 | Physical security access controls appear adequate. | A2 | The asset management system server is located in a locked server room. Access to the server room keys is restricted. Access to site information systems is also restricted through site perimeter fencing, locked gates, a locked control room and CCTV system. | |
| 7.5 | Data backup procedures appear adequate. | B2 | A back up process is in place. Currently site data is backed up to Perth Office and corporate data is backed up off site several times daily. Testing of current back-up reliability has not occurred formally, the process has been proven by routine on-demand restoration of files from back-ups.<br>The process is due to be upgraded to allow corporate back up to go to two separate data centres. Upgrade is currently due in December 2012.<br>The "Perth Energy Information Technology Server Disaster Recovery Plan" identifies the use of Netlink offsite backup following critical incidents. | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
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| 7.6 | Key computations related to licensee performance reporting are materially accurate. | B2 | Computations related to the licensee performance reporting are relatively simple and performed in spreadsheets, allowing easy traceability. Calculations have been performed by two or more parties so that the results have been independently verified. | |
| 7.7 | Management reports appear adequate for the licensee to monitor licence obligations. | A1 | Management reports appear adequate for monitoring licence obligations.<br>The TechOne system allows for the following reports:<br>• budgets versus actual hours and costs<br>• expenditure<br>• daily inspection<br>• power station performance (based on daily inspection data), this includes fuel consumption, electricity generated, number of starts for each GT, running hours for each GTs, water disposal to Water Corp;<br>• incident log.<br>Management reports also report on electricity exported, greenhouse gas emissions, number of scheduled and forced outages, availability and operating data. | |
| **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. | B2 | Risk management policies and procedures exist and are in use.<br>There is a Perth Energy and WEPL "Risk Management Policy", March 2011, signed by Perth Energy's Managing Director.<br>"Perth Energy Risk Management Procedure PE.PRO.300.0001" applies to all companies in the Perth Energy group. The procedure refers to the review of risk management processes as part of the internal audit program.<br>Reports show that risks have been recorded and control and actions (where applicable) have been identified.<br><br>Asset failure modes were analysed in a Generation Risk Register (2010) including likelihood and consequences of failure and actions required to mitigate the risks. The Generation Risk Register is due to be reviewed annually (as per “Quantate Risk Report: Perth Energy (including WEPL) (as at 15 Oct 2012)” for period ending 30 | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (▸ Findings) | Recommendations |
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| | | | September 2012).<br>The Quantate Risk Reports review the status of risks across the Perth Energy Group. The top Western Energy (WEPL) asset risks are individually identified in the report and are reviewed monthly by respective risk owners however there is no written documentation of the progress of actions.<br>▸ One of the top risks identified in the risk analysis is risk number 36, "Generation licence regulation non-compliance". A number of actions are in place to mitigate the risk however the actions and their status are not readily visible in risk registers or reports. This also applies to other risks identified in the Quantate Risk Reports. | **11.** There should be a more transparent record of the actions taken to mitigate the risks identified in the Quantate Risk Reports and in the Generation Risk Register. There should be a program of regular reviews which should document the status of the actions (this could be achieved both through the monthly Quantate Risk Report updates and/or the annual review of the Generation Risk Register). |
| 8.2 | Risks are documented in a risk register and treatment plans are actioned and monitored. | B2 | The Generation risk register is in place and is noted in "Quantate Risk Report: Perth Energy (including WE) (as at 15 Oct 2012)", for period ending 30 September 2012.<br>The Quantate Risk Reports report on risks to Western Energy:<br>• risks identified in Quantate report are reviewed monthly by respective risk owners.<br>• the actions arising from the risks have been translated into a Gantt chart.<br>• risk number 26: OHS incident causing injury or death to persons; actions identified: “conduct emergency exercises for site activities - desktop and on-site”.<br>• risk number 23: environmental disaster at KPS with significant impact on WEPL's operation and reputation; respective action is: “to initiate a disaster recovery exercise once a year (Michael Crevola, by 30 November 2012)”.<br>• risk number 27: access to site by an intruder, controls have been implemented; was rated Extreme Inherent Risk, mitigated to moderate after control | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (▸ Findings) | Recommendations |
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| | | | implementation. | |
| 8.3 | The probability and consequences of asset failure are regularly assessed. | B3 | Probability and causes of asset failure are regularly reviewed.<br>Corporate risks are analysed in the Quantate Risk Reports ("Quantate Risk Report: Perth Energy (including WE) as at 15 Oct 2012", for period ending 30 September 2012) in respect of:<br>• financial<br>• health, safety and the environment<br>• reputation, customer service<br>• shareholder value.<br><br>Risks identified in Quantate report are reviewed monthly by respective risk owners.<br><br>▸ It was noted that the Generation Risk Register is due to be reviewed annually as per Quantate Risk Reports, however the generation risk register was last reviewed in 2010. | **12.** Review and update the Generation Risk Register. Bring up to date the actions required. |
| **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. | B3 | ▸ A "Kwinana Power Station Emergency Response Plan KSPS-00-PLAN-001" has been prepared but is not yet fully implemented.<br>Corporate contingency plans are selectively tested such as a disaster recovery exercise to be tested by the Finance Manager Michael Crevola, by 30 November 2012. | **13.** Implement contingency plans and test to confirm their application. |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
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| **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 | WEPL has a forty year bank budget model, the "Bank Model K1 V32 Oct update use for Sept12 Qtr Rpt KL", (Bank Model), which has been approved by the company financial lender. Any changes to the bank budget model must be approved by the bank. The financial objectives and strategies of the operation are represented in the model. | |
| 10.2 | The financial plan identifies the source of funds for capital expenditure and recurrent costs. | B2 | The Bank Model includes identification of the sources of funds to manage the operating and capital expenditure. | |
| 10.3 | The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets). | A1 | Projections for profit and loss and balance sheets are set out in the Bank Model for the period 2011 to 2040. | |
| 10.4 | The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions beyond this period. | A1 | Predictions of income are included in the Bank Model. | |
| 10.5 | The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services. | B2 | The financial plan in the Bank Model includes for all O&M, administration expenditure for the assets and minor allowances for capital expenditure requirements of the services. | |
| 10.6 | Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary. | A1 | Variances are reported in Monthly Operating Reports. Reasons, strategies and actions are noted in the reports together with forecasts. | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
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| **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. | B3 | The capital expenditure plan is included in the Bank Model and contains both the historical costs and forecast nominal provision for capital expenditure in 2013. The plan extends to 2040.<br>‣ There are no commitments of funds for major asset expenditure in the Bank Model however the Forecast Update report shows that there will be major capital expenditure in 2014 and 2017.<br>Proposed projects are identified in a "Proposed Project List" (SDDD), minor works are also listed in a separate list.<br>‣ Major projects such as development of further major assets are reported in the Monthly Operating Reports, however there is no documented program for implementation of these major assets and expenditure has not been identified in the expenditure plan. | **14.** Update the capital expenditure plan to include planned asset expenditure and remove inconsistency. |
| 11.2 | The plan provides reasons for capital expenditure and timing of expenditure. | C2 | ‣ A procedure for asset creation and acquisition including capital expenditure planning was in draft at the time of the audit. The procedure should be implemented.<br>Major projects such as development of further major assets are reported in the Monthly Operating Reports. Documentation is available tracking capital expenditure however, as noted above, the process for programming major capital expenditure and documenting reasons and timing should be formalised as per the procedure. | **15.** Implement the procedure for asset creation and acquisition including the management of the capital expenditure plan. |
| 11.3 | The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan. | B2 | Short term capital expenditure identified in the Bank Model is consistent with the asset life and condition of the plant. Unplanned capital expenditure due to the units malfunction will need to be added to the plan if not recovered through warranty or insurance claims. | |
| 11.4 | There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned. | B2 | ‣ At this point the capital expenditure process is not formalised. Updates and revisions to the proposed expenditure were documented in Monthly Operating Reports, however these changes were not reflected in the overall plans. | Recommendation included in recommendation 15, see item 11.2 above. |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
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| **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. | B2 | The AMP and the Asset Management System are subject to continuous review and have been updated in the two years of operation.<br><br>Continuous review takes place through the review of operation at weekly and monthly operating meetings and through the Generation Project Status report which documents the meeting actions and planned changes to the AMS.<br><br>A formal review of the AMP was carried out in June 2011, the AMP is due for another review (AMP is due to be reviewed yearly, OFI in section 1.8). The AMP requires further updating, for example it still refers to the MEX Work Management System, however this system has been retired and replaced by the TechOne asset management system.<br><br>Some of the changes in the period include:<br><br>• Western Power System Management (East Perth Control Centre - EPCC) was initially tasked with the day to day dispatch (remote operation) of the power station for providing power to the grid. (E-mail 21 June 2012 "Operations and Maintenance Agreement with CTEC 2012 June 21 - Draft Response to Frank Safi"). This changed in July 2011 due to changes to the IMO Market Rules with Western Power System Management reviewing its operation and transferring the remote operation of the power station to Western Energy;<br>• CTEC were contracted to provide the operation and maintenance services for the power station on a two year initial period; Western Energy has now taken over the O&M of the power station and has increased its resources to perform the new functions. | |
| 12.2 | Independent reviews (e.g. internal audit) are performed of the asset management system. | B2 | An external review was conducted by a consultant in preparation of the introduction of the new (TechOne) asset management system. The review has resulted in the "Solution Design Detail Document - Asset Management (TechnologyOne)" which has documented the path forward for the improvement of the AMS. Implementation of the new system is in progress. | |

| No. | Asset Management System Element / Criteria | Rating | Review summary (‣ Findings) | Recommendations |
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| | | | External reviews are carried out as part of the electricity licence asset management system review. | |

# 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




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## POST AUDIT IMPLEMENTATION PLAN

| PERFORMANCE AUDIT | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Cl** | **Licence Requirement / Rating** | **Finding** | **Recommendation** | **Action** | **By Whom** | **Date** |
| L5 | Cl.5 | **Compliance**:<br>The licensee must comply with all applicable legislation.<br>Rating: 3 | ▸ There has been one non-compliance which has been recorded under item 124 below and at the Asset Management System (AMS) Review, item 4.3. | 1. Continue with the implementation of corrective actions to address the non-compliance against licence obligations.<br><br>Recommendation has also been recorded in the Asset Management System Review, under item 6 (EC 4.3). | All ERA obligations to be diarised and also added to the Asset Management System | Patrick Peake | 1 March 2013 |
| 124 | 16, 16.1 | **Provision of information**<br>Electricity Industry Act section 11<br>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.<br>Rating: 3 | ▸ The licensee has provided the information required by the Authority in the manner prescribed however there has been one non-compliance relating to the submission of a compliance report two weeks after the required date for the period 1 July 2011 to 30 June 2012. The non-compliance has been noted under item 4.3 of the Asset Management System Review and recommendations have been noted in that section. | Recommendation as per item L5 above and item 6 (EC 4.3) in Asset Management System Review. | As per L5 above | | |
| 413 | Cl 5,.1 | **Electricity Industry Metering Code clause 5.19(5)**<br>A network operator must give notice to a user, or (if there is a different current user) the current user, acknowledging receipt of any customer, site or address attributes from the user within the timeframes prescribed. | ▸ A number of formal agreements are in place between the user and the network operator which detail the site attributes. The user has had constant communication and meetings with the network operator. The network operator also has accessed the site by request to the user. During the site audit the network operator | 2. Formally provide customer, site and address attributes to the operator and request a formal acknowledgement which needs to be retained as a compliance record. | Send written notice to System Management formally providing site details and contact details for Kwinana Swift Power Station and request formal response.<br><br>[Action verified as completed on 18 December 2012] | James Heng | 20 Dec 2012 |

| PERFORMANCE AUDIT | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Cl** | **Licence Requirement / Rating** | **Finding** | **Recommendation** | **Action** | **By Whom** | **Date** |
| | | **Rating: 4** | representative visited the site and accessed the metering facilities. At this point however, there is no available formal record of official acknowledgement by the network operator of receipt of customer, site and address attributes. | | | | |
| 448 | Cl 5.1 | **Electricity Industry Metering Code clause 7.2(1)**<br>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.<br>**Rating: 3** | ▸ Whilst there was evidence of communication between the code participant and the network operator, there was no formal record of notification of contacts between the network operator and code participant. | **3.** Arrange formal notification to the network operator of a telephone number for voice communication in connection with the code.<br>**4.** Contact information of both the network operator and the code participant should be included in a joint communication protocol. The communication protocol should include:<br>**4.1.** the customer, site or address attributes<br>**4.2.** contact details for both the network operator and the code participant,<br>**4.3.** reference to communication responsibilities of both the network operator and the code participant<br>**4.4.** requirements for maintaining the currency of those details and<br>**4.5.** for the notification of changes of contact details to the other party. | Send written notice to System Management<br><br>Document a communication protocol that will list the customer, site or address attributes and contact details, will be used both by the user and the network operator to maintain that information up to date and will document the process for notification of changes. | James Heng<br><br>James Heng | 20 Dec 2012 (Completed)<br><br>31 March 2013 |

| PERFORMANCE AUDIT | | | | | | | |
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| **No** | **Cl** | **Licence Requirement / Rating** | **Finding** | **Recommendation** | **Action** | **By Whom** | **Date** |
| 449 | Cl 5.1 | **Electricity Industry Metering Code clause 7.2(2)**<br>A network operator must notify each Code participant of its initial contact details and of any change to its contact details at least 3 business days before the change takes effect.<br>Rating: 3 | ▸ Whilst there was evidence of communication between the code participant and the network operator, there was no formal record of notification of contacts between the network operator and code participant. | Recommendation as at item 448. | As per item 448 | | |
| 451 | Cl 5.1 | **Electricity Industry Metering Code clause 7.2(5)**<br>A Code participant must notify any affected network operator of any change to the contact details it notified to the network operator at least 3 business days before the change takes effect<br><br>Rating: NR | There was no evidence to show that there had been a change in the code participant contact details during the audit period.<br><br>▸ Whilst there was evidence of communication between the code participant and the network operator, there was no formal record of notification of contacts between the network operator and code participant. | Recommendation as at item 448. | As per item 448 | | |
| | | **Actions from Previous Post Audit Implementation Plan** | | | | | |
| | | This is the first audit of the licence and, consequently, there are no previous actions. | | | | | |

## POST REVIEW IMPLEMENTATION PLAN

| ASSET MANAGEMENT REVIEW | | | | | | | |
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| **Item No** | **EC Ref** | **AMS Element Effectiveness Criteria / Rating** | **Finding** | **Recommendation** | **Action** | **By Whom** | **Date** |
| | **1** | **Asset Planning** | | | | | |
| | | Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning.<br>Rating: B2 | ▸ At present the process has been documented in a draft procedure on asset acquisition/creation. Whilst a paper trail exists this procedure will need to be fully implemented. A recommendation has been noted at EC Ref. 11.2 below. | Recommendation recorded under EC Ref. 11.2, recommendation 15 | As per item 11.2 | | |
| 1 | 1.8 | Plans are regularly reviewed and updated.<br>Rating: B2 | ▸ The AMP review is now due (AMP is due to be reviewed yearly). The AMP requires further updating, for example it still refers to the MEX Work Management System, however this system has been retired and replaced by the TechOne asset management system. | 1. [OFI] The AMP needs to be reviewed and brought up to date (AMP is due to be reviewed yearly). | Review AMP, identify areas that require upgrade and bring up to date. | Patrick Peake | 31 March 2013 |
| 2 | | | ▸ In places the documentation supporting the system is fragmented. An initiative is in place to introduce a new document management system which will assist in bringing together and consolidating the asset management system (AMS) documentation. | 2. Continue with the implementation of a document management system. Documentation should preferably be collected in a single area that is easily identifiable and accessible by all staff. | Complete implementation of the document management system.<br>Collect all documentation into one area | Gordon Whitelaw<br>James Heng | 31 March 2013<br>30 June 2013 |
| | **2** | **Asset Creation and acquisition** | | | | | |
| 3 | 2.4 | Commissioning tests are documented and completed. | ▸ A non-compliance was identified in the review of the commissioning | 3. Continue with the performance of new tests leading to | Complete testing and pursue derogation from Western Power | Gordon Whitelaw | 30 June 2013 |

| ASSET MANAGEMENT REVIEW | | | | | | | |
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| **Item No** | **EC Ref** | **AMS Element Effectiveness Criteria / Rating** | **Finding** | **Recommendation** | **Action** | **By Whom** | **Date** |
| | | Rating: B2 | results. The non-compliance concerned the Technical Rules, Cl 3.2.5.4 (c) and (e) [now 3.3.4.5 (a) (3)]: not complying with "maintaining adequate generating unit stability under all operating conditions". It was noted that the "Testing data showed poor damping (less than the required 0.5), the user proceeding to fine-tuning the unit to improve damping towards compliance". The Network Operator [System Management] has been involved in the resolution which has been documented in the "Generation Project Status" reports. Further tests will be required in view of some of the manufacturer incorrect inertia calculations. Tests should take place in early 2013. There was a submission for an exemption on 15 June 2011; Western Power has indicated that it will be favourable to an exemption after completion of the tests which are due to confirm the final generator parameters. | acceptance of the stability condition found during commissioning. | | | |
| | **3** | **Asset Disposal** | | | | | |
| 4 | 3.2 | The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken. | ▸ Data for forced outages is captured for every outage, however whilst recorded by quantity monthly on "Monthly Operating Report" together with | **4.** **OFI**: Consider the introduction of charting of some of the critical operational parameters to enable trending analysis. | Review how data on outages is gathered and determine ways in which this can be better captured and used | James Heng | 30 June 2013 |

| ASSET MANAGEMENT REVIEW | | | | | | | |
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| **Item No** | **EC Ref** | **AMS Element Effectiveness Criteria / Rating** | **Finding** | **Recommendation** | **Action** | **By Whom** | **Date** |
| | | Rating: B2 | trips, it is not logged with causes, dates, actions, responsibilities etc in a register. There is no evident analysis of trends. At this early stage of the plant operation this may not provide clear results however charting of trends will assist in the long term. . | | | | |
| 5 | | | ▸ "Monthly Operations Summaries for the Board 2012-13" calculates all the data that is then reported in the Monthly Reports, using data reported by the site. Main data is not reported by unit but by the overall facility. There may be a benefit to check trends, within the Generation Group, by generating unit. | **5.** **OFI**: Consider reporting of performance by generating unit within the Generation group. | Review how reporting by generation unit can be implemented. Assess benefits and costs. | James Heng | 30 June 2013 |
| | **4** | **Environmental Analysis** | | | | | |
| 6 | 4.3 | Compliance with statutory and regulatory requirements.<br><br>Rating: B3 | ▸ Noted a non-compliance against licence obligation no. 124, Cl 16.1 of EGL19, letter to the Authority of 5 September 2012: "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: compliance report was submitted two weeks after the required date." for the period 1 July 2011 to 30 June 2012. | **6.** Continue with the implementation of corrective actions to address the non-compliance against licence obligations. | All ERA obligations to be diarised and also added to the Asset Management System<br><br>(Action as per item L5) | Patrick Peake | 1 March 2013 |

| ASSET MANAGEMENT REVIEW | | | | | | | |
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| **Item No** | **EC Ref** | **AMS Element Effectiveness Criteria / Rating** | **Finding** | **Recommendation** | **Action** | **By Whom** | **Date** |
| | **5** | **Asset Operations** | | | | | |
| 7 | 5.1 | Operational policies and procedures are documented and linked to service levels required.<br>Rating: B1 | ▸ Some of the operational procedures are not available including an asset disposal procedure. | **7.** Continue with the preparation of operation procedures including an asset disposal procedure. | Continue with development of operating procedures.<br>Prepare asset disposal procedure | Patrick Peake | 30 June 2013 |
| 8 | 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.<br>Rating: B2 | ▸ Viewed spare parts register by CTEC; noted that some of the parts still show ETA 13 October and 19 December 2010. Spare Parts Register (CTEC) needs to be updated. | **8.** Update the Spare Parts Register (CTEC). | Review and update the spare parts register. | James Heng | 30 June 2013 |
| | **6** | **Asset Maintenance** | | | | | |
| 9 | 6.1 | Maintenance policies and procedures are documented and linked to service levels required.<br>Rating: B2 | ▸ In practice some of the maintenance is required on the basis of operation (number of running hours), other maintenance is "period" based, e.g. every three/six/12 months. Because of the low operating demand, periodic maintenance can be uneconomical and the decision on running the maintenance tasks is left with the site operator, who, on the basis of the inspections and assessment of plant condition determines the maintenance requirements. Whilst the maintenance is recorded in the | **9.** [**OFI**] Document the current policy for plant maintenance. | Document and implement formal procedures for modification of the approved maintenance schedule | Patrick Peake<br>James Heng | 31 March 2013 |

| ASSET MANAGEMENT REVIEW | | | | | | | |
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| | | | asset management system and maintenance "model" schedules are available, there is no clear high level view of the programmed or actual maintenance over the year. | | | | |
| 10 | 6.4 | Failures are analysed and operational/maintenance plans adjusted where necessary.<br>Rating: B2 | ▸ The failure recording system needs minor improvement:<br>◦ to better track the details of each event, including identification of plant, causes, documentation, actions, dates,<br>◦ enable better reporting at operational meetings and<br>◦ provide an historical view of the asset performance.<br>This should include more transparent reporting of items such as failures to start or engine trips. | **10.** [**OFI**] Consider the revision and updating of the failure recording system to better track the details of each event, including identification of plant, causes, documentation, actions, dates. This will enable better reporting at operational meetings and will provide an historical view of the asset performance. This should include more transparent reporting of items such as failures to start or engine trips.. | Implement reporting of all plant operation with details of any untoward events.<br>Improve reporting of all failures and engine trips. | James Heng | 31 March 2013 |
| | **8** | **Risk Management** | | | | | |
| 11 | 8.1 | Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system.<br>Rating: B2 | ▸ One of the top risks identified in the risk analysis is risk number 36, "Generation licence regulation non-compliance". A number of actions are in place to mitigate the risk however the actions and their status are not readily visible in risk registers or reports. | **11.** There should be a more transparent record of the actions taken to mitigate the risks identified in the Quantate Risk Reports and in the Generation Risk Register.. There should be a program of regular reviews which should document the status of the actions (this could be achieved both through the monthly | Implement a review of the Risk Register on a quarterly basis.<br>Implement a full review with HAZOP on an annual basis.<br>Review the status of all actions as part of this review. | Patrick Peake<br>Lee Robertson | 31 March 2013 |

| ASSET MANAGEMENT REVIEW | | | | | | | |
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| | | | | Quantate Risk Report updates and/or the annual review of the Generation Risk Register). | | | |
| 12 | 8.3 | The probability and consequences of asset failure are regularly assessed.<br>Rating: B3 | ▸ It was noted that the Generation Risk Register is due to be reviewed annually (Quantate Risk Report: Perth Energy (including WE) as at 15 Oct 2012 for period ending 30 September 2012), however the generation risk register was last reviewed in 2010. | **12.** Review and update the Generation Risk Register. Bring up to date the actions required. | As per item 11 above | Patrick Peake<br>Lee Robertson | 31 March 2013 |
| | **9** | **Contingency Planning** | | | | | |
| 13 | 9.1 | Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.<br>Rating: B3 | ▸ A "Kwinana Power Station Emergency Response Plan KSPS-00-PLAN-001" has been prepared but is not yet fully implemented. | **13.** Implement contingency plans and test to confirm their application. | Implement and test contingency plans at Kwinana Swift | James Heng | 30 June 2013 |
| | **11** | **Capital Expenditure Planning** | | | | | |
| 14 | 11.1 | There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates.<br>Rating: B3 | ▸ There are no commitments of funds for major asset expenditure in the Bank Model however the Forecast Update report shows that there will be major capital expenditure in 2014 and 2017.<br>▸ Major projects such as development of further major assets are reported in the | **14.** Update the capital expenditure plan to include planned asset expenditure and remove inconsistencies. | Identify all committed capital expenditure and include into a capital expenditure plan | Patrick Peake | 30 June 2013 |

| ASSET MANAGEMENT REVIEW | | | | | | | |
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| **Item No** | **EC Ref** | **AMS Element Effectiveness Criteria / Rating** | **Finding** | **Recommendation** | **Action** | **By Whom** | **Date** |
| | | | Monthly Operating Reports, however there is no documented program for implementation of these major assets and expenditure has not been identified in the expenditure plan. | | | | |
| 15 | 11.2 | The plan provides reasons for capital expenditure and timing of expenditure.<br>Ratings: C2 | ▸ A procedure for asset creation and acquisition including capital expenditure planning was in draft at the time of the audit. The procedure should be implemented. | **15.** Implement the procedure for asset creation and acquisition including the management of the capital expenditure plan. | Prepare procedure for asset creation and acquisition. | Patrick Peake | 31 March 2103 |
| | 11.4 | There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned.<br>Rating: B2 | ▸ At this point the capital expenditure process is not formalised. Updates and revisions to the proposed expenditure were documented in Monthly Operating Reports, however these changes were not reflected in the overall plans. | Recommendation included in recommendation 15 (EC11.2) | Action as per 15(EC11.2) | Patrick Peake<br>Lee Robertson | 31 March 2013 |
| | | **Actions from Previous Post Audit Implementation Plan** | | | | | |
| | | This is the first audit of the licence and, consequently, there are no previous actions. | | | | | |

# Appendix B - Documentation reviewed

## Documentation reviewed

### Licence compliance

1. Tax Invoice ERA199, Economic Regulation Authority, 16 September 2010
2. Tax Invoice ERA253, Economic Regulation Authority, 26 August 2011
3. Tax Invoice ERA319, Economic Regulation Authority, 6 September 2012
4. Tax Invoice ERA086, Economic Regulation Authority, 4 July 2008
5. GHD Invoice on job number 6125340, Dangerous Goods Licensing, 10 May 2010
6. Remittance advice reference 6166988, 4 June 2010 (Dangerous Goods)
7. Letter from WEPL to the Authority on draft Asset Management Plan, 10 September 2010
8. Letter from Authority to WEPL on asset management plan receipt and extension of period of time for audit and review, 15 September 2010
9. Letter from WEPL to the Authority on final Asset Management Plan, 24 September 2010
10. Letter from Authority to WEPL on compliance with Cl.16.1 of the licence re notification of the AMS, 4 October 2010
11. Letter AMS changes

### Operation

12. Asset Management Plan, Western Energy, WE.PLA.KS1.00.001, 23 June 2011
13. Asset Operations Procedure, Kwinana Swift Power Station 25 September 2012
14. Documentation Index - Manuals (CTEC)
15. E-mail 21 June 2012 "Operations and Maintenance Agreement with CTEC 2012 June 21 - Draft Response to Frank Safi"
16. Generation Project Status Report
17. Kwinana Swift Power Station - Operating Philosophy
18. Monthly operating Report, Perth Energy, September 2012
19. Proposal to restructure the power station maintenance arrangements (draft) May 2011
20. Operation Record, September 2010 to October 2012
21. Operations and Maintenance Agreement (CTEC)
22. Operational and Maintenance Budget of O&M Contractor (CTEC PL)
23. Operational Readiness Index (CTEC) [List of procedures and documentation]
24. PWPS Service Bulletin 96B03 Attachment A-2: Recommended Periodic

Maintenance Schedule for FT8 Units

25. Spare Parts Register (CTEC)
26. Western Energy Kwinana OCGT Power Station Interconnection - Technical Compliance Final Report, August 2010

**AMIS**

27. Solution Design Detail Document - Asset Management (TechnologyOne)

**Risk / Emergency / Contingency**

28. Perth Energy and Western Energy Risk Management Policy, March 2011
29. Kwinana Power Station Emergency Response Plan KSPS-00-PLAN-001
30. Perth Energy Risk Management Procedure PE.PRO.300.0001
31. 001 Risk Calc Corporate PE WE Risks 20 Jul 11
32. Quantate Risk Report: Perth Energy (including WE) (as at 15 Oct 2012), for period ending 30 September 2012
33. Gantt Chart of Risk Assessment, 21 Jul 2011
34. Perth Energy Information Technology Server Disaster Recovery Plan

**Financial**

35. Perth Energy Group Forecast Update October 2012 (for September 2012)
36. Western Energy Fixed Assets Tech1 Report at September 2012
37. Bank Model K1 V32 Oct update use for Sept12 Qtr Rpt KL
38. Special Purpose Financial Report (31 March 2011)

# Appendix C - Staff interviewed

## Appendix C – Western Energy Staff Interviewed

The following Western Energy representatives participated in the review meetings or were requested to clarify areas of the review:

- James Heng, Asset Manager
- Patrick Peake, General Manager Western Energy
- Gordon Whitelaw, Engineering Manager
- Stewart Fraser, Supervisor Power Plant Maintenance and Operations
- Michael Crevola, Chief Finance Officer
- Stephanie McDougall, Senior Accountant
- Lee Robertson, Business Development Executive
- Julie Miller, Senior Business Consultant, Enterprise Asset Management