





2019 Performance Audit & Asset Management System Review - EGL19

Kwinana Swift Power Station

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November 2019

Audit Report No: WEAR0112019_3

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GLOSSARY

Abbreviation	Description
AEMO	Australian Energy Market Operator. The national market operator that succeeded IMO.
AGL	The new owners of Perth Energy Holding
AMP	Asset Management Plan
AMS	Asset Management System
BCFM	Base case financial model
BoP	Balance of Plant
BPR	Business performance report
CA	Connection Agreement
CCTV	Closed circuit TV
CFO	Chief Financial Officer
CMP	Compliance management program
DSOC	Declared Sent Out Capacity
ERA	Economic Regulation Authority
FY	Financial year
GES	Geographe Environmental Services
GT	Gas Turbine
GWh	GigaWattHour
IT	Information Technology
KSPS	Kwinana Swift Power Station
kV	KiloVolt
LTI	Lost time injuries
MW	MegaWatt
N-1	Capacity to meet requirements with one unit out of service

NAA	Network Access Agreement
O&M	Operations and Maintenance
OCGT	Open Cycle Gas Turbine
OEM	Original equipment manufacturers
OSH	Occupational Safety and Health
P&L	Profit and loss
PEH	Perth Energy Holdings, (Holding Co for Perth Energy, WA Power Exchange and Western Energy)
PLC	Programmable logic controller
PSA	Preferred Service Agreement
PWPS	Pratt and Witney Power Systems (GT OEM)
SAP	Business management database system
SCADA	System Control and Data Acquisition
SWOT	Strength, weakness, opportunities and threats
TES	Theoretical Energy Schedule, used to compare System Management and SCADA energy dispatched data
UPS	Uninterruptable power supply
WE	Western Energy
WHS	Database used for OHS and storage of policies and procedures
WP	Western Power

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Quality Control Record

	CLIENT	DATE
REQUESTED BY	MARC HETTLER	JUNE 2019
PREPARED BY	NICOLE DAVIES	NOVEMBER 2019
CHECKED BY	SIMON ASHBY	NOVEMBER 2019
REVISION	3	

1. EXECUTIVE SUMMARY

The Licensee is Western Energy Pty. Ltd. The power station is referenced as Kwinana Swift Power Station.

Asset Overview

The Kwinana Swift Power Station (KSPS), completed in 2010, is a 120 MW dual fuel, fast response Open Cycle Gas Turbine (OCGT) power plant in Kwinana. Operated and maintained by Western Energy, part of the Perth Energy Group, the power station delivers expanded capability to Perth Energy in meeting peak demands and contributes to the economical and reliable supply of power to their customers.

Perth Energy was sold to AGL on 2nd September 2019, this was just prior to the end of the reporting period i.e. 30th September 2019.

The plant consists of four 30 MW aero-derivative gas turbines hooked to two common generators and operates as an open cycle peaking station that can be fired on either natural gas or ultra-low sulphur diesel or both. These units have a very fast start-up time, typically less than five minutes from standstill to full load. These add to the reliability of supply during high demand periods and improved security of supply during system emergencies or blackouts, by being able to switch between the two fuels on the fly.

The declared sent out capacity DSOC was 108MW up to 1/10/2015 and from then on 109MW.

The power station is operated and maintained by Western Energy using sub-contractors for major maintenance.

KSPS main and check bi-directional tariff metering equipment is provided by Western Power and located at the 132kV connection point in the 132/11kV substation.

Western Energy has issued a Consultancy Brief to undertake its third Performance Audit and Asset Management System Review as required by the Economic Regulation Authority (ERA/Authority). Western Energy holds a Generation Licence (Licence Number EGL19) under the Electricity Industry Act 2004.

Sections 13 and 14 of the Electricity Industry Act 2004 require as a condition of every licence that the licensee must, not less than once in every period of 24 months (or any longer period that the Authority allows) calculated from the grant of the licence, provide the Authority with a performance audit and a asset management system review report by an independent expert acceptable to the Authority.

Geographe Environmental Services has been approved by the Authority (Ref: D206354/ 13th September 2019) to undertake the works subject to development of an audit plan. The period for the audit and review is 1st October 2014 to 30th September 2019 and the report is due to be submitted to the Authority on or before 29th November 2019.

It is confirmed that the licensee facilitated the audit and review process by providing the audit team;

- Access to the facilities and business premises identified in the audit and review plan.
- Access to materials and information sources that the auditor needs to conduct the audit or review, including data, reports, records and any other relevant information.
- Access to the relevant personnel at each of the Western Energy sites that were audited.
- An introduction to persons, other than employees of the licensee, who are relevant to the audit and review, such as site contractors.

Performance Audit and Asset Management Review Objectives.

The Asset Management System Review and the Performance Audit have been conducted in order to assess the effectiveness of the Western Energy's Asset Management Systems and level of compliance with the conditions of its Generation Licence EGL19. Through the execution of the Audit Plan, field work, assessment and testing of the control environment, the information system, control procedures and compliance attitude, the audit team members have gained reasonable assurance that Western Energy, had an effective asset management system and has complied with its Generation Licence, with the exception of obligations 105 and 124 relating to payment of licence fees and reporting of compliance requirements. It is the auditors' opinion that the omission of the reporting of the late payment of fees in the annual compliance report was due to administrative procedures. Compliance and integrity of reporting by the Licensee is considered well managed and is detailed in the ERA Generation Licence Compliance [Procedure.Operations.008].

The Licensee has implemented the recommendations of the previous audit report, the effectiveness of the actions is evident in the compliance history during the audit period (refer Table 5). Implementation of corrective actions were confirmed, tested and have been regularly reviewed during the audit period. The head office and site audits were conducted on the 29th and 30th of October 2019 and this audit report is an accurate representation of the audit team's findings and opinions. The Auditors confirm that the Licensee provided full access as required by the Audit Guidelines (2019), in respect to; access to facilities and business premise, access to data, reports, minutes, documentation, correspondence and process control data. Additionally, the Licensee ensured the appropriate personnel were available and provided information where possible as requested for external persons relevant to the audit process. Western Energy have established a sound control environment, the management philosophy and operating style, organisational structure, assignment of authority and responsibilities, the use of internal audit, the use of information technology and the skills and experience of the relevant staff members were tested and verified during the audit process.

1.1 Performance Audit Summary of Findings

The majority of licence obligations reviewed were found to be compliant during the audit, with the exception of Electricity Compliance Reporting Manual Ref 105 and 124 (refer Appendix 1 for further details). The organisation has established processes and provided resources to ensure compliance requirements are met. A two-dimensional rating scale (refer Section 5.1.6.1 of the Audit Guidelines) was used in the Audit report to summarise the compliance rating for each licence condition. Each obligation was rated for both the adequacy of existing controls and the compliance with the relevant licence

obligation. The methodology for the Audit has been clearly defined in the Audit Plan. A comprehensive report of the audit findings is included in Appendix 1.

1.2 Performance Audit Excluded Conditions

Some of the reporting obligations for EGL19 have been excluded from the audit because they are not applicable to Western Energy. There are no Type 1 reporting requirements applicable to EGL19. Excluded compliance obligations are detailed in Table 1 below;

Table 1 Performance Audit Excluded Conditions

Compliance Manual Reference	Legislative Reference	Reason For Exclusion
120	Electricity Industry Act section 11, Generation Licence, condition 5.2.4,	Individual performance standards have not been prescribed by the Authority.
364	Electricity Industry Metering Code clause 3.27 Generation Licence, condition 4.1.1	This requirement is not applicable to generation licences and as advised by the Authority will be removed from future versions of the Electricity Compliance Reporting Manual
401	Electricity Industry Metering Code clause 5.16, Generation Licence, condition 4.1.1,	The Network Operator collects the energy data.
405	Electricity Industry Metering Code clause 5.18, Generation Licence, condition 4.1.1,	The network operator has access to their own tariff meters,
407- 408	Electricity Industry Metering Code clause 5.19(2) & (3) Generation Licence, condition 4.1.1	The connection point is with the network operator.
	Section 18	This section is not applicable to Western Energy as there have been no specific conditions and obligations attached to the generation licence.

1.3 Audit & Review Methodology & Approach

A work schedule is defined in Table 2 and 3 covering;

- Details of the activities performed during the audit or review.
- Details of the audit or review team members and hours utilised by each member.
- The period over which the audit or review has been performed.

The performance audit was conducted in a period over August to November involving one visit to the KSPS site and one visit to the Perth Energy head office. For further information regarding the Audit Work Schedule refer to Table 2 and for Site Visits to Table 3 below. The Performance Audit planning, audit execution and report writing required 65 hours of Nicole Davies time.

The review was conducted in conjunction with the Performance Audit during October – November 2019 and included desktop review and one half day in head office and one day on site to execute the review plan, interview sessions and report writing. In total the Review planning, execution and report writing required 80 hours of Power and Energy Services' Simon Ashby's time and 20 hours of Nicole Davies' time.

Table 2 Audit Work Schedule

AUDITORS (Approach)	AUDIT AREA (Key Documents and Systems)	LOCATION & DATE (Auditees)
Nicole Davies (Lead Auditor) <ul style="list-style-type: none"> Verify Documentation Confirm Processes And Systems Established Review Compliance Documentation Review Correspondence With The Authority Review Legislative Compliance Processes Financial Records Review Risk Management & Mitigation Processes 	Section 9: Electricity Industry Customer Transfer Code - Part 3 - Customer/ Connection Information/Data <ul style="list-style-type: none"> ERA Generation Licence Compliance [Procedure.Operations.008] Monthly Operating Reports PEH Group Business Performance Reports Online WHS System – Compliance Activity Tech One maintenance system WE Capex Budgets Asset Management System Annual Asset Management Plans [2014-2019] ERA Licence & Standing Data Charges Correspondence with the Authority Financial Records Emergency Response Procedures Audit Risk Management Committee Site Lease & Associated Documentation 	Perth Office (5th November 2019) <ul style="list-style-type: none"> General Manager Operations CFO General Manager EMR, Regulation Manager Compliance & Risk IT Generation Lead KSPS (6th November 2019) <ul style="list-style-type: none"> Generation Lead Senior OMT Electrical

<p>Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Financial Records Verify Documentation Confirm Processes And Systems Established Review Compliance Documentation Review Correspondence With The Authority Review Legislative Compliance Processes Review Risk Management & Mitigation Processes 	<p>Section 12: Electricity Licences - Licence Conditions And Obligations</p> <ul style="list-style-type: none"> Financial Statements Correspondence with the Authority Business Performance Reports Budgets Financial Reports Monthly Operating Meetings Compliance Reports Economic Regulation Authority's Website 	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO General Manager EMR, Regulation Manager Compliance & Risk Generation Lead <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Generation Lead Senior OMT Electrical
<p>Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Verify Documentation Confirm Processes And Systems Established Review Compliance Documentation Review Correspondence With The Authority Review Legislative Compliance Processes 	<p>Section 14: Electricity Industry Metering Code - Licence Conditions And Obligations</p> <ul style="list-style-type: none"> Theoretical Energy Schedule (TES) Reports Western Power Portal Company Procedures NAA 	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations General Manager EMR, Regulation Manager Compliance & Risk Generation Lead <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Generation Lead Senior OMT Electrical
<p>Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review Correspondence With The Authority 	<p>Section 16: Electricity Licences - Licensee Specific Conditions And Obligations</p> <ul style="list-style-type: none"> Review Correspondence With The Authority EGL19 	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations

<p>Simon Ashby (Technical Expert) Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review and assess the adequacy of asset planning processes including funding Review and assess adequacy of asset management plans Assess if asset management plans are up to date Assess implementation of asset management plans (status) Assess whether the asset management plan clearly assigns responsibilities and if these have been applied in practice Review Risk Management processes Condition monitoring programs 	<p>Asset Planning</p> <ul style="list-style-type: none"> Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning Service levels are defined Non-asset options (e.g., demand management) are considered Lifecycle costs of owning and operating assets are assessed Funding options are evaluated Costs are justified and cost drivers identified Likelihood and consequences of asset failure are predicted Plans are regularly reviewed and updated <p>(Refer Table 18 Section 1 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO General Manager EMR, Regulation Manager Compliance & Risk IT Generation Lead TECH1 (Asset Management System) <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Senior OMT Electrical Generation Lead
<p>Simon Ashby (Technical Expert) Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review adequacy of policies and processes in relation to asset creation and acquisition Review examples of creations / acquisitions to check if policies and procedures were followed and check costs against estimates Review budgeting/financial planning Review plant performance Review maintenance systems Review legislative compliance processes 	<p>Asset Creation/ Acquisition</p> <ul style="list-style-type: none"> Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions Evaluations include all life-cycle costs Projects reflect sound engineering and business decisions Commissioning tests are documented and completed Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood <p>(Refer Table 18 Section 2 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO IT Generation Lead TECH1 (Asset Management System) <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Senior OMT Electrical Generation Lead

<p>Simon Ashby (Technical Expert)</p> <p>Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review adequacy of policies and procedures in relation to asset disposal, asset replacement, identification of under-performing assets Determine if a review on the usefulness of assets are undertaken Review examples to check that policies and procedures are being followed Review business case/ capital expenditure processes 	<p>Asset Disposal</p> <ul style="list-style-type: none"> Under-utilised and under-performing assets are identified as part of a regular systematic review process The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken Disposal alternatives are evaluated There is a replacement strategy for assets <p>(Refer Table 18 Section 3 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations Generation Lead <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Senior OMT Electrical Generation Lead
<p>Simon Ashby (Technical Expert)</p> <p>Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review performance and service standards over audit period Review performance / identify any breaches and non-compliances and corrective action taken Review adequacy of reporting and monitoring tools Review risk management and mitigation processes 	<p>Environmental Analysis</p> <ul style="list-style-type: none"> Opportunities and threats in the system environment are assessed Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved Compliance with statutory and regulatory requirements Achievement of customer service levels <p>(Refer Table 18 Section 4 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO General Manager EMR, Regulation Manager Compliance & Risk IT Generation Lead TECH1 (Asset Management System)

<p>Simon Ashby (Technical Expert) Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review adequacy of policies and procedures in relation to asset operations Review staff skills / training and resources available Check that operations procedures are being followed including testing of the asset register, observation of operational procedures and analysis of costs Identify any operational events and corrective actions Review implementation of maintenance system and records management Review budgeting 	<p>Asset operations</p> <ul style="list-style-type: none"> Operational policies and procedures are documented and linked to service levels required Risk management is applied to prioritise operations tasks Assets are documented in an Asset Register, including asset assessment of assets' physical, structural condition and accounting data Operational costs are measured and monitored Staff receive training commensurate with their responsibilities <p>(Refer Table 18 Section 5 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO General Manager EMR, Regulation Manager Compliance & Risk IT Generation Lead TECH1 (Asset Management System) <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Senior OMT Electrical Generation Lead
<p>Simon Ashby (Technical Expert) Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review adequacy of policies and procedures in relation to asset maintenance / maintenance functions Check that policies and procedures have been followed including testing of maintenance schedules, analysis of costs, Review maintenance schedules / plans Review Condition monitoring Identify any maintenance events and corrective actions Review budgets and financial planning processes 	<p>Asset maintenance</p> <ul style="list-style-type: none"> Maintenance policies and procedures are documented and linked to service levels required Regular inspections are undertaken of asset performance and condition Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule Failures are analysed and operational / maintenance plans adjusted where necessary Risk management is applied to prioritise maintenance tasks Maintenance costs are measured and monitored <p>(Refer Table 18 Section 6 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations General Manager EMR, Regulation Manager Compliance & Risk IT Generation Lead TECH1 (Asset Management System) <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Senior OMT Electrical Generation Lead

<p>Simon Ashby (Technical Expert)</p> <p>Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review adequacy of asset information system: – Asset coverage – Functionality – Data coverage – Security – User functionality granted is appropriate Review outputs / reports generated by systems and assess suitability for reporting against performance standards / licence obligations Review Backup Processes/ system integrity analysis Review compliance processes 	<p>Asset Management Information System</p> <ul style="list-style-type: none"> Adequate system documentation for users and IT operators Input controls include appropriate verification and validation of data entered into the system Logical security access controls appear adequate, such as passwords and that appropriate system access and functionality is provided to users Physical security access controls appear adequate Data backup procedures appear adequate Key computations related to licensee performance reporting are materially accurate Management reports appear adequate for the licensee to monitor licence obligations <p>(Refer Table 18 Section 7 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO General Manager EMR, Regulation Manager Compliance & Risk IT Generation Lead TECH1 (Asset Management System) <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Senior OMT Electrical Generation Lead
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<p>Simon Ashby (Technical Expert) Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review risk assessment processes Review sample of risk mitigation to check policies and procedures are followed Assess staff understanding of risk management and adequacy of risk management training for staff Review consistency and continuity of risk management processes Assess Management Review processes 	<p>Risk Management</p> <ul style="list-style-type: none"> Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system Risks are documented in a risk register and treatment plans are actioned and monitored The probability and consequence of risk failure are regularly assessed <p>(Refer Table 18 Section 8 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO General Manager EMR, Regulation Manager Compliance & Risk IT Generation Lead TECH1 (Asset Management System) <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Senior OMT Electrical Generation Lead
<p>Simon Ashby (Technical Expert) Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review adequacy / relevance and currency of contingency plans Review if plans have been tested and report on findings Identify any improvements that have been actioned as a result of testing of the contingency plans 	<p>Contingency Planning</p> <ul style="list-style-type: none"> Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks <p>(Refer Table 18 Section 9 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO General Manager EMR, Regulation Manager Compliance & Risk IT Generation Lead TECH1 (Asset Management System) <p>KSPS (6th November 2019)</p> <ul style="list-style-type: none"> Senior OMT Electrical Generation Lead

<p>Simon Ashby (Technical Expert) Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review adequacy and effectiveness of financial planning and reporting processes Review current financial plan and assess whether the process is being followed Review budgeting processes 	<p>Financial Planning</p> <ul style="list-style-type: none"> The financial plan states the financial objectives and strategies and actions to achieve the objectives The financial plan identifies the source of funds for capital expenditure and recurrent costs The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets) The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services Significant variances in actual / budget income and expenses are identified and corrective action taken where necessary (Refer Table 18 Section 10 for full list of documentation reviewed) 	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO Generation Lead TECH1 (Asset Management System)
<p>Simon Ashby (Auditor/Technical Expert) Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> Review adequacy and effectiveness of capital planning processes through examination of application of process and example documents Assess effectiveness of capital expenditure processes 	<p>Capital Expenditure Planning</p> <ul style="list-style-type: none"> There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates The plan provides reasons for capital expenditure and timing of expenditure The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned <p>(Refer Table 18 Section 11 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> General Manager Operations CFO General Manager EMR, Regulation Manager Compliance & Risk IT Generation Lead TECH1 (Asset Management System)

<p>Simon Ashby (Technical Expert) Nicole Davies (Lead Auditor)</p> <ul style="list-style-type: none"> ▪ Review adequacy and currency of Asset Management System ▪ Assess when the Asset Management System was last updated / reviewed ▪ Assess outcomes of independent review of AMSs ▪ Identify if AMS needs to be updated 	<p>Review of AMS</p> <ul style="list-style-type: none"> ▪ A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current ▪ Independent reviews (e.g. internal audit) are performed of the asset management system <p>(Refer Table 18 Section 12 for full list of documentation reviewed)</p>	<p>Perth Office (5th November 2019)</p> <ul style="list-style-type: none"> ▪ General Manager EMR, Regulation ▪ Manager Compliance & Risk ▪ Generation Lead
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Table 3 List of Sites Visited during the audit and review

Sites Visited	Address	Date of Visit / Duration
Perth Energy Head Office	L24, 221 St Georges Tce, Perth, WA 6000	5/11/2019 – full day
Kwinana Swift Power Station	Corner of Donaldson Road and Burton Place, Kwinana Beach WA 6167	6/11/2019 – half day

Table 4 Audit Compliant and Control Rating Scales

Performance Audit Compliance & Controls Rating Scales			
Adequacy of Controls Rating		Compliance Rating	
Rating	Description	Rating	Description
A	Adequate controls – no improvement needed	1	Compliant
B	Generally adequate controls – improvement needed	2	Non-Compliant – minor impact on customers or third parties
C	Inadequate controls – significant improvement needed	3	Non-Compliant – moderate impact on customers or third parties
D	No controls evident	4	Non-Compliant – major impact on customers or third parties
NP	Not Performed	NR	Not rated – Determined Not Applicable during the audit period

The Generation Licence compliance elements that were included in the scope of this audit because they are defined in Table 5, are further detailed in Appendix 1.

Table 5 Performance Audit Compliance Summary

Compliance Obligation Reference No.	Licence Reference	Audit Priority	Adequacy of Controls Rating					Compliance Rating				
			A	B	C	D	NP	1	2	3	4	NR
SECTION 8: TYPE 1 REPORTING REQUIREMENTS												
THERE ARE NO TYPE 1 REPORTING REQUIREMENTS APPLICABLE TO EGL19												
SECTION 11: ELECTRICITY INDUSTRY ACT - LICENCE CONDITIONS AND OBLIGATIONS												
101	Electricity Industry Act section 13(1) Generation Licence condition 5.3.1	5	A					1				
102	Electricity Industry Act section 14(1)(a) Generation Licence condition 5.1.1	4	A					1				
103	Electricity Industry Act section 14(1)(b) Generation Licence condition 5.1.2 & 5.1.3	4	A					1				
104	Electricity Industry Act section 14(1)(c) Generation Licence condition 5.1.4	5	A					1				
105	Electricity Industry Act section 17(1) Generation Licence condition 4.2.1	4		B					2			
106	Electricity Industry Act section 31(3) Generation Licence condition 4.1.1	5	A					1				
107	Electricity Industry Act section 41(6) Generation Licence condition 4.1.1	4	A					1				
SECTION 12: ELECTRICITY LICENCES - LICENCE CONDITIONS AND OBLIGATIONS												
119	Electricity Industry Act section 11 Generation Licence condition 4.3.1	4	A					1				
121	Electricity Industry Act section 11 Generation Licence condition 5.3.2	4	A					1				

122	Electricity Industry Act section 11 Generation Licence condition 5.1.5	4	A					1				
123	Electricity Industry Act section 11 Generation Licence condition 4.4.1	4	A									NR
124	Electricity Industry Act section 11 Generation Licence condition 4.5.1	4		B					2			
125	Electricity Industry Act section 11 Generation Licence condition 3.8.1 & 3.8.2	4	A									NR
126	Electricity Industry Act section 11 Generation Licence condition 3.7.1	4	A					1				
SECTION 14: ELECTRICITY INDUSTRY METERING CODE - LICENCE CONDITIONS AND OBLIGATIONS												
324	Generation Licence condition 4.1.1 Electricity Industry Metering Code, clause 3.3B	4					NP					NR
339	Generation Licence condition 4.1.1 Electricity Industry Metering Code CI 3.27	4	A									NR
371	Electricity Industry Metering Code CI 4.4(1) Generation Licence condition 4.1.1	5					NP					NR
372	Electricity Industry Metering Code CI 4.5(1) Generation Licence condition 4.1.1	5					NP					NR
373	Electricity Industry Metering Code CI 4.5(2) Generation Licence condition 4.1.1	4					NP					NR
388	Electricity Industry Metering Code CI 5.4(2) Generation Licence condition 4.1.1	4					NP					NR
402	Electricity Industry Metering Code CI 5.17(1) Generation Licence condition 4.1.1	4					NP					NR

406	Electricity Industry Metering Code CI 5.19(1) Generation Licence condition 4.1.1	5					NP					NR
410	Electricity Industry Metering Code CI 5.19(6) Generation Licence condition 4.1.1	5					NP					NR
416	Electricity Industry Metering Code CI 5.21(5) Generation Licence condition 4.1.1	4					NP					NR
417	Electricity Industry Metering Code CI 5.21(6) Generation Licence condition 4.1.1	4					NP					NR
435	Electricity Industry Metering Code CI 5.27 Generation Licence condition 4.1.1	4					NP					NR
448	Electricity Industry Metering Code CI 6.1(2) Generation Licence condition 4.1.1	4	A					1				
451	Electricity Industry Metering Code CI 7.2(1) Generation Licence condition 4.1.1	5	A					1				
453	Electricity Industry Metering Code CI 7.2(4) Generation Licence condition 4.1.1	4					NP					NR
454	Electricity Industry Metering Code CI 7.2(5) Generation Licence condition 4.1.1	4					NP					NR
455	Electricity Industry Metering Code CI 7.5 Generation Licence condition 4.1.1	4	A									NR
456	Electricity Industry Metering Code CI 7.6(1) Generation Licence condition 4.1.1	4					NP					NR
457	Electricity Industry Metering Code CI 8.1(1) Generation Licence condition 4.1.1	5					NP					NR

458	Electricity Industry Metering Code CI 8.1(2) Generation Licence condition 4.1.1	5					NP					NR
459	Electricity Industry Metering Code CI 8.1(3) Generation Licence condition 4.1.1	5					NP					NR
460	Electricity Industry Metering Code CI 8.1(4) Generation Licence condition 4.1.1	4					NP					NR
461	Electricity Industry Metering Code CI 8.3(2) Generation Licence condition 4.1.1	5					NP					NR
SECTION 16: ELECTRICITY LICENCES - LICENSEE SPECIFIC CONDITIONS AND OBLIGATIONS												
THIS SECTION IS NOT APPLICABLE TO WESTERN ENERGY PTY LTD AS THERE HAVE BEEN NO SPECIFIC CONDITIONS AND OBLIGATIONS ATTACHED TO THE GENERATION LICENCE												

Table 6 Compliance and controls ratings summary table

		Compliance Rating					
		1	2	3	4	N/R	TOTAL
Controls Rating	A	12	-	-	-	4	16
	B	-	2	-	-	-	2
	C	-	-	-	-	-	0
	D	-	-	-	-	-	0
	N/P	-	-	-	-	18	18
	TOTAL	12	2	0	0	22	36

1.4 Asset Management System Review Summary

The asset management system was found to be effective but could be improved with better communication between Head Office and site and greater use of an integrated AMS database. With the takeover by AGL the power station is anticipated to transition its systems to AGL's procedures and systems.

As required by section 5.1.6.2 of the Audit & Review Guidelines (March 2019) Table 7 summarises the auditor's assessment of both the process and policy definition rating and the performance rating for each key process in the licensee's asset management system, using the scales described in Table 9 and Table 10 (refer Section 3.3, Methodology for Asset Management Review). The rating was determined by the auditor's judgement based on the execution of the Audit Plan.

The process and policy and asset management system adequacy ratings are summarised below;

Table 7 Asset Management System: Effectiveness Summary

Asset Management System	Asset Management Process And Policy Definition Adequacy Rating	Asset Management Performance Rating
1. Asset planning	A	2
1.1 Asset management plan covers the processes in this table	A	2
1.2 Planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning	A	1
1.3 Service levels are defined in the asset management plan	A	1
1.4 Non-asset options (e.g. demand management) are considered	A	NR
1.5 Lifecycle costs of owning and operating assets are assessed	A	1
1.6 Funding options are evaluated	A	1
1.7 Costs are justified and cost drivers identified	A	1
1.8 Likelihood and consequences of asset failure are predicted	A	1
1.9 Asset management plan is regularly reviewed and updated	A	2

2. Asset creation and acquisition	A	2
2.1 Full project evaluations are undertaken for new assets, including comparative assessment of non- asset options	A	1
2.2 Evaluations include all life-cycle costs	A	1
2.3 Projects reflect sound engineering and business decisions	A	1
2.4 Commissioning tests are documented and completed	NP	NR
2.5 Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood	A	2
3. Asset disposal	A	2
3.1 Under-utilised and under-performing assets are identified as part of a regular systematic review process	A	1
3.2 The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	A	1
3.3 Disposal alternatives are evaluated	A	1
3.4 There is a replacement strategy for assets	A	2
4. Environmental analysis	A	2
4.1 Opportunities and threats in the asset management system environment are assessed	A	1
4.2 Performance standards (availability of service, Capacity, continuity, emergency response, etc.) are measured and achieved	A	1
4.3 Compliance with statutory and regulatory requirements	A	2
4.4 Service standard (customer service levels etc) are measured and achieved.	A	1

5. Asset operations	A	2
5.1 Operational policies and procedures are documented and linked to service levels required	A	2
5.2 Risk management is applied to prioritise operations tasks	A	1
5.3 Assets are documented in an asset register including asset type, location, material, plans of components and an assessment of assets' physical/structural condition	A	2
5.4 Accounting data is documented for assets	A	1
5.5 Operational costs are measured and monitored	A	1
5.6 Staff resources are adequate and staff receive training commensurate with their responsibilities.	A	1
6. Asset maintenance	A	1
6.1 Maintenance policies and procedures are documented and linked to service levels required	A	1
6.2 Regular inspections are undertaken of asset performance and condition	A	1
6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	A	1
6.4 Failures are analysed and operational / maintenance plans adjusted where necessary	A	1
6.5 Risk management is applied to prioritise maintenance tasks	A	1
6.6 Maintenance costs are measured and monitored	A	1
7. Asset Management Information System	A	2
7.1 Adequate system documentation for users and IT operators	A	2
7.2 Input controls include suitable verification and validation of data entered into the system	A	2

7.3 Security access controls appear adequate, such as passwords	A	1
7.4 Physical security access controls appear adequate	A	1
7.5 Data backup procedures appear adequate and backups are tested	A	1
7.6 Computations for licensee performance reporting are accurate	A	2
7.7 Management reports appear adequate for the licensee to monitor licence obligations	A	1
7.8 Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	A	1
8. Risk management	A	1
8.1 Risk management policies and procedures exist and are applied to minimise internal and external risks	A	1
8.2 Risks are documented in a risk register and treatment plans are implemented and monitored	A	1
8.3 Probability and consequences of asset failure are regularly assessed	A	1
9. Contingency planning	A	1
9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher	A	1
10. Financial planning,	A	1
10.1 The financial plan states the financial objectives and identifies strategies and actions to achieve those	A	1
10.2 The financial plan identifies the source of funds for capital expenditure and recurrent costs	A	1
10.3 The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	A	1
10.4 The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	A	1

10.5 The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	A	1
10.6 Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	A	1
11. Capital expenditure planning	A	1
11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	A	1
11.2 The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	A	1
11.3 The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	A	1
11.4 There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented	A	1
12. Review of AMS	A	2
12.1 A review process is in place to ensure the asset management plan and the asset management system described in it remain current	A	2
12.2 Independent reviews (e.g. internal audit) are performed of the asset management system	A	1

The Audit & Review Guidelines (March 2019) require that auditors who have rated the adequacy of the process and policy definition process as C or D or the asset management performance as 3 or 4 also make recommendations to address the issue(s). None fall into these categories.

2. PERFORMANCE AUDIT

2.1 Performance Audit Scope

In executing the Audit Plan and in line with the Audit & Review Guidelines (March 2019) the auditors, when assessing if the licensee has complied with its licence obligations, applied a level of scrutiny that corresponds to a “reasonable assurance engagement”. This has been further detailed within the audit plan (refer Paragraph 12(a)(i)(a) of ASAE 3000, June 2014).

This is the third audit of EGL19. The organisation has implemented the recommendations of the previous audit and as required by Section 11.3 of the Audit Guidelines (March 2019). Table 8 below details how all recommendations were resolved in the current audit period.

Table 8 Previous Audit Non-compliances and Recommendations

Table of Previous Non-Compliances & Audit Recommendations				
A Resolved before end of previous audit period				
Reference (no./year)	(Compliance rating/ Legislative Obligation/ details of the issue)	Auditors' Recommendation, or action taken	Date Resolved	Further action required
EC6/2012	Non-Compliant 3/124 There was 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	Continue with the implementation of corrective actions to address the noncompliance against licence obligations. ERA obligations have been set out in Engineering Diary on MS Office system. AMP 2015-16 has identified that the Authority's Obligations will be set	30/9/14	No

		as work orders in TechnologyOne Asset Management System by March 2015.		
B Resolved during the current audit period				
Reference (no./year)	(Compliance rating/, Legislative Obligation/details of the issue)	Auditors' Recommendation or action taken	Date Resolved	Further action required
Not applicable				

C Unresolved at the end of the current audit period				
Reference (no./year)	(Compliance rating/ Legislative Obligation/ details of the issue)	Auditors' Recommendation or action taken	Date Resolved	Further action required
Not Applicable				

2.2 Recommendations and Action Plans

Recommendations made within the report are detailed below and will be reviewed and included in the post audit implementation plan by the licensee to ensure compliance with requirements.

Table 9 Current audit non-compliances and recommendations

CURRENT AUDIT NON-COMPLIANCES/RECOMMENDATIONS			
A. RESOLVED DURING THE CURRENT AUDIT PERIOD			
Not Applicable			
B. UNRESOLVED AT END OF CURRENT AUDIT PERIOD			
Reference, (no./year)	Non Compliance/Controls Improvement, (Rating/ Legislative Obligation/ Details of Non Compliance or Inadequacy of Controls)	Auditors', Recommendation	Management action taken, by end of Audit period
01/2019 – Ref 105	<p>Non-Compliant/B2 /105</p> <p>CRITERIA: The Licensee is required to pay the invoices issued by the Authority for the standing data charges within 30 days of issue of the invoice and Generation Licence fee before the 15 October annually.</p> <p>CURRENT CONDITION: There were 3 invoices paid past the required timeframe.</p>	<p>CORRECTIVE ACTION: The organisation could include the payment of licence fees in the Online WHS or similar Compliance management process established by AGL. Ensuring the invoices are paid prior to the due dates to allow for transfer delays. Communicate the requirement to accounts department to ensure ongoing compliance.</p>	<p>Nil - Refer Post Audit Action Plan</p>

B. UNRESOLVED AT END OF CURRENT AUDIT PERIOD			
	<p>CAUSE: The reason for the late payments (ERA100415, ERA100523 and ERA101926) were due scheduling of payment.</p> <p>CONSEQUENCE: The terms of the Standing Data and Annual Licence invoice payments were marginally late by up to 2 days on 3 occasions.</p>		
02/2019 – Ref 124	<p>Non-Compliant/B2 /124</p> <p>CRITERIA: The Licensee is required to ensure that non-compliances are reported in a Compliance Report which is to be submitted by the 31st August annually.</p> <p>CURRENT CONDITION: On 3 occasions the Compliance Report prepared during the audit period did not report a non-compliance in reference to late payment of the licence fee for the 2014-2015, 2015-2016 and 2018-2019 Compliance Reporting years. It is noted that the Compliance Report for the 2018-2019 did report late submission of data to the Authority for the standing data charges.</p> <p>CAUSE: The awareness to the requirement to include the late payment of fees as a compliance obligation was not established and there are not processes implemented within the organisation to identify the compliance requirement proactively. ERA Generation Licence Compliance</p>	<p>CORRECTIVE ACTION: A process (such as an internal audit) to ensure compliance requirements have been met and a documented liaison relating to the legislative requirements and content of the Compliance Report prior to submission to the Authority is required. The Tech One system does not include the Compliance Report in the Compliance Activity and this could be optimised to ensure this is an automated process to ensure ongoing compliance. Updating the procedure to reference conducting internal audits prior to the submission of the Compliance Report would also be beneficial.</p>	<p>Nil - Refer Post Audit Action Plan</p>

B. UNRESOLVED AT END OF CURRENT AUDIT PERIOD			
	<p>[Procedure. Operations.008] does reference the process for annual compliance report preparation.</p> <p>CONSEQUENCE: On 3 occasions during the audit period 2 standing data and 1 annual licence fee invoices were paid outside the required payment terms and this event was not captured in the annual compliance reporting process.</p>		

3. ASSET MANAGEMENT SYSTEM EFFECTIVENESS REVIEW

3.1 AMS Review Scope

The scope of the AMS review includes an assessment of adequacy and effectiveness of the Western Energy, KSPS's Asset Management System by evaluating during the audit period 1st October 2014 to 30th September 2019 the following;

1. Asset Planning,
2. Asset creation/Acquisition,
3. Asset disposal,
4. Environmental analysis,
5. Asset operations,
6. Asset maintenance,
7. Asset management information system,
8. Risk management,
9. Contingency planning,
10. Financial planning,
11. Capital expenditure planning,
12. Review of asset management system.

The review has been established as a requirement of the current Generation Licence issued by the Economic Regulation Authority to Western Energy.

The asset management review follows the approved audit plan and uses;

- a risk-based approach to auditing using the risk evaluation model set out in ISO31000:2018
- an overall effectiveness rating for an asset management process, based on a combination of the process and policy adequacy rating and the performance rating
- the format and content of the reviewer's report; and post-review plan as described in the Guidelines.

The Asset Management System Review has been carried out as a 'limited assurance engagement'.

Table 10 Interviewed Personnel during the Review

Company	Name	Designation
Western Energy	Elizabeth Aitken	General Manager Operations
Western Energy	Kheng Lim	CFO
Western Energy	Craig Beasland	IT
Western Energy	Patrick Peak	General Manager EMR, Regulation

Company	Name	Designation
Western Energy	Peter Durack	Manager Compliance & Risk
Western Energy	Daniel Bailey	Senior OMT Electrical
Western Energy	Marc Hettler	Generation Lead

The key documents and other information sources are detailed below and further in Appendix 2.

Table 11 Key Reference Documents

#	Document Title
7	2016 March - Asset Management System v5.docx
12	2016-17 Asset Management Plan - V1.pdf
13	Asset Management Plan - 2017-18.docx
15	Asset Management Plan - 2018-19 FINAL.pdf
16	2018 PM 01.xlsx
17	2018 PWPS critical spares.xlsx
18	AMP 2019-20 Overview.pdf
20	KSPS Asset Management Plan - 201811.pdf
21	Western Energy 2014 Audit Review Report EGL019.pdf
22	Western Energy 2014 Post Review Implementation Plan EGL019.pdf
24	Pre audit period 2012 Mar 6 - Wormald Signed Agreement.pdf
25	2017 Feb 22 - GHD Consultancy Agreement for Minor Engineering Works.pdf
26	2019.09.13 Letter re Effluent Services Agreement - Extension, Western Energy KSPS.pdf
27	Atlas Copco Service.pdf
28	Contract P18033C0301 Variation No. 1 Executed.pdf
29	Preferred Service Agreement_PW Power Systems_Western Energy_04042016.pdf
30	PWPS WE PSA_fully executed_5 APR 2016.pdf
31	Renewal Letter - 67357 - 15-16.pdf
32	SUEZ - Kwinana Services Agreement Feb 11 2019.pdf
33	Transpacific Cleanaway 30.03.15.pdf
34	Motherwell Automation.pdf
35	Western Energy Wilsons Patrol Agreement 2016 2017 1808_001 signed WE and Wilsons.pdf
36	Wilson Security - 01.09.15 to 31.08.16.pdf
37	Wilson Security 01.09.14 to 31.08.15.pdf
38	WESTERN_ENERGY_Fuel_Transfer_Procedure_final.pdf
39	WESTERN_ENERGY_RC_Cert_Kwinana_Donaldson_Operating_Protocol_signed_23062016.pdf
40	WESTERN_ENERGY_RC_Cert_ETACs_and_Amendments.pdf
41	Operating Maintenance Agreement_DBNGP_Western Energy_04102011.pdf
43	Metering TES
44	2015 Jul 15 - EGL Compliance Reports #49-68.pdf
65	2018 ERA Licence Compliance - Western Energy Kwinana Swift Power Station.pdf
66	2019.04.18 Western Energy Compliance Breach Register.docx
68	2019.04.18 Western Energy Register of Public Complaints.xlsx

#	Document Title
69	20190919 Compliance Activity.pdf
70	WEST0002 - LANDCORP - 26318 01.04.2015.pdf
71	LandCorp Invoices\Landcorp invoices & payments_xlsx #76-132.msg
129	2016 Business Performance Report Sample - Generation Section.pdf
135	PEH Group Business Performance Report May 2018 vFinal.pdf
136	PEH Group Business Performance Report May 2019 FINAL.pdf
137	PEH Group Business Performance Report November 2017 v1.pdf
138	PEH Group Business Performance Report November 2018 VFINAL.pdf
139	PEH Group Business Performance Report October 2017 v1.pdf
140	PEH Group Business Performance Report October 2018 vFINAL.pdf
141	PEH Group Business Performance Report September 2018 vFINAL.pdf
143	PEH Group BPR Sept17 v1.pdf
144	PEH Group Business Performance Report April 2018 vFinal.pdf
145	PEH Group Business Performance Report April 2019 vFinal.pdf
146	PEH Group Business Performance Report August 2017 v1.pdf
147	PEH Group Business Performance Report August 2018 vFinal.pdf
148	PEH Group Business Performance Report December 2017 v1.pdf
149	PEH Group Business Performance Report December 2018 VFINAL.pdf
150	PEH Group Business Performance Report February 2018-V1.pdf
151	PEH Group Business Performance Report February 2019VFINAL.pdf
152	PEH Group Business Performance Report January 2018-Final.pdf
153	PEH Group Business Performance Report January 2019 V1.pdf
154	PEH Group Business Performance Report July 2017.pdf
155	PEH Group Business Performance Report July 2018 V1.pdf
156	PEH Group Business Performance Report July 2019 vFINAL.pdf
157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
158	PEH Group Business Performance Report June 2018 vFinal.pdf
159	PEH Group Business Performance Report June 2019 vFinal.pdf
160	PEH Group Business Performance Report March 2018 v1.pdf
161	PEH Group Business Performance Report March 2019VFINAL.pdf
162	FY15 Budget Slides IMO Generation 25-11-2014.pdf
163	Item 2.1 FY16 Revised Budget 03Feb15.pdf
164	Item 4.1A FY16 Q3 Forecast v1 Combined (Revised).pdf
165	PEH Item 5.1 - FY18 Budget Presentation Final.pdf
166	PEH Item 5.1 - FY19 Budget Presentation (Final) 20180301.pdf
167	WE Capex - FY15 Budget.xlsx
168	WE Capex Budget FY18-FY22 v1.xlsm
169	WE Capex FY17-FY21.xlsm
170	WE Opex Workpad 20180124 - FY19 Budget.xlsm
171	WE Bank Report - Sept 2014 v1 (revised).pdf
172	WE Bank Report - March 2015 v1.pdf
173	WE Bank Report - Sept 2015 v1.docx
174	WE Bank Report - Mar 2016 v1.pdf
175	WE Bank Report - Sept 2016 v1.pdf
176	WE Bank Report - March 2017 v1.pdf
177	WE Bank Report - Sept 2017 v1.pdf

#	Document Title
178	WE Operating Report - Mar 2018 - Final.pdf
180	WE Operating Report -October 2018 Final.pdf
181	WE Financial Statements March 15 v1 - Signed 30-04-15.pdf
182	WE Financial Statements Mar 16 - Signed.pdf
183	WE Financial Statements Mar 17 v1 (signed).pdf
184	WE Financial Statements Mar 18 v1 (signed).pdf
185	WE Financial Statements Mar 19 v1(Signed).pdf
189	Risk Register - Framework.xlsx
190	Policy.HSEQ.001 Risk Management.pdf
191	Procedure.HSEQ.001 Risk Assessment.pdf
192	Risk Register - Framework.xlsx
193	Procedure_Operations_007_Emergency_Response_Procedure_KSPS.pdf
194	Emergency Response Procedure KSPS - Hazardous Areas.docx
195	Procedure.HSEQ.002 - Crisis Preparation.pdf
196	Procedure.HSEQ.003 - CMP - Business Recovery and Continuity Plan - Main Office.pdf
197	Procedure.HSEQ.004 - CMP - Business Recovery and Continuity Plan - Kwinana Swift Power Station.pdf
198	Risk Assessments\KPS-Likelihood Matrix-1.0.pdf
199	KPS-Risk Rating Matrix-1.0.pdf
200	KWINANA-RISK ANALYSIS-05.pdf
202	Kwinana Swift Site Visit 10 –11 September 2019.pdf
204	2019.09.15 Check List ERA Licence fee invoices and remittance notices.xlsx
205	2019.09.18 Check List ERA Licence fee invoices and remittance notices - KT.xlsx
206	09092019 - Letter to the ERA from Western Energy re Change of Ownership-signed.pdf
207	5.05.16.pdf
208	ECON - ERA - ERA 100204 - 22.08.14.pdf #262-283
222	26.08.15.pdf
223	26.08.16.pdf
255	Technology One
256	WHS
257	PW servicing
258	Western Energy Budget for 2015-16 - Capex V2.msg
259	20190129 KSPS Incident.pdf
260	20190313 KSPS Incident.pdf
261	2014 08 August - Maintenance Plan.xlsx
262	2015 06 June - Maintenance Plan.xlsx
263	2016 10 October - Maintenance Plan.xlsx
264	2018 10 October - Maintenance Plan.xlsx
265	2019-02 Service bulletins completed and actions.xlsx
266	1. Incident Report - Sunday 24 September 2017.msg
267	2. Incident Report - Monday 25 September 2017.msg
268	3. Incident Report - Friday 29 September 2017.msg
269	4. Incident Report - Sunday 12 November 2017.msg
270	5. Incident Report - 02 January 2018.msg
271	6. Incident Report - Sunday 14 January 2018.msg
272	7. Incident Report - Wednesday 1 August 2018.msg
273	2017 05 May - Maintenance Plan.xlsx

#	Document Title
274	2017 - Incidents Summary.docx
276	RE_ Western Energy KSPS - Data backup of historian and systems on site.msg
277	DCS-Perth Energy-External Network Penetration Test Report_Sep2019.pdf
278	DCS-Perth Energy-External Penetration Testing Report_May2018.pdf
279	Policy.IT.006 IT Network Security Policy (1).pdf
280	Procedure.Operations.028 - IT Security - Generation (KWN) (1).pdf
282	Policy.IT.001 - Information Technology.pdf
284	2019.04.18 PEH Group Structure.pdf
286	4GTProcedure_Operations_004_Rev1_Contractor_Management_Ektimo (1).docx
287	HNEProcedure_Operations_004_Rev1_Contractor_Management_Ektimo (1).docx
288	JHA images for upload (1).docx
289	Online WHS overview.docx
290	Perth Energy JSA (1).pdf
291	Policy_Finance_001_Expense_Reimbursement.pdf
292	Policy_HR_001_Leave.pdf
293	Policy_HR_002_Alcohol_Other_Drugs.pdf
294	Policy_HR_003_Equal_Employment_Opportunity.pdf
295	Policy_HR_004_Fitness_For_Work.pdf
296	Policy_HR_005_Personnel_File_Access.pdf
297	Policy_HR_006_Workplace_Related_Social_Functions.pdf
298	Policy_HR_007_Sports_Activities_Events.pdf
299	Policy_HR_008_Code_of_Conduct.pdf
300	Policy_HR_009_Termination_of_Employment.pdf
301	Policy_HR_010_Social_Media.pdf
302	Policy_HR_011_Recruitment.pdf
303	Policy_HR_0013_Hours_of_Work_and_Work_Pattern_policy.pdf
304	Policy_IT_001_Information_Technology.pdf
305	Principles_Corporate_001_People_PEPL_.pdf
306	Principles_Corporate_002_Health_Safety_PEPL_.pdf
307	Principles_Corporate_003_Environment_Sustainability_PEPL_10_2_.pdf
308	Principles_Corporate_004_Operational_Excellence_PEPL_.pdf
309	SWMS working at heights draft (1).doc
310	Checklist.pdf
311	Form.HSE.004 Use of Motor Vehicle Risk Assessment.docx
312	MTIwNDU2Procedure_Operations_030_Engineering_Change_Management_COMPRESSED.pdf
313	Procedure_Operations_018_Reporting_and_Investigating_an_Accident_KWN_.pdf
314	Responsibility.pdf
315	Procedure_HSEQ_008_Environmental_Management_System_Manual_PEPL_.pdf
316	Procedure_HSEQ_009_Environmental_Management_System_Registers_PEPL_.pdf
317	Procedure_HSEQ_010_Environmental_Management_System_Internal_Audit_Checklists_PEPL_.pdf
318	Procedure_HSEQ_011_Environmental_Management_System_Annual_Review_PEPL_.pdf
319	MTIwNDU2Procedure.Operations.030---Engineering-Change-Management-COMPRESSED (2).pdf
320	Procedure.Corporate.002 - Document Control.pdf
321	Procedure.Corporate.003 - Procurement Procedure.pdf
322	Procedure_Operations_004_Contractor_Management_Procedure_KWN_ (1).pdf
323	Procedure_Operations_014_Outages_KWN_ (1).pdf

#	Document Title
324	Procedure_Operations_015_Operating_Strategy_KWN_ (1).pdf
325	Procedure_Operations_016_Power_Station_Induction_KWN_ (1).pdf
326	Procedure_Operations_019_Site_Access_KWN_ (1).pdf
327	Procedure_Operations_020_Switching_Programs_HV_Equipment_and_Switchyard_KWN_ (1).pdf
328	Procedure_Operations_022_Verification_of_Certified_Reserve_Capacity_KWN_ (1).pdf
329	Procedure_Operations_025_Confined_Space_Gas_Testing_KWN_COMPRESSED_VERSION (1).pdf
330	Site_Induction_Booklet_Rev_4 (1).pdf
331	Site_Induction_Form_Worker_Updated_2019_Final (1).pdf
332	Procedure_Operations_018_Reporting_and_Investigating_an_Accident_KWN_ (1).pdf
337	Monthly Operating Report - Apr 15 v1.pdf
338	Monthly Operating Report - Apr 16 v1.pdf
341	Monthly Operating Report - Aug 15 v1.pdf
342	Monthly Operating Report - Aug 16 v1.pdf
343	Monthly Operating Report - Dec 13 v1.pdf
344	Monthly Operating Report - Dec 14 v1.pdf
345	Monthly Operating Report - Dec 15 v1.pdf
346	Monthly Operating Report - Dec 16 v1.pdf
348	Monthly Operating Report - Feb 15 v1.pdf
349	Monthly Operating Report - Feb 16 v1.pdf
350	Monthly Operating Report - Feb 17 v1.pdf
352	Monthly Operating Report - Jan 15 v1.pdf
353	Monthly Operating Report - Jan 16 v1.pdf
354	Monthly Operating Report - Jan 17 v1.pdf
357	Monthly Operating Report - July 15 v1.pdf
358	Monthly Operating Report - July 16 v1.pdf
361	Monthly Operating Report - June 15 v1.pdf
362	Monthly Operating Report - June 16 v1.pdf
364	Monthly Operating Report - Mar 15 v1.pdf
365	Monthly Operating Report - Mar 16 v1.pdf
366	Monthly Operating Report - Mar 17 v1.pdf
369	Monthly Operating Report - May 15 v1.pdf
370	Monthly Operating Report - May 16 v1.pdf
372	Monthly Operating Report - Nov 14 v1.pdf
373	Monthly Operating Report - Nov 15 v1.pdf
374	Monthly Operating Report - Nov 16.pdf
376	Monthly Operating Report - Oct 14 v1.pdf
377	Monthly Operating Report - Oct 15 v1.pdf
378	Monthly Operating Report - Oct 16 v1.pdf
381	Monthly Operating Report - Sep 15 v1.pdf
382	Monthly Operating Report - Sep 16 v1.pdf
385	Policy.Corporate.001- External & Public Relations.pdf
386	Policy.Corporate.002 - Privacy.pdf
387	Policy.Finance.001 - Expense Reimbursement.pdf
388	Policy.Finance.002 - Business Travel.pdf
389	Policy.Finance.003 - Delegation of Financial Authority.pdf
391	Plan.HSEQ.001 - Environmental Management System - EMP for Kwinana Swift Power Station.pdf

#	Document Title
392	Plan.HSEQ.003 - Dangerous Goods Management Plan (KWN).pdf
395	Procedure.Operations.014 - Outages (KWN).pdf
396	Procedure.Operations.015 - Operating Strategy (KWN).pdf
397	Procedure.Operations.016 - Power Station Induction (KWN).pdf
398	Procedure.Operations.017 - Preparation of Annual Asset Management Plan (KWN).pdf
399	Procedure.Operations.018 - Reporting and Investigating and Accident (KWN).pdf
400	Procedure.Operations.019 - Site Access (KWN).pdf
401	Procedure.Operations.020 - Switching Programs - HV Equipment and Switchyard (KWN).pdf
402	Procedure.Operations.022 - Verification of Certified Reserve Capacity (KWN).pdf
403	Procedure.Operations.025 - Confined Space Gas Testing (KWN).pdf
404	Procedure.Operations.026 - Maintenance Access Permit System (KWN).pdf
405	Procedure.Operations.027_Rev1 - Personal Protective Equipment (KWN).pdf
406	Procedure.Operations.029 - Tender Evaluation (KWN).pdf
407	Procedure.Operations.031- Working at Heights (KWN).pdf
408	Procedure.Operations.032 - OHS Management Plan (KWN).pdf
409	Procedure.Operations.033 - Software Change Management (KWN).pdf
410	Procedure.Operations.034 - Forklift Safety Procedure.pdf
411	Procedure.Operations.035 - Fire Protection Impairment Procedure.pdf
418	Kwinana Swift Site Visit 10 –11 September 2019.pdf
419	IT Backup Standard\Motherwell Support Log_Claim incl. Backup test Item 11.pdf
420	Business Cases for CAPEX\2018-09 Business case - Storage Shed at KSPS.pdf"
421	20191112 Risk Register.xlsx

The review was conducted in conjunction with the Performance Audit during October – November 2019 and included desktop review and one half day in head office and one day on site to execute review plan, interview sessions and report writing. In total the Review planning, execution and report writing required 80 hours of Power and Energy Services' Simon Ashby's time and 20 hours of Nicole Davies' time.

3.2 Objective of the Asset Management System Review

The objective of the review is to examine the effectiveness of the processes used by the Western Energy to deliver asset management, the information systems supporting asset management activities and the data and knowledge used to make decisions about asset management. These elements were examined from a life cycle perspective i.e. planning, construction, operation, maintenance, renewal, replacement and disposal using the guidelines developed by the Economic Regulation Authority.

3.3 Asset Management System Effectiveness Rating

The Audit and Review Guidelines – Electricity and Gas Licences (March 2019) (section 5.1.6.2) states that the asset management review report must provide a table that summarises the auditor's assessment of both the process and policy definition rating and the performance rating for each key process in the licensee's asset management system using the scales described in [Table 12](#) and [Table 13](#). It is left to the judgement of the auditor to determine the most appropriate rating for each asset management process.

Table 12 Asset Management Process and Policy Definition Adequacy Ratings

Rating	Description	Criteria
A	Adequately defined	Processes and policies are documented. Processes and policies adequately document the required performance of the assets. Processes and policies are subject to regular reviews and updated where necessary. The asset management information system(s) are adequate in relation to the assets being managed.
B	Requires some improvement	Processes and policies require improvement. Processes and policies do not adequately document the required performance of the assets. Reviews of processes and policies are not conducted regularly enough. The asset management information system(s) requires minor improvements (taking into consideration the assets being managed).
C	Requires substantial improvement	Processes and policies require improvement. Processes and policies do not adequately document the required performance of the assets. Reviews of processes and policies are not conducted regularly enough. The asset management information system(s) requires minor improvements (taking into consideration the assets being managed).
D	Inadequate	Processes and policies are not documented. The asset management information system(s) is not fit for purpose (taking into consideration the assets being managed).

Table 13 Asset Management Performance Ratings

Rating	Description	Criteria
1	Performing effectively	The performance of the process meets or exceeds the required levels of performance. Process effectiveness is regularly assessed, and corrective action taken where necessary.
2	Improvement required	The performance of the process requires some improvement to meet the required level. Process effectiveness reviews are not performed regularly enough. Recommended process improvements are not implemented.
3	Corrective action required	The performance of the process requires substantial improvement to meet the required level. Process effectiveness reviews are performed irregularly, or not at all. Recommended process improvements are not implemented.
4	Serious action required	Process is not performed, or the performance is so poor the process is considered to be ineffective.

3.4 Deviations from the Review Plan

There have been no deviations from the Review plan.

3.5 Follow Up Review Process

This is the third Performance Audit and Asset Management Review conducted since the issue of the licence. There are no recommendations arising from this audit that require post audit action plans. As

detailed in section 5.1.8 of the Audit Guidelines (March 2019) recommendations for licence obligations, asset management processes or effectiveness criteria that received a rating other than those detailed in section 5.1.8. have been provided directly to the licensee.

3.6 Follow-Up from Previous Review Findings

The organisation has implemented the recommendations of the previous review where possible and as required by Section 5.1.5 of the Audit Guidelines (March 2019). Table 14 below details how all recommendations were addressed and their status in the current review period.

Table 14 Ineffective components recommendations, previous Review Implementation Plan

A Resolved before the end of the previous review period.				
Reference (no. /yr)	Process and policy deficiency / Performance deficiency, (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Auditor's recommendation or action taken	Date resolved	Further action required, (Yes/No/Not Applicable), Details of further action required (including current recommendation reference if applicable)
None				

B Resolved during the current review period.				
Reference (no. /yr)	Process and policy deficiency / Performance deficiency, (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Auditor's recommendation or action taken	Date seen resolved / ref	Further action required, (Yes/No/Not Applicable) &, Details of further action required (including current recommendation reference if applicable)
1/2014	B2 Asset Operations Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition and accounting data.	Record assessment of assets' physical and structural condition in the asset register.	Tech One and Capex budget 8/2015	No

	Information in the asset management system (AMS) database does not yet include information on the asset physical/structural condition. This information is available from site diaries, however the retrieval of this information will be laborious.			
2/2014	B2 Asset Maintenance Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule. While the records of maintenance activities can be traced through the site diaries, the records of work orders in the AMIS do not yet include actual completion of the activities or condition of the assets.	Records of actual completion of maintenance activities should be entered in the TechnologyOne Asset Management System and should be traceable to the work activities.	8/2015	No
3/2014	B2 Asset Management Information System Adequate system documentation for users and IT operators. Some documents such as the "Crisis Management Plan" are in draft form and should be finalised.	Ensure that, as appropriate, documents in draft or under review are finalised and approved.	4/2015 Rev 5 CMP	No

4/2014	B3 Contingency Planning Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks. Both the Emergency Response Plan and the Kwinana Power Station Emergency Response Procedure contain similar information, however they also have differences. In case of emergency, one of the documents should take precedence over the other.	4/2014 Both the Emergency Response Plan and the Kwinana Power Station Emergency Response Procedure contain similar information, however they also have differences. In case of an emergency, one of the documents should take precedence over the other and that this should be clarified in the KSAMS and in the documents. Both documents should be reviewed side by side to ensure consistency and, if necessary, one withdrawn.	11/2016 rev 2 ERP	No
5/2014	B3 Contingency Planning	Refer to recommendation 3/2014	4/2015 Rev 5 CMP	No

	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks. The Crisis Management plan has been consolidated from three separate plans and has been in operation since 2012. This plan is still shown to be in draft, however this is unlikely as the plan has been signed off, in use for a long time and had a number of updates.			
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C. Unresolved at end of the current review period				
Reference (no. /yr)	Process and policy deficiency / Performance deficiency, (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Auditor's recommendation or action taken	Date seen resolved / ref	Further action required, (Yes/No/Not Applicable) &, Details of further action required
Not Applicable				

3.7 Asset Management System Recommendations and Action Plans

As stipulated in section 5.3 of the Audit and Review Guidelines – Electricity and Gas Licences (March 2019), the Audit Team notes that the Asset Management Review Post Implementation Plan does not form part of the Audit Opinion. It is the responsibility of the licensee to ensure actions are undertaken as determined by Western Energy.

3.8 2019 Review Asset System Deficiencies/Recommendations

Table 15 Current Review Asset System Deficiencies / Recommendations (Adequacy C or D and/or Performance 3 or 4)

Table of Current Review Asset System Deficiencies/Recommendations			
A. Resolved during current Review period			
Ref.	Asset System Deficiency, (Rating / Asset Management System Component & Effectiveness Criteria / Details of Asset System Deficiency)	Date Resolved (& management action taken)	Auditors comments
None			

B. Unresolved at end of current Review period			
Ref. (no./year)	Process and policy deficiency / Performance deficiency, (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Auditors' Recommendation	Action taken by the licensee by end of review period
None			

APPENDIX 1 - PERFORMANCE AUDIT

WESTERN ENERGY

NOVEMBER 2019

Table 16 Performance Audit

REF*	LICENCE CONDITION	RELATED LEGISLATION	LEGISLATIVE/LICENCE, REQUIREMENT	AUDIT PRIORITY	AUDITING FINDING, RELATED DOCUMENTATION &/OR CONTROL SYSTEMS/AUDIT EVIDENCE, → CORRECTIVE ACTION (CA) OPPORTUNITY FOR IMPROVEMENT	ADEQUACY OF CONTROLS	COMPLIANCE RATING
SECTION 8: TYPE 1 REPORTING REQUIREMENTS							
THERE ARE NO TYPE 1 REPORTING REQUIREMENTS APPLICABLE TO EGL19							
SECTION 9: ELECTRICITY INDUSTRY CUSTOMER TRANSFER CODE - PART 3 - CUSTOMER/ CONNECTION INFORMATION/DATA							
101	Generation Licence condition 5.3.1	Electricity Industry Act section 13(1)	A licensee must provide the Authority with a performance audit conducted by an independent expert acceptable to the Authority not less than once every 24 months.	5	<p>This is the third Audit conducted by an independent expert for the current licensee since the licence was granted on 15 September 2008.</p> <p>The requirement for the audit is monitored by the Generation Lead. Additionally, it is raised in email communications and correspondence with the Secretariat. GES was appointed with the Authority's approval to undertake the performance audit for the audit period</p>	A	1

					<p>on the 13th September 2019 (Authority Document Ref: D206354). Previous Audit Period 1 October 2012 to 30 September 2014 Report was provided and published on the Authority's Website. Current Audit Period 1 October 2014 – 30 September 2019 report to be provided to the Authority for publishing.</p> <p>The organisation has identified the requirement in the following documentation; ERA Generation Licence Compliance [Procedure. Operations.008], Monthly Operating Reports, PEH Group Business Performance Reports, Online WHS System – Compliance Activity, Various communication between licensee and the Authority, Audit Plan developed and approved in accordance with Audit Guidelines, Discussion with Manager Compliance & Risk.</p> <p>The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents</p>		
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102	Generation Licence condition 5.1.1	Electricity Industry Act, section 14(1)(a)	A licensee must provide for an asset management system.	4	<p>The licensee has provided for an asset management system and this has been verified during a site inspection of both Kwinana Swift Power Station and head office sites.</p> <p>The organisation has recognised ongoing review and management of the asset management plans. The organisation has identified the requirement in the following documentation, system controls and processes; Monthly Operating Reports, PEH Group Business Performance Reports, Online WHS System, Tech One maintenance system, WE Capex Budgets, Asset Management System, Annual Asset Management Plans [2014-2019], Annual Maintenance Plans.</p> <p>The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents</p>	A	1
103	Generation Licence condition 5.1.2 and 5.1.3	Electricity Industry Act, section 14(1)(b)	A licensee must notify details of the asset management system and any substantial changes to it to the Authority.	4	The asset management system was provided to the Authority as part of generation licence applications. There have been no such substantial changes	A	1

					to the AMS within the audit period. The Asset Management Plans have been updated annually throughout the audit period. Therefore, the obligation has not been rated for the audit period		
104	Generation Licence condition 5.1.4	Electricity Industry Act, section 14(1)(c)	A licensee must provide the Authority with a report by an independent expert about the effectiveness of its asset management system every 24 months or such longer period as determined by the Authority.	5	<p>This is the third Asset Management Review conducted by an independent expert for the current licensee since the licence was granted in 15 September June 2008. The requirement for the audit is monitored by the Generation Lead. Additionally, it is raised in email communications and correspondence with the Secretariat. GES was appointed with the Authority's approval to undertake the performance audit for the audit period on the 13 September 2019 (Authority Document Ref: D206354). Previous Audit Period 1 October 2012 to 30 September 2014. Report was provided and published on the Authority's Website. Current Audit Period 1 October 2014 – 30 September 2019 report to be provided to the Authority for publishing.</p> <p>The organisation has identified the requirement in the following</p>	A	1

					<p>documentation; ERA Generation Licence Compliance [Procedure. Operations.008], Monthly Operating Reports, PEH Group Business Performance Reports, Online WHS System – Compliance Activity, Various communication between licensee and the Authority, Audit Plan developed and approved in accordance with Audit Guidelines, Discussion with Manager Compliance & Risk.</p> <p>The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents</p>		
105	Generation Licence condition 4.2.1	Electricity Industry Act section 17(1)	A licensee must pay the prescribed licence fees to the Authority according to clauses 6, 7 and 8 of the Economic Regulation Authority (Licensing Funding) Regulations 2014.	4	<p>Licence fees were assessed during the audit period for the Annual Licence Charge and the Quarterly Standing Data Charges. In total there were 6 Annual fees due within the audit period. All but 1 was paid in accordance with the licence requirements. There were 18 quarterly Standing Data Charge Invoices received during the audit period and 2 of these were not paid in accordance with the invoice terms of 30 days of receipt of the invoice.</p>	B	2

					<p>The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents of payments with the Authority.</p> <p>RECOMMENDATION – 01/2019</p> <p>CRITERIA: The Licensee is required to pay the invoices issued by the Authority for the standing data charges within 30 days of issue of the invoice and Generation Licence fee before the 15 October annually.</p> <p>CURRENT CONDITION: There were 3 invoices paid past the required timeframe.</p> <p>CAUSE: The reason for the late payments (ERA100415, ERA100523 and ERA101926) were due scheduling of payment.</p> <p>CONSEQUENCE: The terms of the Standing Data and Annual Licence invoice payments were marginally late by up to 2 days on 3 occasions.</p> <p>CORRECTIVE ACTION: The organisation could include the payment of licence fees in the Online WHS or</p>		
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					similar Compliance management process established by AGL. Ensuring the invoices are paid prior to the due dates to allow for transfer delays. Communicate the requirement to accounts department to ensure ongoing compliance.		
106	Generation Licence condition 4.1.1	Electricity Industry Act section 31(3)	A licensee must take reasonable steps to minimise the extent or duration of any interruption suspension or restriction of the supply of electricity due to an accident emergency potential danger or other unavoidable cause.	5	<p>The Licensee has taken reasonable steps to minimise the extent or duration of any unavoidable interruption, suspension or restriction of electricity. Processes implemented include Emergency Response Procedures, Audit Risk Management Committee, Asset Management Plans (updated throughout the audit period) and Budgets. Additionally, the Licensee has taken significant measures to ensure the plant performance.</p> <p>The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents (including, operational and management records), and verification of processes on site.</p>	A	1

107	Generation Licence condition 4.1.1	Electricity Industry Act section 41(6)	A licensee must pay the costs of taking an interest in land or an easement over land.	4	A long term lease exists over the property, which was valid and has been executed in compliance with the lease terms (including payment) during the audit period. The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents, Site Visit and head office visit.	A	1
SECTION 12: ELECTRICITY LICENCES - LICENCE CONDITIONS AND OBLIGATIONS							
119	Generation Licence condition 4.3.1	Electricity Industry Act section 11	A licensee and any related body corporate must maintain accounting records that comply with the Australian Accounting Standards Board Standards or equivalent International Accounting Standards.	4	The Western Energy Pty Ltd WE Financial Statements have been prepared by third party accountants during the audit period. The Financial Statements contain a statement of compliance that they have been prepared in accordance with all Australian Accounting Standards and Interpretations. All audits were completed by KPMG, declarations of independence and compliance with Australian Accounting Standards were verified.	A	1

					The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review financial reports during the audit period.		
121	Generation Licence condition 5.3.2	Electricity Industry Act section 11	A licensee must comply and require its auditor to comply with the Authority's standard audit guidelines for a performance audit.	4	<p>Direct instructions from Licensee to Auditor to comply with the Economic Regulation Authority's guidelines. Copies of communications received from the Authority relating to audit requirements sent by Licensee through to Auditor to convey requirements specifically the undertaking of audits in compliance with the Audit & Review Guidelines: Electricity Gas and Water Licences.</p> <p>The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents, Communication between the Authority and the Licensee</p>	A	1
122	Generation Licence condition 5.1.5	Electricity Industry Act section 11	A licensee must comply and must require the licensee's expert to comply with the relevant aspects of the Authority's standard audit guidelines for an asset management system review.	4	Direct instructions from Licensee to Auditor to comply with the Economic Regulation Authority's guidelines. Copies of communications received from the Authority relating to audit requirements sent by Licensee through to Auditor to	A	1

					<p>convey requirements specifically the undertaking of audits in compliance with the Audit & Review Guidelines: Electricity, Gas and Water Licences.</p> <p>The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents, Communication between the Authority and the Licensee</p>		
123	Generation Licence condition 4.4.1	Electricity Industry Act section 1	In the manner prescribed a licensee must notify the Authority, if it is under external administration or if there is a significant change in the circumstances that the licence was granted which may affect the licensee's ability to meet its obligations.	4	<p>Under Licence clause 15.1 the licensee is required to report relevant information to the Authority in the event that it: (a) Is under external administration, (b) Experiences a change in its corporate financial or technical circumstances upon which this license was granted; and that change may materially affect the licensee's ability to perform its obligations under this license, (c) Changes its name, ABN or address. Confirmed that for the period 1 October 2014 to 30 September 2019 no such changes arose. The change in ownership was advised to the ERA.</p> <p>The conclusion was determined via; Interview with supervisory & operational</p>	A	NR

					personnel, Review documents including Business Performance Reports, Budgets, Financial Reports and Monthly Operating Meetings.		
124	Generation Licence condition 4.5.1	Electricity Industry Act section 11	A licensee must provide the Authority in the manner prescribed with any information that the Authority requires in connection with its functions under the Electricity Industry Act.	4	<p>During the Audit Period the Licensee has provided the Authority information it required in connection with its functions under the Electricity Industry Act. All licensees are required to submit a compliance report to the Authority covering all of its type 1 and type 2 licence obligations for each financial year (1 July to 30 June inclusive) by 31 August immediately following the year that is the subject of the report. Compliance with submission of the report is confirmed during the audit period the reports were submitted on the following dates; 2014 - 2015 Report 15th July 2015, 2015 - 2016 Report – 6th July 2016, 2016 - 2017 Report – 10th July 2017, 2017 - 2018 Report – 17th July 2018, 2018 -2019 10th July 2019.</p> <p>Compliance was noted during all the reports, however, during the audit review of compliance, it is noted that the</p>	B	2

					<p>Compliance Report (due 31 August 2015) did not reflect the late payment of the Standing Data Charge for the quarter commencing March 2015 should have been reflected in the Compliance Report for 2014-2015 Year. Compliance Report (due 31 August 2016) did not reflect the late payment of Annual Licence fees. Compliance Report for the 2018-2019 year did not reflect the late payment of fees for the Standing Data charges for the December 2018 quarter.</p> <p>The conclusion was determined via; Interview with supervisory & operational personnel, Review of compliance reports, Desktop Review documents.</p> <p>RECOMMENDATION – 02/2019</p> <p>CRITERIA: The Licensee is required to ensure that non-compliances are reported in a Compliance Report which is to be submitted by the 31st August annually.</p> <p>CURRENT CONDITION: On 3 occasions the Compliance Report prepared during the audit period did not report a non-compliance in reference to late payment</p>		
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					<p>of the licence fee for the 2014-2015, 2015-2016 and 2018-2019 Compliance Reporting years. It is noted that the Compliance Report for the 2018-2019 did report late submission of data to the Authority for the standing data charges.</p> <p>CAUSE: The awareness to the requirement to include the late payment of fees as a compliance obligation was not established and there are not processes implemented within the organisation to identify the compliance requirement proactively. ERA Generation Licence Compliance [Procedure. Operations.008] does reference the process for annual compliance report preparation.</p> <p>CONSEQUENCE: On 3 occasions during the audit period 2 standing data and 1 annual licence fee invoices were paid outside the required payment terms and this event was not captured in the annual compliance reporting process.</p> <p>CORRECTIVE ACTION: A process to ensure compliance requirements have been met and a documented liaison</p>		
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					relating to the legislative requirements and content of the Compliance Report prior to submission to the Authority is required. The Tech One system does not include the Compliance Report in the Compliance Activity and this could be optimised to ensure this is an automated process to ensure ongoing compliance. Updating the procedure to reference conducting internal audits prior to the submission of the Compliance Report would also be beneficial.		
125	Generation Licence condition 3.8.1 and 3.8.2	Electricity Industry Act section 11	A licensee must publish any information it is directed by the Authority to publish within the timeframes specified.	4	<p>According the Licensee's Generation Licence EGL19; the term "publish" in relation to a report or information means either: (a) posting the report or information on the licensee's website; or (b) sending the report or information to the Authority to be published on the Economic Regulation Authority's website.</p> <p>The Licensee has submitted the previous Performance Audit and Asset Management System Review. This was published on the Economic Regulation Authority's Website on the 12 March</p>	A	NR

					<p>2015 and a notice published on the advising the outcome and subsequent audit period. There have been no other requests by the Authority to publish information during the audit period.</p> <p>The conclusion was determined via; Interview with supervisory & operational personnel, review of Economic Regulation Authority's website, Desktop Review documents.</p>		
126	Generation Licence condition 3.7.1	Electricity Industry Act section 11	Unless otherwise specified all notices must be in writing.	4	<p>During the audit period the Licensee maintained records of communication with the Authority, primarily via mail or email communication. All responses have been in writing and specific notices in relation to the Generation Licence have been reviewed as part of the audit.</p> <p>The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents, review of communication electronic and hardcopy, verification of processes on site.</p>	A	1
SECTION 14: ELECTRICITY INDUSTRY METERING CODE - LICENCE CONDITIONS AND OBLIGATIONS							

324	Generation Licence condition 4.1.1	Electricity Industry Metering Code, clause 3.3B	If a user is aware of bi-directional electricity flows at a metering point that was not previously subject to a bi-directional flows or any changes in a customer's or user's circumstances in a metering point that will result in bi-directional flows the user must notify the network operator within 2 business days.	4	There has been no change with respect to bi-directional flows during the audit period. The Licensee continues to import power from Synergy as required. Normal operating conditions requires this only occurs when the plant is not generating sufficient electricity for site consumption.	NP	NR
339	Generation Licence condition 4.1.1	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.	4	WPN has primary responsibility for the management and monitoring of meters. There were no outages or malfunctions identified during the audit period. Production staff monitor usage through production calculations and can generally identify an error. Discussions with Western Energy Personnel. The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents, verification of processes and systems on site	A	NR
371	Generation Licence condition 4.1.1	Electricity Industry Metering Code clause 4.4(1)	If there is a discrepancy between energy data held in a metering installation and in the metering database the affected Code participants and the network operator must	5	There have been no discrepancies between energy data held in metering installation and in the metering database. As such compliance with this requirement	NP	NR

			liaise to determine the most appropriate way to resolve the discrepancy.		cannot be made. Discussions with the Generation Lead. The organisation has established a process to review data, Theoretical Energy Schedule (TES) Reports are prepared and were sighted during the audit. The conclusion was determined via; Interview with supervisory & operational personnel, Desktop Review documents Note: The above audit procedures are applicable for Ref 371-461		
372	Generation Licence condition 4.1.1	Electricity Industry Metering Code clause 4.5(1)	A Code participant must not knowingly permit the registry to be materially inaccurate.	5	Western Energy does not maintain any standing data or energy data in relation to the metering installations captured under the Metering Code. These activities are managed by the Network Operator and are outside the control of the Licensee. As the Network operator maintains sole responsibility for the management of standing data within the registry and/or metering database these obligations are not relevant to the Licensee's operations for the period 1 October 2014 to 30 September 2019.	NP	NR

373	Generation Licence condition 4.1.1	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.	4	As above.	NP	NR
388	Generation Licence condition 4.1.1	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.	5	The network operator has not requested the assistance of Western Energy with respect to their metering installation during the audit period. Note: The Licensee has no meters and Western Power owns the meters at Kwinana Swift Power Station Terminal substation and is responsible for their quality control.	NP	NR
402	Generation Licence condition 4.1.1	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.	4	There are no meters maintained by the Licensee to collect information or data from billing. The Network Operator is responsible for metering installations.	NP	NR

406	Generation Licence condition 4.1.1	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.	5	There have been no requests to any user to collect information during the audit period. Therefore, this obligation has not been rated.	NP	NR
410	Generation Licence condition 4.1.1	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.	5	During the audit period there has been no provision of standing data by the network operator to the user that resulted in the user notifying the network operator of a change in attributes.	NP	NR
416	Generation Licence condition 4.1.1	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.	4	No tests have been requested during the audit period 1 October 2014 to 30 September 2019.	NP	NR
417	Generation Licence condition 4.1.1	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.	4	As above.	NP	NR
435	Generation Licence condition 4.1.1	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	4	The network operator did not make any requests for customer attributes information during the audit period.	NP	NR

			missing or incorrect within the timeframes prescribed.				
448	Generation Licence condition 4.1.1	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.	4	There have been no breaches of the rules, procedures, agreements and criteria during the audit period.	A	1
451	Generation Licence condition 4.1.1	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.	5	The Kwinana Swift Power Station site has well established communication processes such as a main telephone line, mobile telephone coverage, remote system monitoring, and wireless internet access. During the audit period there have been no communication issues arising.	A	1
453	Generation Licence condition 4.1.1	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.	4	During the period 1 October 2014 to 30 September 2019 the network operator did not request the licensee to provide its contact details. There have been no changes made to Licensee's contact details. However, the ownership of Western Energy Pty Ltd changed on the 2 nd September 2019. The ERA were notified of this in writing on the 9 th September. The acquisition by AGL was not considered to materially affect	NP	NR

					Western Energy's ability to perform its obligations under the Generation Licence.		
454	Generation Licence condition 4.1.1	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.	4	There have been no changes in contact details for the Licensee during the audit period. However, the ownership of Western energy Pty Ltd changed on the 2 nd September 2019. The ERA were notified of this in writing on the 9 th September. . The acquisition by AGL was not considered to materially affect Western Energy's ability to perform its obligations under the Generation Licence.	NP	NR
455	Generation Licence condition 4.1.1	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.	4	During the period 1 October 2014 to 30 September 2019 the Licensee has established confidentiality procedures and has not disclosed confidential information in connection to the Code.	A	NR
456	Generation Licence condition 4.1.1	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.	4	As above.	NP	NR

457	Generation Licence condition 4.1.1	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.	5	There have been no disputes arising during the audit period.	NP	NR
458	Generation Licence condition 4.1.1	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.	5	As above	NP	NR
459	Generation Licence condition 4.1.1	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.	5	As above	NP	NR
460	Generation Licence condition 4.1.1	Electricity Industry Metering Code clause 8.1(4)	If the dispute is resolved by representative negotiations, senior management negotiations, or CEO negotiations the	4	As above	NP	NR

			disputing parties must prepare a written and signed record of the resolution and adhere to the resolution.				
461	Generation Licence condition 4.1.1	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 expedition as the requirements of Part 8 of the Code and a proper hearing and determination of the dispute permit.	5	As above	NP	NR

SECTION 16: ELECTRICITY LICENCES - LICENSEE SPECIFIC CONDITIONS AND OBLIGATIONS

THIS SECTION IS NOT APPLICABLE TO WESTERN ENERGY PTY LTD AS THERE HAVE BEEN NO SPECIFIC CONDITIONS AND OBLIGATIONS ATTACHED TO THE GENERATION LICENCE

NOTE NP - not possible to provide a compliance rating because no activity has taken place to exercise the obligation during the audit period

NA - Not applicable to audit period and as such not assessed

APPENDIX 2 - ASSET MANAGEMENT REVIEW

WESTERN ENERGY

NOVEMBER 2019

Introduction

Kwinana Swift Power Station operates under generation licence EGL19.

It was originally conceived as an emergency backup station and to provide black start capability, and the expectation was for limited operation. This was evidenced during the first half of the 5 year audit/review period but more recently it has been operated to assist meeting morning and evening demand and it is now operating around 800hrs p.a. (≈10% of the year.)

In this mode generation is selected depending on market conditions and Perth Energy's current internal conditions of gas supply and retail demand.

The aero derivative gas turbines are suited to quick repeated starts and short run periods and are designed for the 25 year life of the station operating as base load and are therefore operated well within their capacity.

It is estimated that operations in the 10 years since commencement are equivalent to 3 years design operation.

A service agreement is in place with the gas turbine original equipment manufacturer, OEM, to provide technical support and plant and control system audits. Contracts are in place for maintenance of the GTs, balance of plant, site security etc.

Operations are by Western Energy with remote stop start control by AEMO being the normal mode. Bidding and advice of availability to AEMO is via Perth Energy.

Perth Energy was taken over by AGL on September 2nd 2019, near the end of the review period. It is anticipated that the AGL's asset management system and processes will be introduced over a period of time but at this stage operations remain the same.

Site operations are well managed with condition monitoring, planning and managing the O&M to meet stakeholders' needs but there appears to be a disconnect between head office, procedures and actual operations on site. This is partially due to the poor internet communication connections between the two areas and the earlier mode of operation where the generators were rarely, if at all, called for. The fragmented documentation system in further exacerbates this with data stored on an array of drives, WHS and Technology One and in some cases being manually transferred. With the introduction of faster comms and Technology One on site this should improve and we understand that in the longer term Perth Energy will come under AGL's SAP operating system.

Safety LTI, environmental and community issues have all been zero throughout the reporting period.

One non-compliance was reported to the ERA during the reporting period concerning the late notification of capacity. No penalties have been applied for availability or capacity to either of the contractors under the O&M contracts during the reporting period.

Table 17 Effectiveness Criteria Descriptors

1	Key Process - Asset Planning Asset planning strategies focuses on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price).	Outcome Asset planning is integrated into operational or business plans, providing a framework for existing and new assets to be effectively utilised and their service optimised.
1.1	Asset management plan covers the processes in this table	
1.2	Planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning	
1.3	Service levels are defined in the asset management plan	
1.4	Non-asset options (e.g. demand management) are considered	
1.5	Lifecycle costs of owning and operating assets are assessed	
1.6	Funding options are evaluated	
1.7	Costs are justified and cost drivers identified	
1.8	Likelihood and consequences of asset failure are predicted	
1.9	Asset management plan is regularly reviewed and updated	
2	Key Process - Asset creation and acquisition , Asset Creation/Acquisition is the provision or improvement of assets.	Outcome , The asset acquisition framework is economic, efficient and cost-effective; it reduces demand for new assets, lowers service costs and improves service delivery. .
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions	
2.2	Evaluations include all life-cycle costs	
2.3	Projects reflect sound engineering and business decisions	
2.4	Commissioning tests are documented and completed	
2.5	Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood	
3	Key process - Asset disposal Asset disposal is the consideration of	Outcome The asset management framework minimises

	alternatives for the disposal of surplus, Obsolete, under-performing or unserviceable assets.	holdings of surplus and underperforming assets and lowers service costs. The cost-benefits of disposal options are evaluated.
3.1	Under-utilised and under-performing assets are identified as part of a regular systematic review process	
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	
3.3	Disposal alternatives are evaluated	
3.4	There is a replacement strategy for assets	
4	Key Process - Environmental analysis, Environmental analysis examines the asset management system environment and assesses all external factors affecting the asset management system. .	Outcome The asset management system regularly assesses external opportunities and threats and identifies corrective action to maintain performance requirements. .
4.1	Opportunities and threats in the asset management system environment are assessed	
4.2	Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	
4.3	Compliance with statutory and regulatory requirements	
4.4	Service standard (customer service levels etc) are measured and achieved	
5	Key Process - Asset operations Asset operations is the day-to- day running of assets (where the asset is used for its intended purpose).	Outcome The asset operation plans adequately document the processes and knowledge of staff in the operation of assets so service levels can be consistently achieved.
5.1	Operational policies and procedures are documented and linked to service levels required	
5.2	Risk management is applied to prioritise operations tasks	
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	
5.4	Accounting data is documented for assets	
5.5	Operational costs are measured and monitored	

5.6	Staff resources are adequate and staff receive training commensurate with their responsibilities	
6	Key process - Asset maintenance Asset maintenance is the upkeep of assets.	Outcome The asset maintenance plans cover the scheduling and resourcing of the maintenance tasks so work can be done on time and on cost.
6.1	Maintenance policies and procedures are documented and linked to service levels required	
6.2	Regular inspections are undertaken of asset performance and condition	
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	
6.4	Failures are analysed and operational/maintenance plans adjusted where necessary	
6.5	Risk management is applied to prioritise maintenance tasks	
6.6	Maintenance costs are measured and monitored	
7	Key process - Asset Management Information System (MIS) An asset management information system is a combination of processes, data and software supporting the asset management functions	Outcome The asset management information system provides authorized, complete and accurate information for the day-to-day 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	
7.2	Input controls include suitable verification and validation of data entered into the system	
7.3	Security access controls appear adequate, such as passwords	
7.4	Physical security access controls appear adequate	
7.5	Data backup procedures appear adequate and backups are tested	
7.6	Computations for licensee performance reporting are accurate	
7.7	Management reports appear adequate for the licensee to monitor licence obligations	
7.8	Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	

8	Key Process - Risk Management Risk management involves the identification of risks and their management within an acceptable level of risk.	Outcome The risk management framework effectively manages the risk that the licensee does not maintain effective service standards
8.1	Risk management policies and procedures exist and are applied to minimise internal and external risks	
8.2	Risks are documented in a risk register and treatment plans are implemented and monitored	
8.3	Probability and consequences of asset failure are regularly assessed	
9	Key Process - Contingency Planning Contingency plans document the steps to deal with the unexpected failure of an asset	Outcome- Contingency plans have been developed and tested to minimise any major disruptions to service standards.
9.1	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	
10	Key Process - Financial Planning Financial brings together the financial elements of the service delivery to ensure its financial viability over the long term.	Outcome The financial plan is reliable and provides for the long- term financial viability of the services.
10.1	The financial plan states the financial objectives and identifies strategies and actions to achieve those	
10.2	The financial plan identifies the source of funds for capital expenditure and recurrent costs	
10.3	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	
10.4	The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	
10.5	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	
10.6	Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	
11	Key Process - Capital Expenditure Planning The capital expenditure plan provides a	Outcome - The capital expenditure plan provides reliable forward estimates of capital expenditure and

	<p>schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure for these works over the next five or more years. Since capital investments tend to be large and lumpy, projections would normally be expected to cover at least 10 years preferably longer. Projections over the next five years would usually be based on firm estimates.</p>	<p>asset disposal income. Reasons for the decisions and for the evaluation of alternatives and options are documented.</p>
11.1	There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	
11.2	The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	
11.3	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	
11.4	There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented	
12	<p>Key Process - Review of AMS The asset management system is regularly reviewed and updated.</p>	<p>Outcome The asset management system is regularly reviewed and updated.</p>
12.1	A review process is in place to ensure the asset management plan and the asset management system described in it remain current	
12.2	Independent reviews (e.g. internal audit) are performed of the asset management system	

Table 18 Asset Review Ratings and Recommendations

<p>1. Key Process - Asset Planning, Asset planning strategies focuses on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price).</p> <p>Outcome, Asset planning is integrated into operational or business plans, providing a framework for existing and new assets to be effectively utilised and their service optimised.</p>	<p>Asset management process and policy definition adequacy rating</p> <p>A</p>	<p>Asset management performance rating</p> <p>2</p>
<p>Interviewees:</p> <p>Elizabeth Aitken – General Manager Operations Kheng Lim – CFO Patrick Peak - General Manager EMR, Regulation Peter Durack – Manager Compliance & Risk Craig Beasland – IT Daniel Bailey – Senior OMT Electrical Marc Hettler – Generation Lead Ranjit Vivekananda - TECH1 (Asset Management System)</p>	<p>Relevant documentation:</p> <p>7 2016 March - Asset Management System v5.docx 12 2016-17 Asset Management Plan - V1.pdf 13 Asset Management Plan - 2017-18.docx 15 AMP\2018-19\Asset Management Plan - 2018-19 FINAL.pdf 16 2018 PM 01.xlsx 17 2018 PWPS critical spares.xlsx 18 AMP 2019-20 Overview.pdf 20 KSPS Asset Management Plan - 201811.pdf 21 Western Energy 2014 Audit Review Report EGL019.pdf 22 Western Energy 2014 Post Review Implementation Plan EGL019.pdf 24 Pre audit period 2012 Mar 6 - Wormald Signed Agreement.pdf 25 2017 Feb 22 - GHD Consultancy Agreement for Minor Engineering Works.pdf</p>	

26	2019.09.13 Letter re Effluent Services Agreement - Extension, Western Energy KSPS.pdf
27	Atlas Copco Service.pdf
28	Contract P18033C0301 Variation No. 1 Executed.pdf
29	Preferred Service Agreement_PW Power Systems_Western Energy_04042016.pdf
30	PWPS WE PSA_fully executed_5 APR 2016.pdf
31	Renewal Letter - 67357 - 15-16.pdf
32	SUEZ - Kwinana Services Agreement Feb 11 2019.pdf
33	Transpacific Cleanaway 30.03.15.pdf
34	Motherwell Automation.pdf
35	Western Energy Wilsons Patrol Agreement 2016 2017 1808_001 signed WE and Wilsons.pdf
36	Wilson Security - 01.09.15 to 31.08.16.pdf
37	Wilson Security 01.09.14 to 31.08.15.pdf
38	WESTERN_ENERGY_Fuel_Transfer_Procedure_final.pdf
39	WESTERN_ENERGY_RC_Cert_Kwinana_Donaldson_Operating_Protocol_signed _23062016.pdf
40	WESTERN_ENERGY_RC_Cert_ETACs_and_Amendments.pdf
41	Operating Maintenance Agreement_DBNGP_Western Energy_04102011.pdf
43	~\$cription TES report.docx
44	2015 Jul 15 - EGL Compliance Report.pdf
65	2018 ERA Licence Compliance - Western Energy Kwinana Swift Power Station.pdf
66	2019.04.18 Western Energy Compliance Breach Register.docx
68	2019.04.18 Western Energy Register of Public Complaints.xlsx
69	20190919 Compliance Activity.pdf
70	LandCorp Invoices\WEST0002 - LANDCORP - 26318 01.04.2015.pdf
129	Business Performance Report\Business Performance Report\2016 Business Performance Report Sample - Generation Section.pdf
135	PEH Group Business Performance Report May 2018 vFinal.pdf

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137	PEH Group Business Performance Report November 2017 v1.pdf
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143	PEH Group BPR Sept17 v1.pdf
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151	PEH Group Business Performance Report February 2019VFINAL.pdf
152	PEH Group Business Performance Report January 2018-Final.pdf
153	PEH Group Business Performance Report January 2019 V1.pdf
154	PEH Group Business Performance Report July 2017.pdf
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156	PEH Group Business Performance Report July 2019 vFINAL.pdf
157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
158	PEH Group Business Performance Report June 2018 vFinal.pdf
159	PEH Group Business Performance Report June 2019 vFinal.pdf
160	PEH Group Business Performance Report March 2018 v1.pdf
161	PEH Group Business Performance Report March 2019VFINAL.pdf
163	Item 2.1 FY16 Revised Budget 03Feb15.pdf
164	Item 4.1A FY16 Q3 Forecast v1 Combined (Revised).pdf

165	PEH Item 5.1 - FY18 Budget Presentation Final.pdf
166	PEH Item 5.1 - FY19 Budget Presentation (Final) 20180301.pdf
167	WE Capex - FY15 Budget.xlsx
168	WE Capex Budget FY18-FY22 v1.xlsm
169	WE Capex FY17-FY21.xlsm
170	WE Opex Workpad 20180124 - FY19 Budget.xlsm
181	WE Financial Statements March 15 v1 - Signed 30-04-15.pdf
182	WE Financial Statements Mar 16 - Signed.pdf
183	WE Financial Statements Mar 17 v1 (signed).pdf
184	WE Financial Statements Mar 18 v1 (signed).pdf
185	WE Financial Statements Mar 19 v1(Signed).pdf
189	Risk Register - Framework.xlsx
255	Technology One
256	WHS

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
1.1 Asset management plan covers the processes in this table.	7, 12, 13, 15, 16, 17, 18, 20, 21, 22, 43, 44, 65, 66, 68, 69, 70, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 255, 256		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
AMS addresses the processes in the table but has not been updated since 2016 despite changes in operation and updated ERA guidelines being issued. AMPs have however been annually updated.	N/A	AMS does not match current ERA Guidelines (March 2019)	Update the AMS	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
1.2 Planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning.	7, 12, 13, 15, 16, 17, 18, 20, 21, 22, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	

Power station was planned as emergency back up and black start with little or no use. It is now being used for morning and afternoon shifts when conditions suit.	Changing market conditions.	There is more activity. Servicing is based on hours run and/or time from last service.	Increased staffing levels. Same service plan applies but more frequently.
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Criteria	Evidence Ref#		Adequacy rating	Performance Rating
1.3 Service levels are defined in the asset management plan.	7, 12, 13, 15, 16, 17, 18, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 65, 66, 68, 69, 70, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 255, 256		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
The service levels are defined in the AMP and associated documents and are applicable to both emergency operation and double shifting.	Changing market conditions.	Greater operating hours	Increased staffing on site.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
1.4 Non-asset options (e.g. demand management) are considered.	N/A		N/A	N/A
Condition, (Performance)	Cause	Consequence	Corrective Action	
Not applicable.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
1.5 Lifecycle costs of owning and operating assets are assessed.	7, 12, 13, 15, 16, 17, 18, 20, 21, 22, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Most of the plant has run limited hours apart from certain balance of plant. In the 10 years of service the GTs have operated the equivalent of 3 years normal service.	Fundamentally an emergency back up power station more recently used for peaking.	More use of the station. Increased operating costs and revenue. Operating hours still remain within the design life of the GTs.	Life cycle cost had to be revised for greater operation	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
1.6 Funding options are evaluated.	7, 12, 13, 15, 16, 17, 18, 20, 21, 22, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 181, 182, 183, 184, 185, 189		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Prior to AGL takeover funding was from banks and the like. Re-financing was carried out following analysis of options. AGL have now cleared all debts with funding now within the group.	Market fluctuations in financing costs. Change of ownership.	Potential costs or savings. Now internally funded.	Follow the market and assess options N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
1.7 Costs are justified and cost drivers identified.	7, 12, 13, 15, 16, 17, 18, 20, 21, 22, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 181, 182, 183, 184, 185, 189		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Capital spending has been limited, a new stores shed being the only significant item in the reporting period. Board submission prepared and accepted with budget allocated.	Limited space in existing stores and more spares required with greater operating hours. Storage space shared with workshop	Operational and safety risks	Build new stores separate from workshop.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
1.8 Likelihood and consequences of asset failure are predicted.	7, 12, 13, 15, 16, 17, 18, 20, 21, 22, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
As emergency unit “fail to start” is a primary concern. Regular testing and checks reduce this risk. Contractual tests to confirm rated output are carried out twice a year, Double shifting tests the starting and performance ability.		Loss of revenue and reputation	Applying OEM maintenance and testing recommendations. Close relationship with OEM and reputable contractors and operators provide information of issues	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
1.9 Asset management plan is regularly reviewed and updated.	7, 12, 13, 15, 16, 17, 18, 20, 21, 22, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 256		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
The AMP has been reviewed and revised each year during the reporting period but still operates under the 2016 AMS		Out of date AMS	Revise AMS to reflect current guidelines and operations.	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.

None

2. Key Process - Asset creation and acquisition , Asset Creation/Acquisition is the provision or improvement of assets.	Asset management process and policy definition adequacy rating	Asset management performance rating
Outcome , The asset acquisition framework is economic, efficient and cost-effective; it reduces demand for new assets, lowers service costs and improves service delivery.	A	2
Interviewees: Elizabeth Aitken – General Manager Operations Kheng Lim – CFO Craig Beasland – IT Daniel Bailey – Senior OMT Electrical Marc Hettler – Generation Lead Ranjit Vivekananda - TECH1 (Asset Management System)	Relevant documentation: 7 2016 March - Asset Management System v5.docx 12 2016-17 Asset Management Plan - V1.pdf 13 Asset Management Plan - 2017-18.docx 15 Asset Management Plan - 2018-19 FINAL.pdf 24 Pre audit period 2012 Mar 6 - Wormald Signed Agreement.pdf 25 2017 Feb 22 - GHD Consultancy Agreement for Minor Engineering Works.pdf 26 2019.09.13 Letter re Effluent Services Agreement - Extension, Western Energy KSPS.pdf 27 Atlas Copco Service.pdf 28 Contract P18033C0301 Variation No. 1 Executed.pdf 29 Preferred Service Agreement_PW Power Systems_Western Energy_04042016.pdf 30 PWPS WE PSA_fully executed_5 APR 2016.pdf 31 Renewal Letter - 67357 - 15-16.pdf 32 SUEZ - Kwinana Services Agreement Feb 11 2019.pdf 33 Transpacific Cleanaway 30.03.15.pdf 35 Western Energy Wilsons Patrol Agreement 2016 2017 1808_001 signed WE and Wilsons.pdf 36 Wilson Security - 01.09.15 to 31.08.16.pdf 37 Wilson Security 01.09.14 to 31.08.15.pdf	

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41	Operating Maintenance Agreement_DBNGP_Western Energy_04102011.pdf
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143	PEH Group BPR Sept17 v1.pdf
144	PEH Group Business Performance Report April 2018 vFinal.pdf
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151	PEH Group Business Performance Report February 2019VFINAL.pdf
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159	PEH Group Business Performance Report June 2019 vFinal.pdf
160	PEH Group Business Performance Report March 2018 v1.pdf
161	PEH Group Business Performance Report March 2019VFINAL.pdf
321	Procedure.Corporate.003 - Procurement Procedure.pdf
20	KSPS Asset Management Plan - 201811.pdf
163	Item 2.1 FY16 Revised Budget 03Feb15.pdf
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184	WE Financial Statements Mar 18 v1 (signed).pdf
185	WE Financial Statements Mar 19 v1(Signed).pdf
189	Risk Register - Framework.xlsx
34	Motherwell Automation.pdf
43	Metering TES
44	2015 Jul 15 - EGL Compliance Reports #49-68.pdf
65	2018 ERA Licence Compliance - Western Energy Kwinana Swift Power Station.pdf
66	2019.04.18 Western Energy Compliance Breach Register.docx

	68	2019.04.18 Western Energy Register of Public Complaints.xlsx
	69	20190919 Compliance Activity.pdf
	70	WEST0002 - LANDCORP - 26318 01.04.2015.pdf
	256	WHS
	420	Business Cases for CAPEX\2018-09 Business case - Storage Shed at KSPS.pdf

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
2.1 Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options.	7, 12, 13, 15, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 321, 420		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
The new store building was scoped and costed for submission to the Board who subsequently approved and budgeted for it.	Increased requirement of stock of spares and the existing store was also used as a workshop.	Lack of storage space and no segregation between dirty and clean environments	Construct new store building.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
2.2 Evaluations include all life-cycle costs.	7, 12, 13, 15, 20, 36, 37, 38, 39, 40, 41, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 181, 182, 183, 184, 185, 189, 321, 420		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
The design life for the power station is 25 years with 15 years remaining. The new store building will last beyond this whilst being an economic design.	Lack of space	Risk of damage and contaminations of spares	Construct new store building	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
2.3 Projects reflect sound engineering and business decisions.	7, 12, 13, 15, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 321		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Limited space and shared with workshop.	The need for more storage space.	The new stores are clean, spacious and provide easy access and weather protection.	Designs are in compliance with the relevant standards. Reputable contractors were employed.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
2.4 Commissioning tests are documented and completed.	N/A		NP	NR
Condition, (Performance)	Cause	Consequence	Corrective Action	
Not applicable during review period. Data is stored on Technology One	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
2.5 Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood.	7, 12, 13, 15, 27, 29, 30, 32, 34, 43, 44, 65, 66, 68, 69, 70, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 256		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
<p>The AMP identifies obligations and responsibility is assigned and understood. A compliance register on WHS is employed for major obligations.</p> <p>Other data is in spreadsheets of Technology One</p> <p>All external parties (incl. head office based Perth Energy staff) are inducted every six months if they are moving freely on site without supervision by one of the OMTs/Power Station Supervisor. There was no induction during the site visit due to the auditors being escorted at all times by WE site-based staff.</p>	<p>A variety of sources are used for obligations and manually transferred to WHS</p> <p>Auditors were always escorted by WE site-based staff during the site walk.</p>	<p>Risk of data corruption and duplication</p> <p>No single source of data</p> <p>Safety risk if external parties without induction split from an escorted group.</p>	<p>Consider an overall integrated system</p> <p>Ensure no external parties are unescorted. Alternatively, induct all external parties independent of being escorted by site staff.</p>	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.
None

3.	<p>Key process - Asset disposal Asset disposal is the consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets.</p> <p>Outcome The asset management framework minimises holdings of surplus and underperforming assets and lowers service costs. The cost-benefits of disposal options are evaluated.</p>	<p>Asset management process and policy definition adequacy rating</p> <p>A</p>	<p>Asset management performance rating</p> <p>2</p>
<p>Interviewees:</p> <p>Elizabeth Aitken – General Manager Operations Daniel Bailey – Senior OMT Electrical Marc Hettler – Generation Lead</p>		<p>Relevant documentation:</p> <p>7 2016 March - Asset Management System v5.docx 12 2016-17 Asset Management Plan - V1.pdf 13 Asset Management Plan - 2017-18.docx 15 Asset Management Plan - 2018-19 FINAL.pdf 17 2018 PWPS critical spares.xlsx 129 2016 Business Performance Report Sample - Generation Section.pdf 135 PEH Group Business Performance Report May 2018 vFinal.pdf 136 PEH Group Business Performance Report May 2019 FINAL.pdf</p>	

	137	PEH Group Business Performance Report November 2017 v1.pdf
	138	PEH Group Business Performance Report November 2018 VFINAL.pdf
	139	PEH Group Business Performance Report October 2017 v1.pdf
	140	PEH Group Business Performance Report October 2018 vFINAL.pdf
	141	PEH Group Business Performance Report September 2018 vFINAL.pdf
	143	PEH Group BPR Sept17 v1.pdf
	144	PEH Group Business Performance Report April 2018 vFinal.pdf
	145	PEH Group Business Performance Report April 2019 vFinal.pdf
	146	PEH Group Business Performance Report August 2017 v1.pdf
	147	PEH Group Business Performance Report August 2018 vFinal.pdf
	148	PEH Group Business Performance Report December 2017 v1.pdf
	149	PEH Group Business Performance Report December 2018 VFINAL.pdf
	150	PEH Group Business Performance Report February 2018-V1.pdf
	151	PEH Group Business Performance Report February 2019VFINAL.pdf
	152	PEH Group Business Performance Report January 2018-Final.pdf
	153	PEH Group Business Performance Report January 2019 V1.pdf

	154	PEH Group Business Performance Report July 2017.pdf
	155	PEH Group Business Performance Report July 2018 V1.pdf
	156	PEH Group Business Performance Report July 2019 vFINAL.pdf
	157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
	158	PEH Group Business Performance Report June 2018 vFinal.pdf
	159	PEH Group Business Performance Report June 2019 vFinal.pdf
	160	PEH Group Business Performance Report March 2018 v1.pdf
	161	PEH Group Business Performance Report March 2019VFINAL.pdf
	255	Technology One

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
3.1 Under-utilised and under-performing assets are identified as part of a regular systematic review process	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 255		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Auxiliary transformers leaking oil from radiators. There is a N-1 level of redundancy but both were leaking despite attempts at repair.	Poor design and manufacture.	Oil leaks from radiators and potential loss of 415Vac supply.	Issue was identified and monitored and finally replaced with reputable manufacturer's products.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
3.2 The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Auxiliary transformer leaks were monitored and reported on. Repair attempts failed to totally prevent leaks.	Poor design with radiators non-removable.	Risk of pollution and loss of supply.	Replaced with reputable manufacturer's products.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
3.3 Disposal alternatives are evaluated	7		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
The old, leaking transformers were removed from site by the contractors for the new transformers.	N/A	Recycled or disposed of responsibly.	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
3.4 There is a replacement strategy for assets	7, 12, 13, 15, 17, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
Currently no major assets are near the end of life. Some balance of plant such as compressors are being monitored and will be refurbished or replaced when necessary. RO membrane replacement costs were apparently overlooked in the budget.	Usage Lack of appreciation of requirements	Wear Unexpected costs	Monitor performance and budget for refurbishment/replacement.	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.

None

4.	Key Process - Environmental analysis Environmental analysis examines the asset management system environment and assesses all external factors affecting the asset management system.	Asset management process and policy definition adequacy rating	Asset management performance rating
	Outcome The asset management system regularly assesses external opportunities and threats and identifies corrective action to maintain performance requirements.	A	2
Interviewees: Elizabeth Aitken – General Manager Operations Kheng Lim – CFO Patrick Peak - General Manager EMR, Regulation Peter Durack – Manager Compliance & Risk Craig Beasland – IT Marc Hettler – Generation Lead		Relevant documentation: 7 2016 March - Asset Management System v5.docx 12 2016-17 Asset Management Plan - V1.pdf 13 Asset Management Plan - 2017-18.docx 15 Asset Management Plan - 2018-19 FINAL.pdf 43 Metering TES 44 2015 Jul 15 - EGL Compliance Reports #49-68.pdf 65 2018 ERA Licence Compliance - Western Energy Kwinana Swift Power Station.pdf 66 2019.04.18 Western Energy Compliance Breach Register.docx 68 2019.04.18 Western Energy Register of Public Complaints.xlsx 69 20190919 Compliance Activity.pdf 70 WEST0002 - LANDCORP - 26318 01.04.2015.pdf 71 LandCorp Invoices\Landcorp invoices & payments_xlsx #76-132.msg 129 2016 Business Performance Report Sample - Generation Section.pdf	

	135	PEH Group Business Performance Report May 2018 vFinal.pdf
	136	PEH Group Business Performance Report May 2019 FINAL.pdf
	137	PEH Group Business Performance Report November 2017 v1.pdf
	138	PEH Group Business Performance Report November 2018 VFINAL.pdf
	139	PEH Group Business Performance Report October 2017 v1.pdf
	140	PEH Group Business Performance Report October 2018 vFINAL.pdf
	141	PEH Group Business Performance Report September 2018 vFINAL.pdf
	143	PEH Group BPR Sept17 v1.pdf
	144	PEH Group Business Performance Report April 2018 vFinal.pdf
	145	PEH Group Business Performance Report April 2019 vFinal.pdf
	146	PEH Group Business Performance Report August 2017 v1.pdf
	147	PEH Group Business Performance Report August 2018 vFinal.pdf
	148	PEH Group Business Performance Report December 2017 v1.pdf
	149	PEH Group Business Performance Report December 2018 VFINAL.pdf
	150	PEH Group Business Performance Report February 2018-V1.pdf
	151	PEH Group Business Performance Report February 2019VFINAL.pdf
	152	PEH Group Business Performance Report January 2018-Final.pdf
	153	PEH Group Business Performance Report January 2019 V1.pdf
	154	PEH Group Business Performance Report July 2017.pdf
	155	PEH Group Business Performance Report July 2018 V1.pdf
	156	PEH Group Business Performance Report July 2019 vFINAL.pdf

	157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
	158	PEH Group Business Performance Report June 2018 vFinal.pdf
	159	PEH Group Business Performance Report June 2019 vFinal.pdf
	160	PEH Group Business Performance Report March 2018 v1.pdf
	161	PEH Group Business Performance Report March 2019VFINAL.pdf
	204	2019.09.15 Check List ERA Licence fee invoices and remittance notices.xlsx
	205	2019.09.18 Check List ERA Licence fee invoices and remittance notices - KT.xlsx
	206	09092019 - Letter to the ERA from Western Energy re Change of Ownership-signed.pdf
	255	Technology One
	256	WHS

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
4.1 Opportunities and threats in the asset management system environment are assessed	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Perth Energy monitors the marketplace bidding/scheduling. Western Energy responds to instructions from Perth Energy. Changed from purely back up generation to double shifting	Changes in the marketplace.	Cost effective to double shift	Double shift when beneficial	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 255		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Performance and non-conformance are reported on in numerous reports. Availability has been high.	Ongoing monitoring records availability and capacity	Penalties or loss of revenue	None	

Criteria	Evidence Ref#	Adequacy rating	Performance Rating
4.3 Compliance with statutory and regulatory requirements	7, 12, 13, 15, 71, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 204, 205, 206, 255, 256	A	2
Condition, (Performance)	Cause	Consequence	Corrective Action
Compliance register on WHS alerts reporting requirements to a hierarchy of staff.	Reporting is to staff by name rather than position resulting in failure to contact is staff leaves the company. Non-compliances not included in WHS	Reminder notices may get “lost”, however other staff are also notified. Non-compliance overlooked	Notify position rather than name. Ensure all compliance requirements are on WHS

Criteria	Evidence Ref#	Adequacy rating	Performance Rating
4.4 Service standard (customer service levels etc.) are measured and achieved	7, 12, 13, 15, 43, 44, 65, 66, 68, 69, 70, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 255	A	1
Condition, (Performance)	Cause	Consequence	Corrective Action
Performance is reported in monthly reports, WE Bank and Business Performance Reports. AEMO requires prompt reporting.	Non compliance	Loss of availability. Possible financial penalties, Customer dissatisfaction	Ensure all service standards are monitored and non compliances

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.
None

5.	Key Process - Asset operations Asset operations is the day-to- day running of assets (where the asset is used for its intended purpose).	Asset management process and policy definition adequacy rating A	Asset management performance rating 2
	Outcome The asset operation plans adequately document the processes and knowledge of staff in the operation of assets so service levels can be consistently achieved.		
Interviewees: Elizabeth Aitken – General Manager Operations Kheng Lim – CFO Patrick Peak - General Manager EMR, Regulation Peter Durack – Manager Compliance & Risk Craig Beasland – IT Daniel Bailey – Senior OMT Electrical Marc Hettler – Generation Lead Ranjit Vivekananda - TECH1 (Asset Management System)		Relevant documentation: 7 2016 March - Asset Management System v5.docx 12 2016-17 Asset Management Plan - V1.pdf 13 Asset Management Plan - 2017-18.docx 15 Asset Management Plan - 2018-19 FINAL.pdf 25 2017 Feb 22 - GHD Consultancy Agreement for Minor Engineering Works.pdf 26 2019.09.13 Letter re Effluent Services Agreement - Extension, Western Energy KSPS.pdf 27 Atlas Copco Service.pdf 28 Contract P18033C0301 Variation No. 1 Executed.pdf 29 Preferred Service Agreement_PW Power Systems_Western Energy_04042016.pdf 30 PWPS WE PSA_fully executed_5 APR 2016.pdf 31 Renewal Letter - 67357 - 15-16.pdf 32 SUEZ - Kwinana Services Agreement Feb 11 2019.pdf 33 Transpacific Cleanaway 30.03.15.pdf	

34	Motherwell Automation.pdf
35	Western Energy Wilsons Patrol Agreement 2016 2017 1808_001 signed WE and Wilsons.pdf
36	Wilson Security - 01.09.15 to 31.08.16.pdf
37	Wilson Security 01.09.14 to 31.08.15.pdf
38	WESTERN_ENERGY_Fuel_Transfer_Procedure_final.pdf
39	WESTERN_ENERGY_RC_Cert_Kwinana_Donaldson_Operating_Protocol_signed_23062016.pdf
40	WESTERN_ENERGY_RC_Cert_ETACs_and_Amendments.pdf
41	Operating Maintenance Agreement_DBNGP_Western Energy_04102011.pdf
43	Metering TES
44	2015 Jul 15 - EGL Compliance Reports #49-68.pdf
65	2018 ERA Licence Compliance - Western Energy Kwinana Swift Power Station.pdf
66	2019.04.18 Western Energy Compliance Breach Register.docx
68	2019.04.18 Western Energy Register of Public Complaints.xlsx
69	20190919 Compliance Activity.pdf
70	WEST0002 - LANDCORP - 26318 01.04.2015.pdf
129	2016 Business Performance Report Sample - Generation Section.pdf
135	PEH Group Business Performance Report May 2018 vFinal.pdf
136	PEH Group Business Performance Report May 2019 FINAL.pdf
137	PEH Group Business Performance Report November 2017 v1.pdf
138	PEH Group Business Performance Report November 2018 VFINAL.pdf
139	PEH Group Business Performance Report October 2017 v1.pdf
140	PEH Group Business Performance Report October 2018 vFINAL.pdf
141	PEH Group Business Performance Report September 2018 vFINAL.pdf
143	PEH Group BPR Sept17 v1.pdf
144	PEH Group Business Performance Report April 2018 vFinal.pdf

145	PEH Group Business Performance Report April 2019 vFinal.pdf
146	PEH Group Business Performance Report August 2017 v1.pdf
147	PEH Group Business Performance Report August 2018 vFinal.pdf
148	PEH Group Business Performance Report December 2017 v1.pdf
149	PEH Group Business Performance Report December 2018 VFINAL.pdf
150	PEH Group Business Performance Report February 2018-V1.pdf
151	PEH Group Business Performance Report February 2019VFINAL.pdf
152	PEH Group Business Performance Report January 2018-Final.pdf
153	PEH Group Business Performance Report January 2019 V1.pdf
154	PEH Group Business Performance Report July 2017.pdf
155	PEH Group Business Performance Report July 2018 V1.pdf
156	PEH Group Business Performance Report July 2019 vFINAL.pdf
157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
158	PEH Group Business Performance Report June 2018 vFinal.pdf
159	PEH Group Business Performance Report June 2019 vFinal.pdf
160	PEH Group Business Performance Report March 2018 v1.pdf
161	PEH Group Business Performance Report March 2019VFINAL.pdf
163	Item 2.1 FY16 Revised Budget 03Feb15.pdf
164	Item 4.1A FY16 Q3 Forecast v1 Combined (Revised).pdf
165	PEH Item 5.1 - FY18 Budget Presentation Final.pdf
166	PEH Item 5.1 - FY19 Budget Presentation (Final) 20180301.pdf
167	WE Capex - FY15 Budget.xlsx
168	WE Capex Budget FY18-FY22 v1.xlsm
169	WE Capex FY17-FY21.xlsm
170	WE Opex Workpad 20180124 - FY19 Budget.xlsm
171	WE Bank Report - Sept 2014 v1 (revised).pdf
172	WE Bank Report - March 2015 v1.pdf

173	WE Bank Report - Sept 2015 v1.docx
174	WE Bank Report - Mar 2016 v1.pdf
175	WE Bank Report - Sept 2016 v1.pdf
176	WE Bank Report - March 2017 v1.pdf
177	WE Bank Report - Sept 2017 v1.pdf
178	WE Operating Report - Mar 2018 - Final.pdf
180	WE Operating Report -October 2018 Final.pdf
181	WE Financial Statements March 15 v1 - Signed 30-04-15.pdf
182	WE Financial Statements Mar 16 - Signed.pdf
183	WE Financial Statements Mar 17 v1 (signed).pdf
184	WE Financial Statements Mar 18 v1 (signed).pdf
185	WE Financial Statements Mar 19 v1(Signed).pdf
189	Risk Register - Framework.xlsx
190	Policy.HSEQ.001 Risk Management.pdf
191	Procedure.HSEQ.001 Risk Assessment.pdf
192	Risk Register - Framework.xlsx
193	Procedure_Operations_007_Emergency_Response_Procedure_KSPS.pdf
194	Emergency Response Procedure KSPS - Hazardous Areas.docx
195	Procedure.HSEQ.002 - Crisis Preparation.pdf
196	Procedure.HSEQ.003 - CMP - Business Recovery and Continuity Plan - Main Office.pdf
197	Procedure.HSEQ.004 - CMP - Business Recovery and Continuity Plan - Kwinana Swift Power Station.pdf
198	Risk Assessments\KPS-Likelihood Matrix-1.0.pdf
199	KPS-Risk Rating Matrix-1.0.pdf
200	KWINANA-RISK ANALYSIS-05.pdf
255	Technology One
257	PW servicing

279	Policy.IT.006 IT Network Security Policy (1).pdf
280	Procedure.Operations.028 - IT Security - Generation (KWN) (1).pdf
286	4GTPcedure_Operations_004_Rev1_Contractor_Management_Ektimo (1).docx
287	HNEProcedure_Operations_004_Rev1_Contractor_Management_Ektimo (1).docx
288	JHA images for upload (1).docx
290	Perth Energy JSA (1).pdf
291	Policy_Finance_001_Expense_Reimbursement.pdf
292	Policy_HR_001_Leave.pdf
293	Policy_HR_002_Alcohol_Other_Drugs.pdf
294	Policy_HR_003_Equal_Employment_Opportunity.pdf
295	Policy_HR_004_Fitness_For_Work.pdf
296	Policy_HR_005_Personnel_File_Access.pdf
297	Policy_HR_006_Workplace_Related_Social_Functions.pdf
298	Policy_HR_007_Sports_Activities_Events.pdf
299	Policy_HR_008_Code_of_Conduct.pdf
300	Policy_HR_009_Termination_of_Employment.pdf
301	Policy_HR_010_Social_Media.pdf
302	Policy_HR_011_Recruitment.pdf
303	Policy_HR_0013_Hours_of_Work_and_Work_Pattern_policy.pdf
305	Principles_Corporate_001_People_PEPL_.pdf
306	Principles_Corporate_002_Health_Safety_PEPL_.pdf
307	Principles_Corporate_003_Environment_Sustainability_PEPL_10_2_.pdf
308	Principles_Corporate_004_Operational_Excellence_PEPL_.pdf
309	SWMS working at heights draft (1).doc
310	Checklist.pdf
311	Form.HSE.004 Use of Motor Vehicle Risk Assessment.docx

	312	MTIwNDU2Procedure_Operations_030_Engineering_Change_Management_COMPRESSED.pdf
	319	MTIwNDU2Procedure.Operations.030---Engineering-Change-Management-COMPRESSED (2).pdf
	322	Procedure_Operations_004_Contractor_Management_Procedure_KWN_ (1).pdf
	323	Procedure_Operations_014_Outages_KWN_ (1).pdf
	324	Procedure_Operations_015_Operating_Strategy_KWN_ (1).pdf
	325	Procedure_Operations_016_Power_Station_Induction_KWN_ (1).pdf
	326	Procedure_Operations_019_Site_Access_KWN_ (1).pdf
	327	Procedure_Operations_020_Switching_Programs_HV_Equipment_and_Switchyard_KWN_ (1).pdf
	328	Procedure_Operations_022_Verification_of_Certified_Reserve_Capacity_KWN_ (1).pdf
	329	Procedure_Operations_025_Confined_Space_Gas_Testing_KWN_COMPRESSED_VERSION (1).pdf
	330	Site_Induction_Booklet_Rev_4 (1).pdf
	331	Site_Induction_Form_Worker_Updated_2019_Final (1).pdf
	332	Procedure_Operations_018_Reporting_and_Investigating_an_Accident_KWN_ (1).pdf
	337	Monthly Operating Report - Apr 15 v1.pdf
	338	Monthly Operating Report - Apr 16 v1.pdf
	341	Monthly Operating Report - Aug 15 v1.pdf
	342	Monthly Operating Report - Aug 16 v1.pdf
	343	Monthly Operating Report - Dec 13 v1.pdf
	344	Monthly Operating Report - Dec 14 v1.pdf
	345	Monthly Operating Report - Dec 15 v1.pdf
	346	Monthly Operating Report - Dec 16 v1.pdf
	348	Monthly Operating Report - Feb 15 v1.pdf
	349	Monthly Operating Report - Feb 16 v1.pdf

350	Monthly Operating Report - Feb 17 v1.pdf
352	Monthly Operating Report - Jan 15 v1.pdf
353	Monthly Operating Report - Jan 16 v1.pdf
354	Monthly Operating Report - Jan 17 v1.pdf
357	Monthly Operating Report - July 15 v1.pdf
358	Monthly Operating Report - July 16 v1.pdf
361	Monthly Operating Report - June 15 v1.pdf
362	Monthly Operating Report - June 16 v1.pdf
364	Monthly Operating Report - Mar 15 v1.pdf
365	Monthly Operating Report - Mar 16 v1.pdf
366	Monthly Operating Report - Mar 17 v1.pdf
369	Monthly Operating Report - May 15 v1.pdf
370	Monthly Operating Report - May 16 v1.pdf
372	Monthly Operating Report - Nov 14 v1.pdf
373	Monthly Operating Report - Nov 15 v1.pdf
374	Monthly Operating Report - Nov 16.pdf
376	Monthly Operating Report - Oct 14 v1.pdf
377	Monthly Operating Report - Oct 15 v1.pdf
378	Monthly Operating Report - Oct 16 v1.pdf
381	Monthly Operating Report - Sep 15 v1.pdf
382	Monthly Operating Report - Sep 16 v1.pdf
385	Policy.Corporate.001- External & Public Relations.pdf
386	Policy.Corporate.002 - Privacy.pdf
387	Policy.Finance.001 - Expense Reimbursement.pdf
388	Policy.Finance.002 - Business Travel.pdf
389	Policy.Finance.003 - Delegation of Financial Authority.pdf

391	Plan.HSEQ.001 - Environmental Management System - EMP for Kwinana Swift Power Station.pdf
392	Plan.HSEQ.003 - Dangerous Goods Management Plan (KWN).pdf
395	Procedure.Operations.014 - Outages (KWN).pdf
396	Procedure.Operations.015 - Operating Strategy (KWN).pdf
397	Procedure.Operations.016 - Power Station Induction (KWN).pdf
398	Procedure.Operations.017 - Preparation of Annual Asset Management Plan (KWN).pdf
399	Procedure.Operations.018 - Reporting and Investigating and Accident (KWN).pdf
400	Procedure.Operations.019 - Site Access (KWN).pdf
401	Procedure.Operations.020 - Switching Programs - HV Equipment and Switchyard (KWN).pdf
402	Procedure.Operations.022 - Verification of Certified Reserve Capacity (KWN).pdf
403	Procedure.Operations.025 - Confined Space Gas Testing (KWN).pdf
404	Procedure.Operations.026 - Maintenance Access Permit System (KWN).pdf
405	Procedure.Operations.027_Rev1 - Personal Protective Equipment (KWN).pdf
406	Procedure.Operations.029 - Tender Evaluation (KWN).pdf
407	Procedure.Operations.031 - Working at Heights (KWN).pdf
408	Procedure.Operations.032 - OHS Management Plan (KWN).pdf
409	Procedure.Operations.033 - Software Change Management (KWN).pdf
410	Procedure.Operations.034 - Forklift Safety Procedure.pdf
411	Procedure.Operations.035 - Fire Protection Impairment Procedure.pdf
418	Kwinana Swift Site Visit 10 –11 September 2019.pdf
419	IT Backup Standard\Motherwell Support Log_Claim incl. Backup test Item 11.pdf
421	20191112 Risk Register.xlsx

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
5.1 Operational policies and procedures are documented and linked to service levels required	7, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 65, 66, 68, 69, 70, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 257, 279, 280, 286, 287, 288, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 305, 306, 307, 308, 309, 310, 311, 312, 319, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 385, 386, 387, 388, 389, 391, 392, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 418, 419, 421		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
Policies and procedures are stored on WHS and available to employees. Several are past their revision date and some superseded documents remain 'active'	Administrative inefficiencies.	Policies and procedures may not always reflect current conditions. Incorrect document could be used.	Ensure all revisions are up to date.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
5.2 Risk management is applied to prioritise operations tasks	7, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 181, 182, 183, 184, 185, 189, 190, 191, 192, 418, 421		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Risks have been assessed quite comprehensively and are reviewed by management quarterly.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
5.3 Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition and accounting data	7, 255		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
Asset data is stored on Technology One database. Work orders are sometime linked to just "Power Station" rather than specific assets.	Unfortunately, this was not accessible on site for the reporting period due to poor internet connection.	Risk of errors and poor information on site.	Post audit period Technology One was made available on site. Better policing of data entry	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
5.4 Accounting data is documented for assets	182, 183, 184, 185, 255, 338, 398		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Assets are listed in Technology One and monthly reports and depreciated in the financials	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
5.5 Operational costs are measured and monitored	7, 12, 13, 15, 34, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 170, 171, 172, 173, 174, 175, 176, 177, 178, 180, 255, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366, 369, 370, 372, 373, 374, 376, 377, 378, 381, 382		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Work orders are managed through Technology One, routine costs are budgeted for and reported on with any variances.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
5.6 Staff resources are adequate and staff receive training commensurate with their responsibilities	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Staffing levels at the power station have been increased with the change to double shifting.	Increased operation and in two time slots	Maintain two people on site during working hours as a safety measure.	N/A	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.

None

6.	<p>Key process - Asset maintenance Asset maintenance is the upkeep of assets.</p> <p>Outcome The asset maintenance plans cover the scheduling and resourcing of the maintenance tasks so work can be done on time and on cost.</p>	<p>Asset management process and policy definition adequacy rating</p> <p>A</p>	<p>Asset management performance rating</p> <p>1</p>
<p>Interviewees:</p> <p>Elizabeth Aitken – General Manager Operations Patrick Peak - General Manager EMR, Regulation Peter Durack – Manager Compliance & Risk Craig Beasland – IT Daniel Bailey – Senior OMT Electrical Marc Hettler – Generation Lead Ranjit Vivekananda - TECH1 (Asset Management System)</p>		<p>Relevant documentation:</p> <p>7 2016 March - Asset Management System v5.docx 12 2016-17 Asset Management Plan - V1.pdf 13 Asset Management Plan - 2017-18.docx 15 Asset Management Plan - 2018-19 FINAL.pdf 24 Pre audit period 2012 Mar 6 - Wormald Signed Agreement.pdf 25 2017 Feb 22 - GHD Consultancy Agreement for Minor Engineering Works.pdf 26 2019.09.13 Letter re Effluent Services Agreement - Extension, Western Energy KSPS.pdf 27 Atlas Copco Service.pdf 28 Contract P18033C0301 Variation No. 1 Executed.pdf 29 Preferred Service Agreement_PW Power Systems_Western Energy_04042016.pdf 30 PWPS WE PSA_fully executed_5 APR 2016.pdf 31 Renewal Letter - 67357 - 15-16.pdf 32 SUEZ - Kwinana Services Agreement Feb 11 2019.pdf 33 Transpacific Cleanaway 30.03.15.pdf 34 Motherwell Automation.pdf</p>	

35	Western Energy Wilsons Patrol Agreement 2016 2017 1808_001 signed WE and Wilsons.pdf
36	Wilson Security - 01.09.15 to 31.08.16.pdf
37	Wilson Security 01.09.14 to 31.08.15.pdf
38	WESTERN_ENERGY_Fuel_Transfer_Procedure_final.pdf
39	WESTERN_ENERGY_RC_Cert_Kwinana_Donaldson_Operating_Protocol_signed_23062016.pdf
40	WESTERN_ENERGY_RC_Cert_ETACs_and_Amendments.pdf
41	Operating Maintenance Agreement_DBNGP_Western Energy_04102011.pdf
129	2016 Business Performance Report Sample - Generation Section.pdf
135	PEH Group Business Performance Report May 2018 vFinal.pdf
136	PEH Group Business Performance Report May 2019 FINAL.pdf
137	PEH Group Business Performance Report November 2017 v1.pdf
138	PEH Group Business Performance Report November 2018 VFINAL.pdf
139	PEH Group Business Performance Report October 2017 v1.pdf
140	PEH Group Business Performance Report October 2018 vFINAL.pdf
141	PEH Group Business Performance Report September 2018 vFINAL.pdf
143	PEH Group BPR Sept17 v1.pdf
144	PEH Group Business Performance Report April 2018 vFinal.pdf
145	PEH Group Business Performance Report April 2019 vFinal.pdf
146	PEH Group Business Performance Report August 2017 v1.pdf
147	PEH Group Business Performance Report August 2018 vFinal.pdf
148	PEH Group Business Performance Report December 2017 v1.pdf
149	PEH Group Business Performance Report December 2018 VFINAL.pdf
150	PEH Group Business Performance Report February 2018-V1.pdf
151	PEH Group Business Performance Report February 2019VFINAL.pdf
152	PEH Group Business Performance Report January 2018-Final.pdf

153	PEH Group Business Performance Report January 2019 V1.pdf
154	PEH Group Business Performance Report July 2017.pdf
155	PEH Group Business Performance Report July 2018 V1.pdf
156	PEH Group Business Performance Report July 2019 vFINAL.pdf
157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
158	PEH Group Business Performance Report June 2018 vFinal.pdf
159	PEH Group Business Performance Report June 2019 vFinal.pdf
160	PEH Group Business Performance Report March 2018 v1.pdf
161	PEH Group Business Performance Report March 2019VFINAL.pdf
170	WE Opex Workpad 20180124 - FY19 Budget.xlsm
171	WE Bank Report - Sept 2014 v1 (revised).pdf
172	WE Bank Report - March 2015 v1.pdf
173	WE Bank Report - Sept 2015 v1.docx
174	WE Bank Report - Mar 2016 v1.pdf
175	WE Bank Report - Sept 2016 v1.pdf
176	WE Bank Report - March 2017 v1.pdf
177	WE Bank Report - Sept 2017 v1.pdf
178	WE Operating Report - Mar 2018 - Final.pdf
180	WE Operating Report -October 2018 Final.pdf
190	Policy.HSEQ.001 Risk Management.pdf
191	Procedure.HSEQ.001 Risk Assessment.pdf
192	Risk Register - Framework.xlsx
255	Technology One
257	PW servicing
261	2014 08 August - Maintenance Plan.xlsx
262	2015 06 June - Maintenance Plan.xlsx
263	2016 10 October - Maintenance Plan.xlsx

264	2018 10 October - Maintenance Plan.xlsx
273	2017 05 May - Maintenance Plan.xlsx
277	DCS-Perth Energy-External Network Penetration Test Report_Sep2019.pdf
278	DCS-Perth Energy-External Penetration Testing Report_May2018.pdf
279	Policy.IT.006 IT Network Security Policy (1).pdf
280	Procedure.Operations.028 - IT Security - Generation (KWN) (1).pdf
284	2019.04.18 PEH Group Structure.pdf
287	HNEProcedure_Operations_004_Rev1_Contractor_Management_Ektimo (1).docx
288	JHA images for upload (1).docx
289	Online WHS overview.docx
290	Perth Energy JSA (1).pdf
291	Policy_Finance_001_Expense_Reimbursement.pdf
292	Policy_HR_001_Leave.pdf
293	Policy_HR_002_Alcohol_Other_Drugs.pdf
294	Policy_HR_003_Equal_Employment_Opportunity.pdf
295	Policy_HR_004_Fitness_For_Work.pdf
296	Policy_HR_005_Personnel_File_Access.pdf
297	Policy_HR_006_Workplace_Related_Social_Functions.pdf
298	Policy_HR_007_Sports_Activities_Events.pdf
299	Policy_HR_008_Code_of_Conduct.pdf
300	Policy_HR_009_Termination_of_Employment.pdf
302	Policy_HR_011_Recruitment.pdf
303	Policy_HR_0013_Hours_of_Work_and_Work_Pattern_policy.pdf
304	Policy_IT_001_Information_Technology.pdf
305	Principles_Corporate_001_People_PEPL_.pdf
306	Principles_Corporate_002_Health_Safety_PEPL_.pdf
307	Principles_Corporate_003_Environment_Sustainability_PEPL_10_2_.pdf

308	Principles_Corporate_004_Operational_Excellence_PEPL_.pdf
309	SWMS working at heights draft (1).doc
310	Checklist.pdf
311	Form.HSE.004 Use of Motor Vehicle Risk Assessment.docx
312	MTIwNDU2Procedure_Operations_030_Engineering_Change_Management_COMPRESSED.pdf
319	MTIwNDU2Procedure.Operations.030---Engineering-Change-Management-COMPRESSED (2).pdf
322	Procedure_Operations_004_Contractor_Management_Procedure_KWN_ (1).pdf
323	Procedure_Operations_014_Outages_KWN_ (1).pdf
324	Procedure_Operations_015_Operating_Strategy_KWN_ (1).pdf
325	Procedure_Operations_016_Power_Station_Induction_KWN_ (1).pdf
326	Procedure_Operations_019_Site_Access_KWN_ (1).pdf
327	Procedure_Operations_020_Switching_Programs_HV_Equipment_and_Switchyard_KWN_ (1).pdf
328	Procedure_Operations_022_Verification_of_Certified_Reserve_Capacity_KWN_ (1).pdf
329	Procedure_Operations_025_Confined_Space_Gas_Testing_KWN_COMPRESSED_VERSION (1).pdf
330	Site_Induction_Booklet_Rev_4 (1).pdf
331	Site_Induction_Form_Worker_Updated_2019_Final (1).pdf
332	Procedure_Operations_018_Reporting_and_Investigating_an_Accident_KWN_ (1).pdf
337	Monthly Operating Report - Apr 15 v1.pdf
338	Monthly Operating Report - Apr 16 v1.pdf
341	Monthly Operating Report - Aug 15 v1.pdf
342	Monthly Operating Report - Aug 16 v1.pdf
343	Monthly Operating Report - Dec 13 v1.pdf

	344	Monthly Operating Report - Dec 14 v1.pdf
	345	Monthly Operating Report - Dec 15 v1.pdf
	346	Monthly Operating Report - Dec 16 v1.pdf
	348	Monthly Operating Report - Feb 15 v1.pdf
	349	Monthly Operating Report - Feb 16 v1.pdf
	350	Monthly Operating Report - Feb 17 v1.pdf
	352	Monthly Operating Report - Jan 15 v1.pdf
	353	Monthly Operating Report - Jan 16 v1.pdf
	354	Monthly Operating Report - Jan 17 v1.pdf
	357	Monthly Operating Report - July 15 v1.pdf
	358	Monthly Operating Report - July 16 v1.pdf
	361	Monthly Operating Report - June 15 v1.pdf
	362	Monthly Operating Report - June 16 v1.pdf
	364	Monthly Operating Report - Mar 15 v1.pdf
	365	Monthly Operating Report - Mar 16 v1.pdf
	366	Monthly Operating Report - Mar 17 v1.pdf
	369	Monthly Operating Report - May 15 v1.pdf
	370	Monthly Operating Report - May 16 v1.pdf
	372	Monthly Operating Report - Nov 14 v1.pdf
	373	Monthly Operating Report - Nov 15 v1.pdf
	374	Monthly Operating Report - Nov 16.pdf
	376	Monthly Operating Report - Oct 14 v1.pdf
	377	Monthly Operating Report - Oct 15 v1.pdf
	378	Monthly Operating Report - Oct 16 v1.pdf
	381	Monthly Operating Report - Sep 15 v1.pdf
	382	Monthly Operating Report - Sep 16 v1.pdf

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
6.1 Maintenance policies and procedures are documented and linked to service levels required	7, 12, 13, 15, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 257, 261, 262, 263, 264, 273, 279, 280, 284, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 319, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Maintenance follows the recommendations of the OEM with regular tests to ensure reliable starting. Procedures are kept on Technology One and downloaded when required.	Use latest advice	Maximise reliability	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
6.2 Regular inspections are undertaken of asset performance and condition	7, 12, 13, 15, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 255, 261, 262, 263, 264, 273		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Regular inspections are carried out and condition monitoring reduces the risk of failure.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	7, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 171, 172, 173, 174, 175, 176, 177, 178, 180, 255, 257, 261, 262, 263, 264, 273, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366, 369, 370, 372, 373, 374, 376, 377, 378, 381, 382		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Records are kept on Technology One and planned maintenance listed in the annual updated AMP. PWPS maintenance procedures followed. Experience of other operators gained through the OEM and GT users groups.	N/A	Minimise risk of unexpected conditions.	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
6.4 Failures are analysed and operational/ maintenance plans adjusted where necessary	7, 12, 13, 15, 24, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 171, 172, 173, 174, 175, 176, 177, 178, 180, 277, 278, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366, 369, 370, 372, 373, 374, 376, 377, 378, 381, 382		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
GT failures have mainly involved transducers many of which require two to fail before shutting down. Reliability has been good. Auxiliary transformer oil leaks were monitored and did not take the units out of service	Poor manufacture	Reduced availability Risk of pollution and loss of ac supply	Regular inspection and monitoring. Despite attempts to seal the leaks they continued. After thorough research the transformers were replaced with quality items.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
6.5 Risk management is applied to prioritise maintenance tasks	7, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 190, 191, 192, 255		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Major servicing is planned for bi-annual outages where possible. Smaller works are planned for off peak hours.	N/A	Minimise financial risk	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
6.6 Maintenance costs are measured and monitored	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 170, 171, 172, 173, 174, 175, 176, 177, 178, 180, 255, 261, 262, 263, 264, 273, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366, 369, 370, 372, 373, 374, 376, 377, 378, 381, 382		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Records are kept on Technology One and regularly reported.	N/A	N/A	N/A	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.

None

<p>7.</p>	<p>Key process - Asset Management Information System (MIS) An asset management information system is a combination of processes, data and software supporting the asset management functions.</p> <p>Outcome The asset management information system provides authorised, complete and accurate information for the day-to-day running of the asset management system. The focus of the review is the accuracy of performance information used by the licensee to monitor and report on service standards</p>	<p>Asset management process and policy definition adequacy rating</p> <p>A</p>	<p>Asset management performance rating</p> <p>2</p>
<p>Interviewees:</p> <p>Elizabeth Aitken – General Manager Operations Kheng Lim – CFO Patrick Peak - General Manager EMR, Regulation Peter Durack – Manager Compliance & Risk Craig Beasland – IT Daniel Bailey – Senior OMT Electrical Marc Hettler – Generation Lead Ranjit Vivekananda - TECH1 (Asset Management System)</p>		<p>Relevant documentation:</p> <p>7 2016 March - Asset Management System v5.docx 24 Pre audit period 2012 Mar 6 - Wormald Signed Agreement.pdf 34 Motherwell Automation.pdf 35 Western Energy Wilsons Patrol Agreement 2016 2017 1808_001 signed WE and Wilsons.pdf 36 Wilson Security - 01.09.15 to 31.08.16.pdf 37 Wilson Security 01.09.14 to 31.08.15.pdf 129 2016 Business Performance Report Sample - Generation Section.pdf 135 PEH Group Business Performance Report May 2018 vFinal.pdf 136 PEH Group Business Performance Report May 2019 FINAL.pdf 137 PEH Group Business Performance Report November 2017 v1.pdf</p>	

138	PEH Group Business Performance Report November 2018 VFINAL.pdf
139	PEH Group Business Performance Report October 2017 v1.pdf
140	PEH Group Business Performance Report October 2018 vFINAL.pdf
141	PEH Group Business Performance Report September 2018 vFINAL.pdf
143	PEH Group BPR Sept17 v1.pdf
144	PEH Group Business Performance Report April 2018 vFinal.pdf
145	PEH Group Business Performance Report April 2019 vFinal.pdf
146	PEH Group Business Performance Report August 2017 v1.pdf
147	PEH Group Business Performance Report August 2018 vFinal.pdf
148	PEH Group Business Performance Report December 2017 v1.pdf
149	PEH Group Business Performance Report December 2018 VFINAL.pdf
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151	PEH Group Business Performance Report February 2019VFINAL.pdf
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153	PEH Group Business Performance Report January 2019 V1.pdf
154	PEH Group Business Performance Report July 2017.pdf
155	PEH Group Business Performance Report July 2018 V1.pdf
156	PEH Group Business Performance Report July 2019 vFINAL.pdf
157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
158	PEH Group Business Performance Report June 2018 vFinal.pdf
159	PEH Group Business Performance Report June 2019 vFinal.pdf
160	PEH Group Business Performance Report March 2018 v1.pdf
161	PEH Group Business Performance Report March 2019VFINAL.pdf
200	KWINANA-RISK ANALYSIS-05.pdf
255	Technology One
256	WHS

	276 RE_ Western Energy KSPS - Data backup of historian and systems on site.msg
	277 DCS-Perth Energy-External Network Penetration Test Report_Sep2019.pdf
	278 DCS-Perth Energy-External Penetration Testing Report_May2018.pdf
	279 Policy.IT.006 IT Network Security Policy (1).pdf
	280 Procedure.Operations.028 - IT Security - Generation (KWN) (1).pdf
	282 Policy.IT.001 - Information Technology.pdf
	304 Policy_IT_001_Information_Technology.pdf
	320 Procedure.Corporate.002 - Document Control.pdf
	418 Kwinana Swift Site Visit 10 –11 September 2019.pdf
	419 IT Backup Standard\Motherwell Support Log_Claim incl. Backup test Item 11.pdf

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
7.1 Adequate system documentation for users and IT operators	7, 34, 255, 256, 279, 280, 282, 304, 320, 419		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
Training is provided for the two main software packages, WHS and Technology One. WHS has been in place for 2 yrs but does not appear to be fully utilised yet. Technology One was in place throughout the review period and is the main tool for O&M planning and records. Document control has some shortcomings with duplication of Procedure. Corporate numbers and several overdue document reviews.	No business wide document management system used for all documents.	Poor control of documents	Adopt a document management system. Make Technology One available on site.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
7.2 Input controls include suitable verification and validation of data entered into the system	7, 255, 256, 279, 280, 304, 320, 419		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
During the review period Technology One was not available on site	Input had to be manually transferred to Head Office with risk of errors. Site didn't have access to live data.	Potential errors and use of out of date data	Have live Technology One on site and train operators in its use. (In progress post review period)	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
7.3 Security access controls appear adequate, such as passwords	7, 255, 256, 279, 280, 304		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Both WHS and Technology One have levels of restricted access and password protection.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
7.4 Physical security access controls appear adequate	7, 24, 35, 36, 37, 200, 418		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Fencing and gates are augmented by laser beam perimeter protection. CCTV and security patrol contracts are in place.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
7.5 Data backup procedures appear adequate and backups are tested	7, 255, 256, 276, 279, 304		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
<p>Data is backed up frequently every 4hrs for server, overnight for billing and is replicated off site.</p> <p>Backups and updates to the Integrated Control and Management System are performed by Motherwell.</p> <p>Backup restoration onto a virtual machine checked every fortnight.</p> <p>UPS and diesel generator provide power back up.</p>	N/A	Loss of control and data.		

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
7.6 Computations for licensee performance reporting are accurate	7, 255, 256, 419		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
Some manual transfer of data. AEMO checks performance and WP metering	N/A	Risk of corruption/error	Integrate data input between site and head office with single entry and compliance checking.	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
7.7 Management reports appear adequate for the licensee to monitor licence obligations	7, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
There is a high level of reporting.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
7.8 Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	7, 24, 35, 36, 37, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 255, 256, 277, 278, 279, 280, 419		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Passwords, firewalls etc are in place. An Integrated Control and Management System is an isolated PLC system. Penetration tests are carried out annually	N/A	Risk of data theft, hacking etc.	N/A	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.

None

8.	Key Process - Risk Management Risk management involves the identification of risks and their management within an acceptable level of risk.	Asset management process and policy definition adequacy rating	Asset management performance rating
	Outcome The risk management framework effectively manages the risk that the licensee does not maintain effective service standards	A	1
Interviewees: Elizabeth Aitken – General Manager Operations Kheng Lim – CFO Patrick Peak - General Manager EMR, Regulation Peter Durack – Manager Compliance & Risk Craig Beasland – IT Daniel Bailey – Senior OMT Electrical Marc Hettler – Generation Lead		Relevant documentation: 7 2016 March - Asset Management System v5.docx 129 2016 Business Performance Report Sample - Generation Section.pdf 135 PEH Group Business Performance Report May 2018 vFinal.pdf 136 PEH Group Business Performance Report May 2019 FINAL.pdf 137 PEH Group Business Performance Report November 2017 v1.pdf 138 PEH Group Business Performance Report November 2018 VFINAL.pdf 139 PEH Group Business Performance Report October 2017 v1.pdf 140 PEH Group Business Performance Report October 2018 vFINAL.pdf 141 PEH Group Business Performance Report September 2018 vFINAL.pdf 143 PEH Group BPR Sept17 v1.pdf 144 PEH Group Business Performance Report April 2018 vFinal.pdf 145 PEH Group Business Performance Report April 2019 vFinal.pdf 146 PEH Group Business Performance Report August 2017 v1.pdf 147 PEH Group Business Performance Report August 2018 vFinal.pdf 148 PEH Group Business Performance Report December 2017 v1.pdf 149 PEH Group Business Performance Report December 2018 VFINAL.pdf 150 PEH Group Business Performance Report February 2018-V1.pdf	

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192	Risk Register - Framework.xlsx
193	Procedure_Operations_007_Emergency_Response_Procedure_KSPS.pdf
194	Emergency Response Procedure KSPS - Hazardous Areas.docx
195	Procedure.HSEQ.002 - Crisis Preparation.pdf
196	Procedure.HSEQ.003 - CMP - Business Recovery and Continuity Plan - Main Office.pdf
197	Procedure.HSEQ.004 - CMP - Business Recovery and Continuity Plan - Kwinana Swift Power Station.pdf
198	Risk Assessments\KPS-Likelihood Matrix-1.0.pdf
199	KPS-Risk Rating Matrix-1.0.pdf
200	KWINANA-RISK ANALYSIS-05.pdf
418	Kwinana Swift Site Visit 10 –11 September 2019.pdf
421	20191112 Risk Register.xlsx

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
8.1 Risk management policies and procedures exist and are applied to minimise internal and external risks	7, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 418, 421		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Risk management policies are in place for corporate and operational risks and reviewed regularly.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
8.2 Risks are documented in a risk register and treatment plans are implemented and monitored	7, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 418, 421		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Risk registers are maintained for operational and corporate risks	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
8.3 Probability and consequences of asset failure are regularly assessed	7, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 421		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
The risk committee meets frequently and reviews risks	N/A	N/A	N/A	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.

None

9.	Key Process - Contingency Planning Contingency plans document the steps to deal with the unexpected failure of an asset.	Asset management process and policy definition adequacy rating	Asset management performance rating
	Outcome- Contingency plans have been developed and tested to minimise any major disruptions to service standards.	A	1
Interviewees: Elizabeth Aitken – General Manager Operations Kheng Lim – CFO Patrick Peak - General Manager EMR, Regulation Peter Durack – Manager Compliance & Risk Craig Beasland – IT Daniel Bailey – Senior OMT Electrical Marc Hettler – Generation Lead Ranjit Vivekananda - TECH1 (Asset Management System)		Relevant documentation: 7 2016 March - Asset Management System v5.docx 163 Item 2.1 FY16 Revised Budget 03Feb15.pdf 164 Item 4.1A FY16 Q3 Forecast v1 Combined (Revised).pdf 165 PEH Item 5.1 - FY18 Budget Presentation Final.pdf 166 PEH Item 5.1 - FY19 Budget Presentation (Final) 20180301.pdf 167 WE Capex - FY15 Budget.xlsx 168 WE Capex Budget FY18-FY22 v1.xlsm 169 WE Capex FY17-FY21.xlsm 170 WE Opex Workpad 20180124 - FY19 Budget.xlsm 181 WE Financial Statements March 15 v1 - Signed 30-04-15.pdf 182 WE Financial Statements Mar 16 - Signed.pdf 183 WE Financial Statements Mar 17 v1 (signed).pdf 184 WE Financial Statements Mar 18 v1 (signed).pdf 185 WE Financial Statements Mar 19 v1(Signed).pdf 189 Risk Register - Framework.xlsx	

	190	Policy.HSEQ.001 Risk Management.pdf
	191	Procedure.HSEQ.001 Risk Assessment.pdf
	192	Risk Register - Framework.xlsx
	193	Procedure_Operations_007_Emergency_Response_Procedure_KSPS.pdf
	194	Emergency Response Procedure KSPS - Hazardous Areas.docx
	195	Procedure.HSEQ.002 - Crisis Preparation.pdf
	196	Procedure.HSEQ.003 - CMP - Business Recovery and Continuity Plan - Main Office.pdf
	197	Procedure.HSEQ.004 - CMP - Business Recovery and Continuity Plan - Kwinana Swift Power Station.pdf
	200	KWINANA-RISK ANALYSIS-05.pdf
	418	Kwinana Swift Site Visit 10 –11 September 2019.pdf
	421	20191112 Risk Register.xlsx

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	7, 163, 164, 165, 166, 167, 168, 169, 170, 181, 182, 183, 184, 185, 189, 190, 191, 192, 193, 194, 195, 196, 197, 200, 418, 421		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Contingency plans are in place and tested including computer back up restoration and local and remote starting tests on gas and distillate. As one of a few black start stations reliability is paramount	N/A	N/A	N/A	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.
None

<p>10.</p>	<p>Key Process - Financial Planning Financial brings together the financial elements of the service delivery to ensure its financial viability over the long term.</p> <p>Outcome The financial plan is reliable and provides for the long- term financial viability of the services.</p>	<p>Asset management process and policy definition adequacy rating</p> <p>A</p>	<p>Asset management performance rating</p> <p>1</p>
<p>Interviewees:</p> <p>Elizabeth Aitken – General Manager Operations Kheng Lim – CFO Marc Hettler – Generation Lead Ranjit Vivekananda - TECH1 (Asset Management System)</p>		<p>Relevant documentation:</p> <p>7 2016 March - Asset Management System v5.docx 12 2016-17 Asset Management Plan - V1.pdf 13 Asset Management Plan - 2017-18.docx 15 Asset Management Plan - 2018-19 FINAL.pdf 18 AMP 2019-20 Overview.pdf 20 KSPS Asset Management Plan - 201811.pdf 129 2016 Business Performance Report Sample - Generation Section.pdf 135 PEH Group Business Performance Report May 2018 vFinal.pdf 136 PEH Group Business Performance Report May 2019 FINAL.pdf 137 PEH Group Business Performance Report November 2017 v1.pdf 138 PEH Group Business Performance Report November 2018 VFINAL.pdf 139 PEH Group Business Performance Report October 2017 v1.pdf 140 PEH Group Business Performance Report October 2018 vFINAL.pdf 141 PEH Group Business Performance Report September 2018 vFINAL.pdf 143 PEH Group BPR Sept17 v1.pdf</p>	

144	PEH Group Business Performance Report April 2018 vFinal.pdf
145	PEH Group Business Performance Report April 2019 vFinal.pdf
146	PEH Group Business Performance Report August 2017 v1.pdf
147	PEH Group Business Performance Report August 2018 vFinal.pdf
148	PEH Group Business Performance Report December 2017 v1.pdf
149	PEH Group Business Performance Report December 2018 VFINAL.pdf
150	PEH Group Business Performance Report February 2018-V1.pdf
151	PEH Group Business Performance Report February 2019VFINAL.pdf
152	PEH Group Business Performance Report January 2018-Final.pdf
153	PEH Group Business Performance Report January 2019 V1.pdf
154	PEH Group Business Performance Report July 2017.pdf
155	PEH Group Business Performance Report July 2018 V1.pdf
156	PEH Group Business Performance Report July 2019 vFINAL.pdf
157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
158	PEH Group Business Performance Report June 2018 vFinal.pdf
159	PEH Group Business Performance Report June 2019 vFinal.pdf
160	PEH Group Business Performance Report March 2018 v1.pdf
161	PEH Group Business Performance Report March 2019VFINAL.pdf
163	Item 2.1 FY16 Revised Budget 03Feb15.pdf
164	Item 4.1A FY16 Q3 Forecast v1 Combined (Revised).pdf
165	PEH Item 5.1 - FY18 Budget Presentation Final.pdf
166	PEH Item 5.1 - FY19 Budget Presentation (Final) 20180301.pdf
167	WE Capex - FY15 Budget.xlsx
168	WE Capex Budget FY18-FY22 v1.xlsm
169	WE Capex FY17-FY21.xlsm
170	WE Opex Workpad 20180124 - FY19 Budget.xlsm
171	WE Bank Report - Sept 2014 v1 (revised).pdf

172	WE Bank Report - March 2015 v1.pdf
173	WE Bank Report - Sept 2015 v1.docx
174	WE Bank Report - Mar 2016 v1.pdf
175	WE Bank Report - Sept 2016 v1.pdf
176	WE Bank Report - March 2017 v1.pdf
177	WE Bank Report - Sept 2017 v1.pdf
178	WE Operating Report - Mar 2018 - Final.pdf
180	WE Operating Report -October 2018 Final.pdf
181	WE Financial Statements March 15 v1 - Signed 30-04-15.pdf
182	WE Financial Statements Mar 16 - Signed.pdf
183	WE Financial Statements Mar 17 v1 (signed).pdf
184	WE Financial Statements Mar 18 v1 (signed).pdf
185	WE Financial Statements Mar 19 v1(Signed).pdf
189	Risk Register - Framework.xlsx
258	Western Energy Budget for 2015-16 - Capex V2.msg
337	Monthly Operating Report - Apr 15 v1.pdf
338	Monthly Operating Report - Apr 16 v1.pdf
341	Monthly Operating Report - Aug 15 v1.pdf
342	Monthly Operating Report - Aug 16 v1.pdf
343	Monthly Operating Report - Dec 13 v1.pdf
344	Monthly Operating Report - Dec 14 v1.pdf
345	Monthly Operating Report - Dec 15 v1.pdf
346	Monthly Operating Report - Dec 16 v1.pdf
348	Monthly Operating Report - Feb 15 v1.pdf
349	Monthly Operating Report - Feb 16 v1.pdf
350	Monthly Operating Report - Feb 17 v1.pdf
352	Monthly Operating Report - Jan 15 v1.pdf

	353	Monthly Operating Report - Jan 16 v1.pdf
	354	Monthly Operating Report - Jan 17 v1.pdf
	357	Monthly Operating Report - July 15 v1.pdf
	358	Monthly Operating Report - July 16 v1.pdf
	361	Monthly Operating Report - June 15 v1.pdf
	362	Monthly Operating Report - June 16 v1.pdf
	364	Monthly Operating Report - Mar 15 v1.pdf
	365	Monthly Operating Report - Mar 16 v1.pdf
	366	Monthly Operating Report - Mar 17 v1.pdf
	369	Monthly Operating Report - May 15 v1.pdf
	370	Monthly Operating Report - May 16 v1.pdf
	372	Monthly Operating Report - Nov 14 v1.pdf
	373	Monthly Operating Report - Nov 15 v1.pdf
	374	Monthly Operating Report - Nov 16.pdf
	376	Monthly Operating Report - Oct 14 v1.pdf
	377	Monthly Operating Report - Oct 15 v1.pdf
	378	Monthly Operating Report - Oct 16 v1.pdf
	381	Monthly Operating Report - Sep 15 v1.pdf
	382	Monthly Operating Report - Sep 16 v1.pdf

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
10.1 The financial plan states the financial objectives and identifies strategies and actions to achieve those	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 181, 182, 183, 184, 185, 189		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Annual AMP updates include forecast costs, revenue and operations. BPR, Bank Reports and monthly reports monitor actual v budget costs.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
10.2 The financial plan identifies the source of funds for capital expenditure and recurrent costs	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 181, 182, 183, 184, 185, 189		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
For most of the reporting period funding was through revenue and loans. Following AGL's takeover internal funding is employed. Annual budgets identify the requirements.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
10.3 The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 180, 181, 182, 183, 184, 185, 189, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366, 369, 370, 372, 373, 374, 376, 377, 378, 381, 382		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Annual AMP updates include forecast costs, revenue and operations. BPR, Bank Reports and monthly reports monitor actual v budget costs. Accounts are independently audited each year	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
10.4 The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	7, 12, 13, 15, 18, 20, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 180, 181, 182, 183, 184, 185, 189, 258, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366, 369, 370, 372, 373, 374, 376, 377, 378, 381, 382		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Look ahead budgeting is employed	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
10.5 The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	7, 12, 13, 15, 18, 20, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 180, 181, 182, 183, 184, 185, 189, 258, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366, 369, 370, 372, 373, 374, 376, 377, 378, 381, 382		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
The budgets allow for O&M costs, corporate costs. At this stage no major capital works are planned.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
10.6 Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 180, 181, 182, 183, 184, 185, 189, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366, 369, 370, 372, 373, 374, 376, 377, 378, 381, 382		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Variances are explained in the reports and where necessary action taken.	N/A	N/A	N/A	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.

None

11.	<p>Key Process - Capital Expenditure Planning The capital expenditure plan provides a schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure for these works over the next five or more years. Since capital investments tend to be large and lumpy projections would normally be expected to cover at least 10 years, preferably longer. Projections over the next five years would usually be based on firm estimates.</p> <p>Outcome - The capital expenditure plan provides reliable forward estimates of capital expenditure and asset disposal income. Reasons for the decisions and for the evaluation of alternatives and options are documented.</p>	<p>Asset management process and policy definition adequacy rating</p> <p>A</p>	<p>Asset management performance rating</p> <p>1</p>
<p>Interviewees:</p> <p>Elizabeth Aitken – General Manager Operations Kheng Lim – CFO Patrick Peak - General Manager EMR, Regulation Peter Durack – Manager Compliance & Risk Marc Hettler – Generation Lead</p>		<p>Relevant documentation:</p> <p>7 2016 March - Asset Management System v5.docx 12 2016-17 Asset Management Plan - V1.pdf 13 Asset Management Plan - 2017-18.docx 15 Asset Management Plan - 2018-19 FINAL.pdf 129 2016 Business Performance Report Sample - Generation Section.pdf 135 PEH Group Business Performance Report May 2018 vFinal.pdf 136 PEH Group Business Performance Report May 2019 FINAL.pdf</p>	

137	PEH Group Business Performance Report November 2017 v1.pdf
138	PEH Group Business Performance Report November 2018 VFINAL.pdf
139	PEH Group Business Performance Report October 2017 v1.pdf
140	PEH Group Business Performance Report October 2018 vFINAL.pdf
141	PEH Group Business Performance Report September 2018 vFINAL.pdf
143	PEH Group BPR Sept17 v1.pdf
144	PEH Group Business Performance Report April 2018 vFinal.pdf
145	PEH Group Business Performance Report April 2019 vFinal.pdf
146	PEH Group Business Performance Report August 2017 v1.pdf
147	PEH Group Business Performance Report August 2018 vFinal.pdf
148	PEH Group Business Performance Report December 2017 v1.pdf
149	PEH Group Business Performance Report December 2018 VFINAL.pdf
150	PEH Group Business Performance Report February 2018-V1.pdf
151	PEH Group Business Performance Report February 2019VFINAL.pdf
152	PEH Group Business Performance Report January 2018-Final.pdf
153	PEH Group Business Performance Report January 2019 V1.pdf
154	PEH Group Business Performance Report July 2017.pdf
155	PEH Group Business Performance Report July 2018 V1.pdf
156	PEH Group Business Performance Report July 2019 vFINAL.pdf
157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
158	PEH Group Business Performance Report June 2018 vFinal.pdf
159	PEH Group Business Performance Report June 2019 vFinal.pdf
160	PEH Group Business Performance Report March 2018 v1.pdf
161	PEH Group Business Performance Report March 2019VFINAL.pdf
162	FY15 Budget Slides IMO Generation 25-11-2014.pdf
163	Item 2.1 FY16 Revised Budget 03Feb15.pdf
164	Item 4.1A FY16 Q3 Forecast v1 Combined (Revised).pdf

165	PEH Item 5.1 - FY18 Budget Presentation Final.pdf
166	PEH Item 5.1 - FY19 Budget Presentation (Final) 20180301.pdf
167	WE Capex - FY15 Budget.xlsx
168	WE Capex Budget FY18-FY22 v1.xlsm
169	WE Capex FY17-FY21.xlsm
170	WE Opex Workpad 20180124 - FY19 Budget.xlsm
171	WE Bank Report - Sept 2014 v1 (revised).pdf
172	WE Bank Report - March 2015 v1.pdf
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174	WE Bank Report - Mar 2016 v1.pdf
175	WE Bank Report - Sept 2016 v1.pdf
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342	Monthly Operating Report - Aug 16 v1.pdf
343	Monthly Operating Report - Dec 13 v1.pdf

	344	Monthly Operating Report - Dec 14 v1.pdf
	345	Monthly Operating Report - Dec 15 v1.pdf
	346	Monthly Operating Report - Dec 16 v1.pdf
	348	Monthly Operating Report - Feb 15 v1.pdf
	349	Monthly Operating Report - Feb 16 v1.pdf
	350	Monthly Operating Report - Feb 17 v1.pdf
	352	Monthly Operating Report - Jan 15 v1.pdf
	353	Monthly Operating Report - Jan 16 v1.pdf
	354	Monthly Operating Report - Jan 17 v1.pdf
	357	Monthly Operating Report - July 15 v1.pdf
	358	Monthly Operating Report - July 16 v1.pdf
	361	Monthly Operating Report - June 15 v1.pdf
	362	Monthly Operating Report - June 16 v1.pdf
	364	Monthly Operating Report - Mar 15 v1.pdf
	365	Monthly Operating Report - Mar 16 v1.pdf
	366	Monthly Operating Report - Mar 17 v1.pdf

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 180, 181, 182, 183, 184, 185, 189, 258, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
The KSPS was built fit for purpose and there is no significant capital expenditure planned at this stage.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
11.2 The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 180, 181, 182, 183, 184, 185, 189, 258, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
No significant capital expenditure planned at this stage	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
11.3 The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 180, 181, 182, 183, 184, 185, 189, 258, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
The plant was designed for continuous operation for 25 yrs, now in year 10 it has done the equivalent of 3 years operation. Average run time is around 4.5hrs.	N/A	N/A	N/A	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
11.4 There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 181, 182, 183, 184, 185, 189, 258, 337, 338, 341, 342, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 357, 358, 361, 362, 364, 365, 366		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
The capital expenditure plan is reviewed annually and between that on an as required basis. The plan, with variances, is reported on monthly.	N/A	N/A	N/A	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.

None

12.	Key Process - Review of AMS The asset management system is regularly reviewed and updated	Asset management process and policy definition adequacy rating A	Asset management performance rating 2
Outcome The asset management system is regularly reviewed and updated.		Interviewees: Patrick Peak - General Manager EMR, Regulation Peter Durack – Manager Compliance & Risk Marc Hettler – Generation Lead	
		Relevant documentation: 7 2016 March - Asset Management System v5.docx 12 2016-17 Asset Management Plan - V1.pdf 13 Asset Management Plan - 2017-18.docx 15 Asset Management Plan - 2018-19 FINAL.pdf 256 WHS 320 Procedure.Corporate.002 - Document Control.pdf 129 2016 Business Performance Report Sample - Generation Section.pdf 135 PEH Group Business Performance Report May 2018 vFinal.pdf 136 PEH Group Business Performance Report May 2019 FINAL.pdf 137 PEH Group Business Performance Report November 2017 v1.pdf 138 PEH Group Business Performance Report November 2018 VFINAL.pdf 139 PEH Group Business Performance Report October 2017 v1.pdf 140 PEH Group Business Performance Report October 2018 vFINAL.pdf 141 PEH Group Business Performance Report September 2018 vFINAL.pdf 143 PEH Group BPR Sept17 v1.pdf 144 PEH Group Business Performance Report April 2018 vFinal.pdf	

	145	PEH Group Business Performance Report April 2019 vFinal.pdf
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	148	PEH Group Business Performance Report December 2017 v1.pdf
	149	PEH Group Business Performance Report December 2018 VFINAL.pdf
	150	PEH Group Business Performance Report February 2018-V1.pdf
	151	PEH Group Business Performance Report February 2019VFINAL.pdf
	152	PEH Group Business Performance Report January 2018-Final.pdf
	153	PEH Group Business Performance Report January 2019 V1.pdf
	154	PEH Group Business Performance Report July 2017.pdf
	155	PEH Group Business Performance Report July 2018 V1.pdf
	156	PEH Group Business Performance Report July 2019 vFINAL.pdf
	157	PEH Group Business Performance Report June 2017 v14-07-17.pdf
	158	PEH Group Business Performance Report June 2018 vFinal.pdf
	159	PEH Group Business Performance Report June 2019 vFinal.pdf
	160	PEH Group Business Performance Report March 2018 v1.pdf
	161	PEH Group Business Performance Report March 2019VFINAL.pdf

Criteria Effectiveness			Post Review Rating	
Criteria	Evidence Ref#		Adequacy rating	Performance Rating
12.1 A review process is in place to ensure the asset management plan and the asset management system described in it remain current	7, 12, 13, 15, 256, 320		A	2
Condition, (Performance)	Cause	Consequence	Corrective Action	
Although the AMP is updated annually the AMS has not been updated since 2016	N/A	Not using the latest ERA Guidelines	Revise the AMS	

Criteria	Evidence Ref#		Adequacy rating	Performance Rating
12.2 Independent reviews (e.g. internal audit) are performed of the asset management system	7, 12, 13, 15, 129, 135, 136, 137, 138, 139, 140, 141, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161		A	1
Condition, (Performance)	Cause	Consequence	Corrective Action	
Finances are externally audited annually, the AMS is subject to ERA reviews, AGL carried out due diligence and safety reviews. Performance is reported in the various reports.	N/A	N/A	N/A	

Comments & Recommendations for adequacy ratings C & D or performance ratings 3 & 4.

None

APPENDIX 3 - AUDIT PLAN ASSET REVIEW PRIORITIES

Table 19 Effectiveness Criteria Pre-audit Review

Asset management system component	Consequence 1=minor, 2=moderate, 3=major	Risk Likelihood A=likely, B=probable, C=unlikely	Inherent Risk low, medium, high	Adequacy of existing controls S=strong, M=moderate, W=weak	Review Priority					
					1	2	3	4	5	N/A
ASSET PLANNING					0	0	0	7	2	0
1.1. Asset management plan covers the processes in this table	2	C	MEDIUM	M				4		
1.2. Planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning	2	C	MEDIUM	M				4		
1.3. Service levels are defined in the asset management plan	2	C	MEDIUM	M				4		
1.4. Non-asset options (e.g. demand management) are considered	1	C	LOW	M					5	

Asset management system component	Consequence 1=minor, 2=moderate, 3=major	Risk Likelihood A=likely, B=probable, C=unlikely	Inherent Risk low, medium, high	Adequacy of existing controls S=strong, M=moderate, W=weak	Review Priority					
					1	2	3	4	5	N/A
1.5. Lifecycle costs of owning and operating assets are assessed	2	C	MEDIUM	M				4		
1.6. Funding options are evaluated	2	C	MEDIUM	M				4		
1.7. Costs are justified and cost drivers identified	2	C	MEDIUM	M				4		
1.8. Likelihood and consequences of asset failure are predicted	2	C	MEDIUM	M				4		
1.9. Asset management plan is regularly reviewed and updated	1	C	LOW	M					5	
ASSET CREATION AND ACQUISITION					0	0	0	5	0	0
2.1. Full project evaluations are undertaken for new assets, including comparative assessment of non- asset options	2	C	MEDIUM	M				4		
2.2. Evaluations include all life-cycle costs	2	C	MEDIUM	M				4		

Asset management system component	Consequence 1=minor, 2=moderate, 3=major	Risk Likelihood A=likely, B=probable, C=unlikely	Inherent Risk low, medium, high	Adequacy of existing controls S=strong, M=moderate, W=weak	Review Priority					
					1	2	3	4	5	N/A
2.3. Projects reflect sound engineering and business decisions	2	C	MEDIUM	M				4		
2.4. Commissioning tests are documented and completed	2	C	MEDIUM	M				4		
2.5. Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood	2	C	MEDIUM	M				4		
ASSET DISPOSAL					0	0	0	3	1	0
3.1. Under-utilised and under-performing assets are identified as part of a regular systematic review process	1	C	LOW	M					5	
3.2. The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	2	C	MEDIUM	M				4		

Asset management system component	Consequence 1=minor, 2=moderate, 3=major	Risk Likelihood A=likely, B=probable, C=unlikely	Inherent Risk low, medium, high	Adequacy of existing controls S=strong, M=moderate, W=weak	Review Priority					
					1	2	3	4	5	N/A
3.3. Disposal alternatives are evaluated	2	C	MEDIUM	M				4		
3.4. There is a replacement strategy for assets	2	C	MEDIUM	M				4		
ENVIRONMENTAL ANALYSIS					0	0	0	4	0	0
4.1. Opportunities and threats in the asset management system environment are assessed	2	C	MEDIUM	M				4		
4.2. Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	2	C	MEDIUM	M				4		
4.3. Compliance with statutory and regulatory requirements	2	C	MEDIUM	S				4		
4.4. Service standard (customer service levels etc) are measured and achieved.	2	C	MEDIUM	M				4		

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					1	2	3	4	5	N/A
ASSET OPERATIONS					0	0	0	4	2	0
5.1. Operational policies and procedures are documented and linked to service levels required	1	C	LOW	M					5	
5.2. Risk management is applied to prioritise operations tasks	1	C	LOW	M					5	
5.3. Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition	2	C	MEDIUM	M				4		
5.4. Accounting data is documented for assets	2	C	MEDIUM	M				4		
5.5. Operational costs are measured and monitored	2	C	MEDIUM	M				4		

Asset management system component	Consequence 1=minor, 2=moderate, 3=major	Risk Likelihood A=likely, B=probable, C=unlikely	Inherent Risk low, medium, high	Adequacy of existing controls S=strong, M=moderate, W=weak	Review Priority					
					1	2	3	4	5	N/A
5.6. Staff resources are adequate and staff receive training commensurate with their responsibilities.	2	C	MEDIUM	M				4		
ASSET MAINTENANCE					0	0	0	6	0	0
6.1. Maintenance policies and procedures are documented and linked to service levels required	2	C	MEDIUM	M				4		
6.2. Regular inspections are undertaken of asset performance and condition	2	C	MEDIUM	M				4		
6.3. Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	2	C	MEDIUM	M				4		

Asset management system component	Consequence 1=minor, 2=moderate, 3=major	Risk Likelihood A=likely, B=probable, C=unlikely	Inherent Risk low, medium, high	Adequacy of existing controls S=strong, M=moderate, W=weak	Review Priority					
					1	2	3	4	5	N/A
6.4. Failures are analysed and operational/maintenance plans adjusted where necessary	2	C	MEDIUM	M				4		
6.5. Risk management is applied to prioritise maintenance tasks	2	C	MEDIUM	M				4		
6.6. Maintenance costs are measured and monitored	2	C	MEDIUM	M				4		
ASSET MANAGEMENT INFORMATION SYSTEM					0	0	0	7	1	0
7.1. Adequate system documentation for users and IT operators	2	C	MEDIUM	M				4		
7.2. Input controls include suitable verification and validation of data entered into the system	2	C	MEDIUM	M				4		

Asset management system component	Consequence 1=minor, 2=moderate, 3=major	Risk Likelihood A=likely, B=probable, C=unlikely	Inherent Risk low, medium, high	Adequacy of existing controls S=strong, M=moderate, W=weak	Review Priority					
					1	2	3	4	5	N/A
7.3. Security access controls appear adequate, such as passwords	2	C	MEDIUM	M				4		
7.4. Physical security access controls appear adequate	2	C	MEDIUM	M				4		
7.5. Data backup procedures appear adequate and backups are tested	2	C	MEDIUM	M				4		
7.6. Computations for licensee performance reporting are accurate	2	C	MEDIUM	M				4		
7.7. Management reports appear adequate for the licensee to monitor licence obligations	1	C	LOW	M					5	
7.8. Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	2	C	MEDIUM	M				4		

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					1	2	3	4	5	N/A
RISK MANAGEMENT					0	0	0	3	0	0
8.1. Risk management policies and procedures exist and are applied to minimise internal and external risks	2	C	MEDIUM	M				4		
8.2. Risks are documented in a risk register and treatment plans are implemented and monitored	2	C	MEDIUM	M				4		
8.3. Probability and consequences of asset failure are regularly assessed	2	C	MEDIUM	M				4		
CONTINGENCY PLANNING					0	0	0	1	0	0
9.1. Contingency plans are documented, understood and tested to confirm their operability and to cover higher	2	C	MEDIUM	M				4		

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					1	2	3	4	5	N/A
FINANCIAL PLANNING					0	0	0	6	0	0
10.1. The financial plan states the financial objectives and identifies strategies and actions to achieve those	2	C	MEDIUM	M				4		
10.2. The financial plan identifies the source of funds for capital expenditure and recurrent costs	2	C	MEDIUM	M				4		
10.3. The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	2	C	MEDIUM	M				4		
10.4. The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	2	C	MEDIUM	M				4		

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					1	2	3	4	5	N/A
10.5. The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	2	C	MEDIUM	M				4		
10.6. Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	2	C	MEDIUM	M				4		
CAPITAL EXPENDITURE PLANNING					0	0	0	3	1	0
11.1. There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	1	C	LOW	M					5	
11.2. The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	2	C	MEDIUM	M				4		

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					1	2	3	4	5	N/A
11.3. The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	2	C	MEDIUM	M				4		
There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented,	2	C	MEDIUM	M				4		
REVIEW OF AMS					0	0	0	0	2	0
12.1. A review process is in place to ensure the asset management plan and the asset management system described in it remain current	1	C	LOW	M					5	
12.2. Independent reviews (e.g. internal audit) are performed of the asset management system	1	C	LOW	M					5	

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					1	2	3	4	5	N/A
					0	0	0	49	9	0