## Audit Report

Performance Audit and Asset Management Review

3607-20

Prepared for Goldfields Power Pty Ltd

28 November 2018







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Prepared for Goldfields Power Pty Ltd

Project Name Performance Audit and Asset

Management Review

File Reference Audit Report - 2018

Goldfields - FINAL.docx

Job Reference 3607-20

Date 28 November 2018

Version Number 3

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Effective Date 28/11/2018

Date Approved 28/11/2018

#### **Document History**

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
Α	30/08/2018	Draft for review and comment	J. Edwards	S. Martin
В	14/09/2018	Updated for GPPL comments	J. Edwards	S. Martin
С	17/09/2018	Updated for GPPL comments	J. Edwards	S. Martin
1	18/09/2018	Updated for GPPL comments	J. Edwards	S. Martin
2	09/10/2018	Updated for ERA comments	J. Edwards	P. Lamb
3	28/11/2018	Final	P. Lamb	S. Walker

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#### **Executive Summary**

#### General

Goldfields Power Pty Ltd (GPPL) holds an electricity retail licence (ERL4) and an electricity generation licence (EGL11). GPPL owns and operates gas turbines at Kalgoorlie. GPPL is owned by TEC Kalgoorlie Pty Ltd, a subsidiary of TransAlta Energy Australia Pty Ltd (TransAlta) and NP Kalgoorlie Pty Ltd.

While more than one versions of each licenses have been issued since last audit, the revisions are considered to be immaterial. There have been no significant changes to the assets since the last audit.

The audit was carried out in parallel with that for Southern Cross Energy Partnership (SCE), a subsidiary owned by TransAlta. Some references for SCE have been used as evidence for GPPL.

#### Audit and review objectives

This audit has been conducted in order to assess:

- 1. GPPL's level of compliance with the conditions of their electricity licences.
- 2. The effectiveness of GPPL's asset management system.

This report outlines the findings of the audit and review of GPPL to fulfil the above objectives, conducted on 13-16 August. The audit and review covers the operating period of 1 July 2014 to 30 June 2018.

#### **Performance Audit - Findings**

There were no issues identified during the previous audit.

There were no issues identified during the current audit. No non-compliances with the conditions of GPPL's electricity licence have been observed.

#### **Performance Audit - Effectiveness of controls**

We consider that GPPL has adequate controls in place that are appropriate to the nature and scale of its activities.

#### **Performance Audit - Overall compliance**

The overall compliance of GPPL with its licence is summarised in Section 4.2 of this report. All items were assessed as compliant, not applicable or not able to be rated.

#### Asset Management System Review - Findings

There were no recommendations from the previous review.

The recommendations from this current review are provided in the following table.

Reference (no./year)	Asset Management System Component	Issue	Auditor's recommendation
R1/2018	A1 Asset Maintenance Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule.	The GPPL AMP has identified that the SAP data conversion appears to have created some gaps in both asset records and detailed master data and may include registered equipment such as pressure vessels. These are being investigated by the Maintenance Process Specialist. Statutory compliance and efficient and effective maintenance relies on this data being readily available.	We recommend that GPPL completes the improvement opportunity to rectify the asset record data gaps that it identified in the GPPL AMP.



Reference (no./year)	Asset Management System Component	Issue	Auditor's recommendation
R2/2018	A1 Asset Maintenance Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule.	Apart from SAP PMs and the major maintenance schedule, there is no asset lifecycle maintenance plan. Major maintenance, including capital works, is planned by the Plant Manager South according to the TransAlta MRF and budgeting processes. There are multiple documents managing different parts of the Asset lifecycles.  The GPPL AMP has identified that in reviewing these documents, there is poor correlation between planned work and budgeted work and a single document is required to address this.	We recommend that GPPL develops a single document to manage the different parts of the asset lifecycles in accordance with the opportunity it identified in the GPPL AMP.
R3/2018	A1 Review of Asset Management System A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current	Improvement opportunities are included in Section 14 of the GPPL AMP. However, there is no Improvement Plan that sets out timeframes and responsibilities. We note that other improvements have been identified in the AMP.	We recommend that an Improvement Plan is included in the AMP to summarise the opportunities that have been identifier in the Plan and to assign responsibilities and timeframes.

#### Asset Management System Review - Control Environment

We consider that GPPL has adequate controls in place for its asset management functions that are appropriate to the nature and scale of its activities.

#### **Asset Management System Review - Overall effectiveness**

A summary of our assessment of the effectiveness of GPPL's Asset Management System is provided in Section 4.3. Although some minor improvement opportunities have been identified in the Asset Management Plan, all elements have been rated "A" for policy and procedures. All elements have been rated "1" for performance. Although we have identified a small number of recommendations during the course of the asset management review, we consider that these are minor improvement opportunities and do not warrant a rating policy and procedures rating of "B".



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#### 1 Introduction

#### 1.1 Background

The Economic Regulation Authority (ERA) is responsible for regulating the licensing schemes for gas, electricity and water services in Western Australia. The primary objective of regulation is to ensure the provision of a competitive and fair environment, particularly where businesses operate as natural monopolies.

Goldfields Power Pty Ltd (GPPL) holds an electricity retail licence (ERL4) and an electricity generation licence (EGL11). GPPL owns and operates gas turbines at Kalgoorlie. GPPL is a joint venture (JV) between TEC Kalgoorlie Pty Ltd (TECK), a subsidiary of TransAlta Energy Australia Pty Ltd (TransAlta), and NP Kalgoorlie Pty Ltd (NPK).

#### 1.2 Overview of Goldfields Power

TransAlta operates several power generation & transmission operations in regional Western Australia, including Goldfields Power (GPPL).

TransAlta has 50% ownership of the GPPL assets and has been contracted through TransAlta's TECO Pty Ltd (TECO) subsidiary by GPPL to operate and maintain the facility. TransAlta is contractually obliged to ensure that the PPS business objectives are met.

GPPL's assets are located entirely at the Parkeston Power Station (PPS) approximately 3 km to the east of Kalgoorlie with transmission lines to the Kalgoorlie Consolidated Gold Mines (KCGM) Super Pit and interconnectors to the South West Interconnected System (SWIS). The transmission lines are owned by a third party that TECO maintains under agreement.

Power is supplied by GPPL to Newmont Power Proprietary Ltd (NPPL) under a Power Purchase Agreement (PPA). NPPL also supplies energy to the Kalgoorlie Consolidated Gold Mines (KCGM) under a PPA. The PPA with KCGM is a retail arrangement, while the PPA with NPPL is a wholesale arrangement. PPS is also connected to the South West Interconnected System (SWIS) and is a participant in the Wholesale Energy Market (WEM).

GPPL Asset Management Plan acknowledges that operating and maintenance strategies will need to be modified if there are changes to the PPAs depending on the extent of GPPL's customers' operations into the future. Depending on the future operating scenarios, this may involve pushing out major maintenance, reducing operating spares, changing duty/standby programs and decommissioning plant to meet changing demand. Alternatively, if GPPL's customers' operations are extended past the current end date of the PPA, gas turbine control systems may need to be upgraded, online condition monitoring improved and the machines upgraded to higher specifications. If the PPA is not renegotiated, decommissioning plans and budgets will need to be developed or the assets sold.

Appropriate capital and operating plans and budgets will need to be developed by GPPL depending on the future energy requirements of its customers.

#### 1.3 Goldfields Power's Assets

The Parkeston 110MW power station is located approximately 3 kilometres to the east of Kalgoorlie and is connected to the 132kV Southwest Interconnected System (SWIS). It has two 33kV feeders, A and B, supplying energy to KCGM's Fimiston processing plant and a single 33kV Kaltails feeder. The Kaltails plant has been decommissioned and supply on this line is minimal.

The power station comprises three identical GE LM6000 PA gas turbines (GTs) and associated equipment. Fuel gas is supplied by Newmont from the APA gas pipeline via a gas supply agreement.

One machine is usually run base-loaded for KCGM, primarily during daytime, with the other two units on standby. Presently, all machines are shut down at night due to Newmont importing all their power from the SWIS. This is due to other sources of electricity being cheaper than electricity being generated at PPS. The frequent heat cycling of the Parkeston GTs will incur an increased maintenance cost due to fatigue in a wide range of components on the machines. This cost is difficult to quantify but could be substantial as it might involve fatigue of major turbine and generator parts. TransAlta has maintenance inspections in place to determine early degradation of parts allowing proactive planning for rectification.



There have been no significant changes to GPPL's assets since the last audit/review.

#### 1.4 Purpose of this report

As a condition of the licences, licensees are required to conduct a performance audit and asset management review hat assesses the performance of the licensee against its obligations under the licenses.

The purpose of the performance audit was to assess the effectiveness of measures taken by the licensee to meet the conditions referred to in the licence including the legislative obligations called up by the licence. The scope of the audit report includes assessing the adequacy and effectiveness of performance against the requirements of the licensee by considering:

- > process compliance;
- > outcome compliance;
- > output compliance;
- > integrity of reporting; and
- > compliance with any individual license conditions.

The asset management system reviews covers:

- > a description of the audit or review objectives and the methodology used to conduct the audit or review;
- > the interval of time covered by the audit or review and the previous audit or review, if applicable;
- > the period over which the audit or review has been performed;
- > details of the licensee's representatives participating in the audit or review;
- > details of key documents and other information sources examined by the auditor during the course of the audit or review;
- > details of the audit or review team members and hours utilised by each member; and
- > any other information the auditor considers relevant to the audit or review scope of work.

The *Electricity Industry Act 2004 (WA)* obligate the licensee to provide the Authority with a performance audit conducted by an independent expert acceptable to the Authority not less than every 24 months period (or such longer period as the Authority allows) and provide the Authority with a report by an independent expert acceptable to the Authority as to the effectiveness of the asset management system not less than every 24 month period (or such longer period as the Authority allows).

Version 3 of EGL11 and version 3 of ERL4 were both issued on 13 January 2011. A Performance Audit of both licences was last performed for the period 1 July 2011 to 30 June 2014. An Asset Management Review for EGL11 was last performed for the period 1 July 2011 to 30 June 2014.



## 2 Audit/Review Scope

#### 2.1 Audit/Review Objectives

The objectives of this audit were to:

- Provide to the Authority an independent assessment of GPPL's compliance with all of the relevant obligations under the licences
- 2. Provide to the Authority an independent assessment of the effectiveness of GPPL's asset management system in relation to EGL11
- 3. Provide recommendations to address noncompliance.

#### 2.2 Scope of Works

The audit encompassed an assessment of the following four key areas using a risk based approach (to ISO 31000:2009):

- > Process compliance: assessment of the effectiveness of systems and procedures
- > Outcome compliance: assessment of actual performance against the prescribed licence standards
- Output compliance: assessment of records to indicate procedures are followed and controls are maintained
- > Integrity of reporting: assessment of the completeness and accuracy of the compliance and performance reports

The scope of works of this audit included:

- Interviews with key staff members from GPPL to:
  - Assess findings from the last audit and review the actions taken to address the recommendations from the previous audit / review
  - Assess performance against licence conditions for EGL11 and ERL4
  - Assess performance against each asset management process for EGL11
- Reviews of documents, procedures and policy manuals in relation to financial management and planning, service performance standards, asset management, operations and maintenance functions and reporting
- Testing and assessment to determine whether the procedures and policies are followed and determine its effectiveness
- > Preparation of an audit report in accordance with the format outlined in the ERA Audit and Review Guidelines: Electricity and Gas Licences (April 2014)



#### 2.2.1 Performance Audit

The audit of the licences covered the entire licences, and contained the following key areas as outlined in Table 2-1.

Table 2-1 Licence Performance Audit Areas

Clause	Licence Requirements	EGL11	ERL4
4	Fees	✓	✓
5	Compliance	✓	✓
12	Accounting Records	✓	✓
13	Individual Performance Standards	✓	✓
14	Performance Audit	✓	✓
15	Reporting change in circumstances	✓	✓
16	Provision of information	✓	✓
17	Publishing information	✓	✓
18	Notices	✓	✓
19	Review of the Authority's Decisions	✓	✓
20	Asset Management System	✓	Not used (N/a)
21	Approved Scheme	Not used (N/a)	✓
23	Marketers	Not used (N/a)	✓
24	Customer Contracts	Not used (N/a)	✓
25	Amending the Standard Form Contract	Not used (N/a)	<b>√</b>
26	Directions by the Authority	Not used (N/a)	✓
27	Supplier of Last Resort	Not used (N/a)	<b>√</b>
28	Notification of Default Supply	Not used (N/a)	✓



#### 2.2.2 Performance Audit Excluded Conditions

Some of the reporting obligations for retail have been excluded from the audit because they are not applicable to GPPL.

Table 2-2 Excluded conditions

2017 Compliance Manual Reference	Reference	Reason for exclusion
72-77	Electricity Industry (Obligation to Connect) Regulation	No small use customers
78-100	Electricity Industry (Customer Contracts) Regulations 2005	No small use customers
108-109	Electricity Industry Act: Section 54	No small use customers
110	Electricity Industry Act: Section 76	GPPL is not a retailer of last resort
111	Electricity Industry Act: Section 101	No small use customers
114-118	Electricity Industry Act: Section 11	No small use customers
120	Electricity Industry Act: Section 11	There are no individual performance standards
129-316	Code of Conduct	Code of conduct does not apply because there are no small use customers
339	Electricity Industry Metering Code	GPPL is the user and network operator and any notification would be to itself
486-496	Electricity Industry(Licence Conditions)	Licensee Specific Conditions that don't apply
	Electricity Industry Act section 61 and 11	
	Electricity Industry (Customer Contracts) Regulations 2005	

#### 2.2.3 Asset Management System Review

The review of GPPL's asset management system for EGL11 covered the following asset management elements:

- > Asset planning
- > Asset creation and acquisition
- > Asset disposal
- > Environmental analysis
- > Asset operations
- > Asset maintenance
- > Asset management information system
- > Risk management
- > Contingency planning
- Financial planning
- > Capital expenditure planning
- > Review of AMS

#### 2.3 Methodology and Approach

The audit was undertaken in accordance with ASAE3000. Our approach to the reporting work was to work closely with the licensee so that comments and challenges could be responded to and addressed before the audit report was finalised. The key areas of our approach included:

> A start-up discussion (by telephone) with GPPL to:



- Discuss the main issues to be addressed at audit
- Identify any issues from the previous audit
- Identify any new issues arising from changes to the Licence or operating environment requirements
- Discuss the audit plan.
- > Preparation of a draft audit plan for comment by the licensee. The audit plan identified the number and location of audits, the information to be addressed and the auditor responsible.
- > Submission of the draft audit plan to the ERA for approval
- > A start-up meeting on-site at the beginning of our audit work
- > On site audit work comprising:
  - Face-to-face interviews with business staff responsible for the audit area
  - Demonstration of key systems
  - Sample testing for outcome compliance (assessing sample of documents to confirm procedures / policies are followed and implemented)
  - Review of any non-compliances and assess if any corrective action was undertaken and its effectiveness
  - Controls assessment on obligations that are found to be non-compliant
  - Site visit to Kalgoorlie on 15 August 2018 to meet with the contractor responsible for operating and maintaining GPPL's infrastructure.
- > Preliminary audit feedback at the audit close-out meeting
- > Preparation of a draft report for GPPL's review and comment;
- > Preparation of a final report for submission to the ERA.

Our methodology for completing this audit assignment was based on:

- > A risk assessment that determined the priority of each audit area, using the risk management framework in Appendix A.
- > Our understanding of the licensee's business
- > The experience of our audit team in undertaking regulatory audits which has been gained in several jurisdictions in Australia and in the United Kingdom
- > The outcome of the previous audit completed of GPPL

Our audit methodology, including the key documents required to be reviewed and the supporting systems that we would like to see demonstrated, is detailed in Table 2-3 and Table 2-4.



Table 2-3 Licence Audit Methodology

Audit Area	Priority	Approach	Systems	Key Documents
Licence Audit				
Clause 4 Fees	5	Review invoices from Authority and receipts of payment		<ul> <li>Invoices and receipts</li> </ul>
Clause 5 Compliance	Various	<ul> <li>Review legislative requirements and confirm compliance</li> <li>Identify any corrective action applied to correct / prevent breaches of compliance</li> </ul>	Work scheduling system	<ul><li>Performance standards</li><li>Compliance Summary Reports (record of breaches)</li></ul>
Clause 12 Accounting Records	4	Check that 2014, 2015, 2016 and 2017 financial statements are signed off as being to appropriate standards	Finance system	<ul> <li>2014 Financial statement</li> <li>2015 Financial statement</li> <li>2016 Financial statement</li> <li>2017 Financial statement</li> </ul>
Clause 13 Individual Performance Standards	NA	Not applicable		
Clause 14 Performance Standards	4	<ul> <li>Review information reported to the Authority</li> <li>Confirm methodology used to determine performance conforms to legislation and procedures.</li> </ul>		<ul> <li>Performance Audit</li> <li>Annual Performance Reports</li> <li>Procedures / Policy Manual</li> <li>Post Implementation Audit Reports / Status since previous audit</li> <li>Correspondence between GPPL and Authority regarding review requirements</li> </ul>
Clause 15 Reporting change in circumstances	5	Review any correspondence with the Authority	Correspondence register	Correspondence with ERA
Clause 16 Provision of Information	4	Confirm that the licensee has provided the Authority with data required for performance monitoring purposes as set out in the Compliance Reporting Manual.	Correspondence register	<ul><li>Annual compliance reports</li><li>Correspondence register</li></ul>
Clause 17 Publishing Information	4	Check if any requests have been issued by the Authority to publish any information relating to the performance of the Licensee and correlating response	Correspondence register	<ul> <li>Letters of notification / requests from the Authority</li> <li>Response to the Authority</li> </ul>
Clause 18	4	Confirm all notices are issued in writing	Correspondence register	<ul> <li>Issued notices</li> </ul>



Audit Area	Priority	Approach	Systems	Key Documents
Notices				
Clause 19 Review of the Authority's Decisions	4	Confirm if any requests of a reviewable decision has been issued to the Authority and correlating response		Requests for review of decision (Correspondence)
Clause 20 Asset Management System	Various	Confirm that the asset management policies and procedures meet legislative requirements.	<ul> <li>Enterprise Asset         Management System</li> <li>Computerised         Maintenance Management         System</li> </ul>	<ul> <li>Asset Management Policies</li> <li>Asset Management Plans</li> <li>Asset Management Systems and Procedures Manual</li> <li>Asset Register</li> </ul>
Clause 21 Approved Scheme	NA	Confirm that it is not applicable		
Clause 23 Marketers	NA	Confirm that it is not applicable		
Clause 24 Customer Contracts	NA	Confirm that it is not applicable		
Clause 25 Amending the Standard Form Contract	NA	Confirm that it is not applicable		
Clause 26 Directions by the Authority	5	Confirm that directions from the authority have been complied with.	Correspondence register	Correspondence with ERA
Clause 27 Supplier of Last Resort	NA	Confirm that it is not applicable		
Clause 28  Notification of Default Supply	NA	Confirm that it is not applicable		



Table 2-4 Asset Management Review Methodology

Audit Area	Effectiveness Criteria	Approach	Systems	Key Documents
Asset Managemen	Review			
Asset planning	<ul> <li>Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning</li> <li>Service levels are defined</li> <li>Non-asset options (e.g., demand management) are considered</li> <li>Lifecycle costs of owning and operating assets are assessed</li> <li>Funding options are evaluated</li> <li>Costs are justified and cost drivers identified</li> <li>Likelihood and consequences of asset failure are predicted</li> <li>Plans are regularly reviewed and updated</li> </ul>	<ul> <li>Review and assess the adequacy of asset planning processes</li> <li>Review and assess adequacy of asset management plans</li> <li>Assess if asset management plans are up to date</li> <li>Assess implementation of asset management plans (status)</li> <li>Assess whether the asset management plan clearly assigns responsibilities and if these have been applied in practice</li> </ul>	Asset database / information system	<ul> <li>Overview of planning approach</li> <li>Population projections</li> <li>Infrastructure Planning Reports</li> <li>Asset management plans</li> <li>Service level agreements</li> <li>Business Case/project justification</li> </ul>
Asset creation and acquisition	<ul> <li>Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions</li> <li>Evaluations include all life-cycle costs</li> <li>Projects reflect sound engineering and business decisions</li> <li>Commissioning tests are documented and completed</li> <li>Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood</li> </ul>	<ul> <li>Review adequacy of policies and procedures in relation to asset creation and acquisition</li> <li>Review examples of creations / acquisitions to check if policies and procedures were followed and check costs against estimates</li> </ul>		<ul> <li>Policies and procedures for asset creating and acquisition. Accounting and engineering</li> <li>Overview of planning approach</li> <li>Business Case/project justification</li> <li>Asset management plans</li> <li>Commissioning certificates</li> </ul>
Asset disposal	<ul> <li>Under-utilised and under-performing assets are identified as part of a regular systematic review process</li> <li>The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken</li> <li>Disposal alternatives are evaluated</li> <li>There is a replacement strategy for assets</li> </ul>	<ul> <li>Review adequacy of policies and procedures in relation to asset disposal, asset replacement, identification of under-performing assets</li> <li>Determine if a review on the usefulness of assets are undertaken</li> <li>Review examples to check that policies and procedures are being followed</li> </ul>		<ul> <li>Policies and procedures for asset disposal. Accounting and engineering</li> <li>Asset management plans</li> <li>Decommissioning certificates</li> </ul>



Audit Area	Effectiveness Criteria	Approach	Systems	Key Documents
Environmental analysis	<ul> <li>Opportunities and threats in the system environment are assessed</li> <li>Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved</li> <li>Compliance with statutory and regulatory requirements</li> <li>Achievement of customer service levels</li> </ul>	<ul> <li>Review performance and service standards over audit period</li> <li>Review performance / identify any breaches and non-compliances and corrective action taken</li> <li>Review adequacy of reporting and monitoring tools</li> </ul>		<ul> <li>Relevant policies and procedures</li> <li>Planning reports</li> <li>Performance standards</li> <li>Compliance reports</li> <li>Strategic plans (if appropriate)</li> <li>Monthly KPI reports</li> </ul>
Asset operations	<ul> <li>Operational policies and procedures are documented and linked to service levels required</li> <li>Risk management is applied to prioritise operations tasks</li> <li>Assets are documented in an Asset Register, including asset assessment of assets' physical, structural condition and accounting data</li> <li>Operational costs are measured and monitored</li> <li>Staff receive training commensurate with their responsibilities</li> </ul>	<ul> <li>Review adequacy of policies and procedures in relation to asset operations</li> <li>Review staff skills / training and resources available</li> <li>Check that operations procedures are being followed including testing of the asset register, observation of operational procedures and analysis of costs</li> <li>Identify any operational events and corrective actions</li> </ul>	<ul> <li>Asset information system</li> <li>SCADA</li> <li>Finance system</li> <li>Works management system</li> <li>HR system</li> </ul>	<ul> <li>Asset register</li> <li>Operations procedures</li> <li>Operational costs</li> <li>Daily / weekly / monthly check sheets</li> <li>Staff skills / resourcing structure</li> <li>Asset management plan</li> <li>Incident register</li> </ul>
Asset maintenance	<ul> <li>Maintenance policies and procedures are documented and linked to service levels required</li> <li>Regular inspections are undertaken of asset performance and condition</li> <li>Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule</li> <li>Failures are analysed and operational / maintenance plans adjusted where necessary</li> <li>Risk management is applied to prioritise maintenance tasks</li> <li>Maintenance costs are measured and monitored</li> </ul>	<ul> <li>Review adequacy of policies and procedures in relation to asset maintenance / maintenance functions</li> <li>Check that policies and procedures have been followed including testing of maintenance schedules, analysis of costs,</li> <li>Review maintenance schedules / plans</li> <li>Identify any maintenance events and corrective actions</li> </ul>	<ul> <li>Asset information system</li> <li>Works management system</li> </ul>	<ul> <li>Maintenance procedures and schedules</li> <li>Record of maintenance</li> <li>Maintenance costs</li> </ul>



Audit Area	Effectiveness Criteria	Approach	Systems	Key Documents
Asset Management Information System	<ul> <li>Adequate system documentation for users and IT operators</li> <li>Input controls include appropriate verification and validation of data entered into the system</li> <li>Logical security access controls appear adequate, such as passwords and that appropriate system access and functionality is provided to users</li> <li>Physical security access controls appear adequate</li> <li>Data backup procedures appear adequate</li> <li>Key computations related to licensee performance reporting are materially accurate</li> <li>Management reports appear adequate for the licensee to monitor licence obligations</li> </ul>	<ul> <li>Review adequacy of asset information system:         <ul> <li>Asset coverage</li> <li>Functionality</li> <li>Data coverage</li> <li>Security</li> <li>User functionality granted is appropriate</li> </ul> </li> <li>Review outputs / reports generated by systems and assess suitability for reporting against performance standards / licence obligations</li> </ul>	Asset Management Information system	<ul> <li>Asset Management Information System manual</li> <li>AMIS data coverage and quality report</li> <li>Asset reports</li> </ul>
Risk management	<ul> <li>Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system</li> <li>Risks are documented in a risk register and treatment plans are actioned and monitored</li> <li>The probability and consequence of risk failure are regularly assessed</li> </ul>	<ul> <li>Review risk assessment coverage</li> <li>Review sample of risk mitigation to check policies and procedures are followed</li> <li>Assess staff understanding of risk management and adequacy of risk management training for staff</li> </ul>		<ul> <li>Corporate Risk management framework</li> <li>Risk assessment</li> <li>Risk Register</li> </ul>
Contingency Planning	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	<ul> <li>Review adequacy / relevance and currency of contingency plans</li> <li>Review if plans have been tested and report on findings</li> <li>Identify any improvements that have been actioned as a result of testing of the contingency plans</li> </ul>		Contingency plans
Financial Planning	The financial plan states the financial objectives and strategies and actions to achieve the objectives	<ul> <li>Review adequacy and effectiveness of financial planning and reporting processes</li> </ul>		Financial Plan



Audit Area	Effectiveness Criteria	Approach	Systems	Key Documents
	<ul> <li>The financial plan identifies the source of funds for capital expenditure and recurrent costs</li> <li>The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)</li> <li>The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period</li> <li>The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services</li> <li>Significant variances in actual / budget income and expenses are identified and corrective action taken where necessary</li> </ul>	Review current financial plan and assess whether the process is being followed		
Capital expenditure planning	<ul> <li>There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates</li> <li>The plan provides reasons for capital expenditure and timing of expenditure</li> <li>The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan</li> <li>There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned</li> </ul>	Review adequacy and effectiveness of capital planning processes through examination of application of process and example documents	<ul> <li>Spreadsheets for capital planning and prioritisation</li> </ul>	<ul> <li>Capital expenditure planning process outline</li> <li>Value engineering documents</li> <li>Risk management applied to investment planning</li> <li>Program management documents</li> <li>Review of capex estimate voutturn</li> </ul>
Asset management plan	<ul> <li>A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current</li> <li>Independent reviews (e.g. internal audit) are performed of the asset management system</li> </ul>	<ul> <li>Review adequacy and currency of Asset Management Plan</li> <li>Assess when the Asset Management Plan was last updated / reviewed</li> <li>Assess outcomes of independent review of AMPs</li> <li>Identify if AMP needs to be updated</li> </ul>	Asset management system	Asset management plans



#### 2.4 Time Period Covered by the Audit/Review

This audit covers the period from 1 July 2014 to 30 June 2018.

#### 2.5 Time Period of the Audit/Review Process

The audit/review commenced in July 2018 with preparation of the draft Audit Plan. Interviews with GPPL staff were carried out on 13, 14 and 16 August 2018 at GPPL's office in Perth, WA and on 15 August 2018 at the Parkeston Power Station, Kalgoorlie, WA.

#### 2.6 Details of the Licensee Representatives Participating in the Audit/Review

Details of representatives from GPPL who participated in the audit and review process are provided in Table 2-5.

Table 2-5 Details of Licensee Representatives

	· · · · · · · · · · · · · · · · · · ·	
Name	Organisation	Role
Troy Forward	Goldfields Power Pty Ltd	Group Manager, Commercial and Markets
Jamie Crombie	Goldfields Power Pty Ltd	Goldfields Operations Manager
Simon Broom	Goldfields Power Pty Ltd	RCC Manager
Matthew Kenneday	Goldfields Power Pty Ltd	TransAlta - Commercial
Nigel Feletti	Goldfields Power Pty Ltd	Environmental, Health and Safety
Clinton Schick	Goldfields Power Pty Ltd	Plant Engineering Technician
Brad Fanetti	Goldfields Power Pty Ltd	SCE Plant Manager
Marvin Menjivar	Goldfields Power Pty Ltd	Asset Team - Finance

### 2.7 Details of Key Documents and Other Information Sources

The audit was carried out in parallel with that for Southern Cross Energy Partnership (SCE), being also a subsidiary owned by TransAlta. Some references for SCE have been used as evidence for GPPL.

#### **Asset Planning**

- > GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf
- > PPS047 Operations & Maintenance Agreement with GPPL
- > Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015
- > Life Cycle Planning 20110201.ppt presentation.
- > 2019 Australia Budget Timelines memo, dated 16 July 2018.
- > Budget Process PowerPoint, dated June 2017.
- > Australia 2018 L01.xlsx long range forecast spreadsheet
- > AFE Policy document
- > AFE (Authorisation For Expenditure) Standards document
- > Capital Actuals June 18.xlsx spreadsheet viewed. Shows actuals and forecast capital spend

#### **Asset Creation and Acquisition**

- > GAS.07.1342 PROCUREMENT GOVERNING PRINCIPLES.pdf.
- > Financial Policy 230 (a) PP&E.pdf viewed.

#### **Asset Disposal**

Asset register showing existence of all assets, newly created assets and major asset maintenance plans were viewed.



- > 5 and 10 year asset major maintenance budget and NTA budgets were exhibited.
- > Financial Policy 230 (a) PP&E.pdf
- > Financial Policies 230(k) Decommissioning & Restoration Obligations.

#### **Environmental Analysis**

TransAlta FY18 NPI & NGER V3.0 2366518 3.xlsx emissions register.

The following policies/procedures were viewed:

- GAS.03.0848 VEGETATION CLEARING PROCEDURE.pdf
- GAS.03.0849 WASTE MANAGEMENT.pdf
- GAS.03.0850 SOLID, LIQUID AND GAS SPILL RESPONSE.pdf
- GAS.03.1037 FLORA AND FAUNA CONSERVATION.pdf
- GAS.03.1059 SOIL AND GROUND WATER PROTECTION.pdf
- GAS.04.1260 LEGIONELLA HEALTH RISK MANAGEMENT.pdf
- GAS.03.0820 ENVIRONMENTAL ASPECTS, HAZARD IDENTIFICATION, RISK ASSESSMENT AND DETERMINING CONTROLS.pdf
- GAS.03.0876 HAZARDS, NEAR MISSES AND INCIDENT REPORTING.pdf
- GAS.03.1061 SITE ENVIRONMENTAL LICENCES.pdf

The following Annual Environmental Reports were viewed:

- Parkeston Annual Environmental Report 2017 2326090 1.DOCX
- Kalgoorlie Annual Environmental Report 2017 2326111 1.DOCX (SCE)
- Kambalda Annual Environmental Report 2017 2326113 1.DOCX (SCE)
- Leinster Annual Environmental Report 2017 2326116 1.DOCX (SCE)
- Mt Keith Diesel Annual Environmental Report 2017 2326119 1.DOCX (SCE)
- Mt Keith Gas Annual Environmental Report 2017 2326125 1.DOCX (SCE)

The following NPI reports were viewed:

- WA0146 Emission Report 2016-2017.pdf
- WA0322 Emission Report 2016-2017.pdf (SCE)
- WA0323 Emission Report 2016-2017.pdf (SCE)

The following site summary reports were viewed:

- PPS.pdf
- KNO.pdf (SCE)
- KNS.pdf (SCE)
- LNO.pdf (SCE)
- MKO Diesel.pdf (SCE)
- MKO Gas.pdf (SCE)

The following SRS Notifiable Events Reports were viewed:

- OC-293-276417 SummaryPopup.pdf (SCE)
- OC-570-283188 SummaryPopup.pdf (SCE)
- OC-889-301430 SummaryPopup.pdf (SCE)
- POS-438-291442 Communications.pdf (SCE)
- > EHS&T 2018 Programme V2.pdf



#### **Asset Operations**

- > PPS047 Operations & Maintenance Agreement with GPPL
- > Visit to PPS control room:
  - SCADA viewed (site level and detailed for Parkeston)
  - Example hard copy procedures in control room viewed
- > The following fortnightly performance test reports were viewed:
  - KNO HR 2-8-18.xlsx (SCE)
  - KNS HR 030818.xlsx (SCE)
  - LNO HR 1-8-18.xlsx (SCE)
  - MKO HR 040818.xlsx (SCE)
- > The following weekly production ('heat rate') reports were viewed:
  - North Graphs 2018-07-17.pdf (SCE)
  - North Graphs 2018-07-24.pdf (SCE)
  - North Graphs 2018-07-31.pdf (SCE)
  - South Graphs 2018-07-17.pdf (SCE)
  - South Graphs 2018-07-24.pdf (SCE)
  - South Graphs 2018-07-31.pdf (SCE)
- > The following KPI reports were viewed:
  - PSD KPI Overview.jpg
  - PSD KPI Priority Risk Control Area.pdf
  - PSD Maintenance Management KPI Overview.jpg
  - Parkeston Weekly Schedule Example.pdf viewed
  - Parkeston3 Monthly Schedule Example.pdf viewed.
- Equipment Register Example.txt viewed. This is an asset register in structured hierarchy showing all assets for Kalgoorlie. (SCE)
- > The following daily reports were viewed:
  - Daily Meter Readings.xlsx
  - Pre-start Checklist.xlsx
  - Station Rounds.xlsx
- > The following daily report pro formas were viewed:
  - Equipment Operating Hours Document.doc
  - Eye Wash Station Checks.xlsx
- > The following operational reports were viewed:
  - GPPL.DOCX (904)
  - Management Committee of the Goldfields Power Joint Venture Aug 01 2016.docx
  - Management Committee of the Goldfields Power Joint Venture Aug 16 2017.docx
  - Management Committee of the Goldfields Power Joint Venture Feb 16 2017.docx
  - Management Committee of the Goldfields Power Joint Venture May 17 2017.docx
  - Management Committee of the Goldfields Power Joint Venture Nov 09 2016.docx
  - November JV Meeting.xlsx



- > The following operational procedures were viewed:
  - GAS.05.0963 S AND S FORTNIGHTLY HEAT RATE TEST.pdf
  - GAS.05.0985 KNO AND KNS GT OR BLACK PLANT TRIP.pdf
  - GAS.05.1369 BLACK START DIESEL TEST.pdf

#### **Asset Maintenance**

- > SAP viewed live
- SAS.06.1324 Maintenance Work Management.docx viewed. Covers environmental management; health, injury management and wellness initiatives; safety; training, learning and development; auditing and document control, contractor management; TSE reporting and measurement; budget management; and resourcing (024 and 094)
- > The following maintenance records were viewed:
  - PPS-90835766.pdf
  - PPS-90858457.pdf
  - KNO-90858861.pdf (SCE)
  - KNS-90838158.pdf (SCE)
  - Last 6 Months Of Notification History Example
- The following maintenance procedures were viewed:
  - GAS.06.0919 GAS VALVE CALIBRATION PROCEDURE TO S AND S PACKAGE.pdf
  - GAS.06.0946 VARIABLE GEOMETRY CALIBRATIONS.pdf
  - GAS.09.1029 TM2500 LOADING CODE INTO MICRONET-NETCON.pdf
- Maintenance Plans & Schedules.xlsx spreadsheet viewed. Lists preventive/planned maintenance activities.
- > Maintenance Policy Engineering Standard Example List.jpg viewed.

#### **Asset Management Information System**

- > The following key GPPL asset management information systems were observed during the review:
  - SAP Asset Register
  - SAP PM (Plant maintenance) work schedules
  - Safety Performance Reporting for its incident reporting
  - Citect SCADA system for asset operations and performance monitoring
  - Total Safety Documents (TSD) system for its risk management.
  - Operational Integrity Program (OIP) for reviewing and identifying equipment and safety aspects.
  - TapRooT for Root Cause analysis
- Examples of monthly operation and maintenance reports and financial reports were observed during the course of the review.

#### **Risk Management**

- > TransAlta Australia Risk Register on Synergi viewed.
- > ERA #105 Risk Register Goldfields.xlsx
- > TAC.09.0098 TECHNICAL RISK METHOD.pdf
- > TAC.07.0118 TSMS ELEMENT 2 OPERATIONAL RISK MANAGEMENT.pdf viewed.



- > TAC.03.0069 RISK MATRIX STANDARD.pdf viewed
- > TA Emergency Management Standard.pdf
- Mapping of TransAlta Current TSMA to TEA TS&E Management System hardcopy diagram viewed.
- > Safety Performance Report 201806.xlsx viewed. (Newmont)
- > Synergi system on TransAlta intranet viewed.
- > EHS Portal on TransAlta intranet viewed.
- > Various EHS reports (screenshots) viewed.
- The following incident investigation reports were viewed:
  - Incident Investigation Report 6830 V2.pdf (SCE)
  - Incident Investigation Report 9183 V6.pdf (SCE)
  - Incident Investigation Report 8853 v3.pdf (SCE)
- > GAS.06.1324 Maintenance Work Management.docx viewed.
- > TAC.13.0257 WORK MANAGEMENT WORK EXECUTION STANDARD.pdf viewed
- > TAC.13.0259 WORK MANAGEMENT DOCUMENT CLOSURE STANDARD.pdf viewed
- > TAC.09.0097 RISK INTOLERABILITY CRITERIA AND ALARP CONCEPT.pdf
- > The following Critical Task Analysis Forms (CTAs) were viewed
  - 180809132435.pdf (Recommission PPS-BLD tie line)
  - 180809132712.pdf (Generator protection relay testing)
- > The following incident reports were viewed:
  - Synergi Life case no 5720 PPS 33kV CB161 Kaltails Feeder trip suspected lightning strike.msg
  - Synergi Life case no 7253 KNS Unit trip CO2 fire suppression system operated.msg (SCE)
  - Synergi Life case no 8140 Islanding event for SCE 09052018.msg (SCE)
- > GAS.07.1418 TA AUSTRALIA DOCUMENT AND RECORDS CONTROL PROCEDURE.pdf
- > TAC.07.0124 TSMS ELEMENT 7 DOCUMENT AND RECORDS CONTROL.pdf
- > The following monthly EMG meeting minutes were viewed:
  - 2018 0531 EMG North Minutes.docx
  - 2018 0702 EMG North Minutes.docx
  - 2018 0723 EMG North Minutes.docx
  - EMG South Minutes 20180227.docx
  - EMG South Minutes 20180328.docx
  - EMG South Minutes 20180529.docx
- > The following emails regarding safety improvements were viewed:
  - NiW Email Hood Breathers.msg
  - NiW Email Moulded Ear Plugs.msg
  - NiW Email Wash Bays.msg
- > The following safety reports were viewed:
  - Safety Report June 2018.xlsx
  - Safety Report July 2018.xlsx
- > The following monthly report pro formas were viewed:
  - Emergency Light Tests.xlsx
  - Oil, Chemical & Gas storage area checks.xlsx



- > The following incident/hazard reports were viewed:
  - ERA #93 GF MAY Synergi Reports Raised.xlsx
  - ERA #93 GF JUNE Synergi Reports Raised.xlsx
  - ERA #93 GF JULY Synergi Reports Raised.xlsx
- > Example Asset Operations Report.PNG

#### **Contingency Planning**

- > TA Emergency Management Standard.pdf
- > TAC.02.0023 CORPORATE EMERGENCY MANAGEMENT STANDARD.pdf
- > TAC.07.0130 TSMS ELEMENT 11 EMERGENCY MANAGEMENT.pdf
- > GAS.03.0913 EMERGENCY RESPONSE GUIDE.pdf
- > GAS.02.1407 SOUTHERN CROSS ENERGY EMERGENCY RESPONSE PLAN V2.pdf
- > ERA #031 Synergi History of Drills.xlsx
- > The following drill reports were viewed:
  - 20170906 ER Report KNS.pdf (SCE)
  - 20180605 LNO ER Report.pdf plus photographs (SCE)
  - 20180515 ER Report MKO.pdf (SCE)

#### Financial Planning - Overall Rating: A1

- > The following monthly business planning forecasts were viewed:
  - Parkeston Jun18 F.xlsx (GPPL)
  - SCE North Jun18 F.xlsx (SCE)
  - SCE South Jun18 F.xlsx (SCE)
- > Australia Capital Detail 2018 L01 Final.xlsx viewed. Long range forecast 2018-2042.
- > Budget MRF 2018 BUD.xls viewed.
- > 1806 Day 8 Report Jun18.xlsx viewed.
- > Australia Jun18 F.xlsx viewed. Spreadsheet shows budget vs actual costs for each TransAlta Australia site for June 2018.

#### **Capital Expenditure Planning**

> Australia Capital Detail 2018 L01 Final.xlsx viewed. Long range forecast 2018-2042.

#### **Review of Asset Management System**

> 2015, 2016 and 2017 Compliance Reports viewed



## 2.8 Details of Auditors Participating in the Audit/Review and Hours Utilised

The audit/review team comprised three staff members from Cardno.

Details of their roles and hours utilised in the audit/review process are provided in the table below.

Table 2-6 Details of Audit / Review Team Members

Name	Organisation	Role	Summary of Task	Hours Utilised
Simon Martin	Cardno	Auditor/Reviewer	<ul><li>Audit preparation</li><li>Audit</li><li>Preparation of Report</li></ul>	20 hours
Justin Edwards	Cardno	Auditor/Reviewer	<ul><li>Audit preparation</li><li>Audit</li><li>Preparation of Report</li></ul>	75 hours
Patrick Lamb	Cardno	Project Manager	<ul><li>Project Management</li><li>Audit Plan</li></ul>	30 hours



# 3 Licensee's Response to Previous Audit Recommendations

No actions or improvements to existing controls were recommended during the previous operating licence audit and asset management review.

Table 3-1 Previous Audit Non-compliances and Recommendations

A. Resolved before	end of previous audi	t period		
Electricity compliance reporting manual 2014 (ref. no./ year)	(Compliance rating/ Legislative obligation / details of the issue)	Auditor's recommendation or action undertaken	Date resolved	Further action required (Yes/No/Not applicable) & details of further action required including current recommendation reference if applicable
	Nil			
B. Resolved during	current Audit period			
Electricity compliance reporting manual 2014 (ref. no./ year	(Compliance rating/ Legislative obligation / details of the issue)	Auditor's recommendation or action undertaken	Date resolved	Further action required (Yes/No/Not applicable) & details of further action required including current recommendation reference if applicable
	Nil			
C. Unresolved at e	nd of current Audit pe	riod		
Electricity compliance reporting manual 2014 (ref. no./ year	(Compliance rating/ Legislative obligation / details of the issue)	Auditor's recommendation or action undertaken	Date resolved	Further action required (Yes/No/Not applicable) & details of further action required including current recommendation reference if applicable
	Nil			



## 4 Performance Summary

The findings of the performance audit are summarised in a table with adequacy of control and compliance rating. The table includes all applicable compliance reporting items and are numbered according to the Electricity Compliance Reporting Manual 2017. Description of the rating scale and outcomes of the performance audit is provided in the following sections.

#### 4.1 Assessment Rating Scales

In accordance with the Audit Guidelines, an assessment of the performance of GPPL was completed using the rating scale in Table 4-1 and asset management system effectiveness using the rating scales in Table 4-2 and Table 4-3.

Table 4-1 Audit Compliance and Controls Rating Scales

Adequa	acy of Controls Rating	Compli	ance Rating
Rating	Description	Rating	Description
А	Adequate controls - no improvement needed	1	Compliant
В	Generally adequate controls - improvement needed	2	Non-compliant – minor impact on customers or third parties
С	Inadequate controls – significant improvement required	3	Non-compliant – moderate impact on customers or third parties
D	No controls evident	4	Non-compliant – major impact on customers or third parties

Table 4-2 Asset Management Process and Policy Definition Adequacy Rating

Rating	Description	Criteria
A	Adequately defined	<ul> <li>Processes and policies are documented.</li> <li>Processes and policies adequately document the required performance of the assets.</li> <li>Processes and policies are subject to regular reviews, and updated where necessary.</li> <li>The asset management information system(s) are adequate in relation to the</li> </ul>
		<ul> <li>assets that are being managed.</li> <li>Process and policy documentation requires improvement.</li> </ul>
В	Requires some improvement	<ul> <li>Processes and policies do not adequately document the required performance of the assets.</li> <li>Reviews of processes and policies are not conducted regularly enough.</li> <li>The asset management information system(s) require minor improvements (taking into consideration the assets that are being managed).</li> </ul>
С	Requires significant improvement	<ul> <li>Process and policy documentation is incomplete or requires significant improvement.</li> <li>Processes and policies do not document the required performance of the assets.</li> <li>Processes and policies are significantly out of date.</li> <li>The asset management information system(s) require significant improvements (taking into consideration the assets that are being managed).</li> </ul>
D	Inadequate	<ul> <li>Processes and policies are not documented.</li> <li>The asset management information system(s) is not fit for purpose (taking into consideration the assets that are being managed).</li> </ul>



Table 4-3 Asset Management Performance Ratings

Rating	Description	Criteria
1	Performing effectively	<ul> <li>The performance of the process meets or exceeds the required levels of performance.</li> <li>Process effectiveness is regularly assessed, and corrective action taken where necessary.</li> </ul>
2	Opportunity for improvement	<ul> <li>The performance of the process requires some improvement to meet the required level.</li> <li>Process effectiveness reviews are not performed regularly enough.</li> <li>Process improvement opportunities are not actioned.</li> </ul>
3	Corrective action required	<ul> <li>The performance of the process requires significant improvement to meet the required level.</li> <li>Process effectiveness reviews are performed irregularly, or not at all.</li> <li>Process improvement opportunities are not actioned.</li> </ul>
4	Serious action required	<ul> <li>Process is not performed, or the performance is so poor that the process is considered to be ineffective.</li> </ul>



#### 4.2 Performance Audit Compliance Summary

Table 4-4 provides a summary of GPPL's compliance rating against each licence obligation, and an adequacy of controls rating where the item has been found to be non-compliant.

Na = Not applicable - Determined during the audit that the compliance obligation does not apply to the Licensee's business operations

Nr = Not rated - No relevant activity took place during the audit period, therefore it is not possible to assess compliance.

Table 4-4 Audit Obligation Ratings

Table 4-4 A	udit Obligation Ratings										
2017 Compliance Obligation Ref No.	Licence Reference	Audit Priority applied [rated 1 (Highest) to 5 (Lowest)]	A	equa rols C		1	Com 2	plia 3	nce 4	Ratir Na	ng Nr
6	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	5			<b>✓</b>						✓
7	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	5			<b>✓</b>						<b>✓</b>
8	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	5			✓						✓
9	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			✓						✓
16	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			✓	✓					
17	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			✓	✓					
18	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			✓						✓
19	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			✓	✓					
23	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	5			✓						<b>✓</b>
24	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			✓						<b>✓</b>
25	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			<b>√</b>						<b>✓</b>
26	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			<b>✓</b>						<b>✓</b>
27	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			<b>✓</b>						<b>✓</b>
28	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4			<b>✓</b>						✓



2017 Compliance Obligation	Licence Reference	Audit Priority applied [rated 1	C	Ade onti		icy c Rati		(	Com	plia	nce	Ratir	ng
Ref No.		(Highest) to 5 (Lowest)]	Α	В	С	D	NP	1	2	3	4	Na	Nr
29	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					<b>✓</b>						<b>✓</b>
30	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					<b>✓</b>						✓
34	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					✓						<b>✓</b>
39	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					✓						<b>✓</b>
40	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					✓						<b>✓</b>
43	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					✓						✓
44	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					✓						<b>✓</b>
45	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					<b>✓</b>						<b>✓</b>
48	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	5					<b>√</b>						<b>✓</b>
48A	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	5					✓						<b>✓</b>
49	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					✓						<b>✓</b>
52	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					✓						<b>✓</b>
53	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					✓						✓
54	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					✓	~					
55	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					<b>√</b>						✓
56	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					<b>√</b>						✓
57	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					<b>✓</b>						✓



2017 Compliance Obligation	Licence Reference	Audit Priority applied [rated 1 (Highest) to 5	C	Ade Conti		icy c Rati		C	Compliance Ratin				
Ref No.		(Lowest)]	Α	В	С	D	NP	1	2	3	4	Na	Nr
58	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					<b>✓</b>						✓
59	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	4					<b>✓</b>						<b>✓</b>
101	Electricity Industry Act section 13(1)	4					✓	✓					
102	Electricity Industry Act section 14(1)(a)	5					<b>✓</b>	✓					
103	Electricity Industry Act section 14(1)(b)	4					<b>✓</b>						<b>✓</b>
104	Electricity Industry Act section 14(1)(c)	5					<b>✓</b>	✓					
105	Electricity Industry Act section 17(1)	5					✓	✓					
106	Electricity Industry Act section 31(3)	5					✓	✓					
107	Electricity Industry Act section 41(6)	4					✓	✓					
113	Electricity Industry Act section 115(2)	4					<b>✓</b>	✓					
119	Electricity Industry Act, section 11	4					✓	✓					
121	Electricity Industry Act, section 11	4					✓	✓					
122	Electricity Industry Act, section 11	5					✓	✓					
123	Electricity Industry Act, section 11	5					✓						✓
124	Electricity Industry Act, section 11	4					✓	✓					
125	Electricity Industry Act, section 11	4					✓						✓
126	Electricity Industry Act, section 11	4					✓	✓					
324	Generation Licence condition 5.1 Retail Licence condition 5.1	4					<b>✓</b>						<b>✓</b>
354	Retail Licence condition 5.1	5					✓					✓	
364	Generation Licence condition 5.1 Retail Licence condition 5.1	4					✓						<b>✓</b>
371	Generation Licence condition 5.1 Retail Licence condition 5.1	5					<b>✓</b>						<b>√</b>
372	Generation Licence condition 5.1 Retail Licence condition 5.1	4					<b>✓</b>	<b>✓</b>					
373	Generation Licence condition 5.1 Retail Licence condition 5.1	5					✓						<b>✓</b>
388	Generation Licence condition 5.1 Retail Licence condition 5.1	5					<b>✓</b>						<b>✓</b>
401	Generation Licence condition 5.1 Retail Licence condition 5.1	4					✓						<b>✓</b>



2017 Compliance Obligation	Licence Reference	Audit Priority applied [rated 1	C	Ade Conti		icy c Rati		C	Compliance Rati				ng
Ref No.		(Highest) to 5 (Lowest)]	Α	В	С	D	NP	1	2	3	4	Na	Nr
402	Generation Licence condition 5.1 Retail Licence condition 5.1	4					~	✓					
405	Generation Licence condition 5.1 Retail Licence condition 5.1	4					<b>✓</b>						<b>✓</b>
406	Generation Licence condition 5.1 Retail Licence condition 5.1	5					<b>✓</b>						✓
407	Generation Licence condition 5.1 Retail Licence condition 5.1	5					✓	<b>✓</b>					
408	Generation Licence condition 5.1 Retail Licence condition 5.1	4					✓						✓
410	Generation Licence condition 5.1 Retail Licence condition 5.1	5					✓	✓					
416	Generation Licence condition 5.1 Retail Licence condition 5.1	4					<b>✓</b>						✓
417	Generation Licence condition 5.1 Retail Licence condition 5.1	4					<b>✓</b>						✓
435	Generation Licence condition 5.1 Retail Licence condition 5.1	4					<b>✓</b>						✓
448	Generation Licence condition 5.1 Retail Licence condition 5.1	4					<b>✓</b>	✓					
451	Generation Licence condition 5.1 Retail Licence condition 5.1	4					<b>✓</b>	<b>✓</b>					
453	Generation Licence condition 5.1 Retail Licence condition 5.1	4					<b>✓</b>						✓
454	Generation Licence condition 5.1 Retail Licence condition 5.1	4					✓						✓
455	Generation Licence condition 5.1 Retail Licence condition 5.1	4					✓	<b>✓</b>					
456	Generation Licence condition 5.1 Retail Licence condition 5.1	5					<b>✓</b>						✓
457	Generation Licence condition 5.1 Retail Licence condition 5.1	5					<b>✓</b>						✓
458	Generation Licence condition 5.1 Retail Licence condition 5.1	5					<b>✓</b>						✓
459	Generation Licence condition 5.1 Retail Licence condition 5.1	4					✓						✓
460	Generation Licence condition 5.1 Retail Licence condition 5.1	5					<b>√</b>						<b>✓</b>
461	Generation Licence condition 5.1 Retail Licence condition 5.1	4					✓						✓



#### 4.3 Asset Management Review Effectiveness Summary

The asset management system review assessed the effectiveness of the asset management system in delivering the services as required under the operating licence.

The review was conducted utilising the asset management adequacy and performance ratings as outlined in the Audit Guidelines. A summary of the outcomes of the review is provided in Table 4-5. GPPL has adequate controls in place for the various asset management system components. Some recommendations and process improvements were identified during this audit but they are considered minor and are not considered needed improvements. Therefore we do not consider a rating of B appropriate for those components:

Table 4-5 Asset Management Review Effectiveness Summary

_	•	
Asset Management System Component	Asset management process and policy definition adequacy rating	Asset management performance rating
Asset planning	А	1
Asset creation/acquisition	А	1
Asset disposal	А	1
Environmental analysis	A	1
Asset operations	А	1
Asset maintenance	A	1
Asset management information system	А	1
Risk management	А	1
Contingency planning	А	1
Financial planning	А	1
Capital expenditure planning	А	1
Review of AMS	А	1



## **5** Observations and Recommendations

#### **5.1** Performance Audit

Table 5-1 Performance Audit Observations

Table 5-	i i ciioiiiiai	ice Addit Observations				
2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
6	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code 3.2(2)	A retailer must submit a separate data request for each exit point unless otherwise agreed.	<ul> <li>GPPL as retailer has not made a request for data during the period</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
7	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 3.4(1)	A retailer must submit a data request electronically and must not submit more than a prescribed number of standing or historical data requests in a business day, unless otherwise agreed.	<ul> <li>GPPL as retailer has not made a request for data during the period</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
8	Electricity Industry (Licence Conditions) Regulations	Electricity Industry Customer	A retailer must withdraw a request for historical consumption data if the contestable customer's verifiable consent ceases to apply before the network operator provides the historical consumption data.	<ul> <li>GPPL as retailer has not made a request for data during the period</li> </ul>	<ul><li>Interview with Troy Forward</li></ul>	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
	regulation 5(2)	Transfer Code, clause 3.5(3)		From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.		
9	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 3.6(2)	A retailer must pay any reasonable costs incurred by the network operator for work performed in relation to a request for historical consumption data that has been subsequently withdrawn.	<ul> <li>GPPL as retailer has not made a request for data during the period</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
16	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 3.9(1)	A retailer may only use data relating to a contestable customer to provide that customer with a quotation for the supply of electricity by the retailer; or to initiate a transfer of that customer.	<ul> <li>GPPL as retailer has treated all data relating to each of its contestable customers in accordance with the Code.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	1



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
17	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 3.9(2)	A retailer must not aggregate a contestable customer's historical consumption data with that of other contestable customers for the purposes of internal business development, if requested not to do so by the customer.	GPPL as retailer has treated all data relating to each of its contestable customers in accordance with the Code. From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.	■ Interview with Troy Forward	1
18	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 3.9(3)	A retailer must not disclose a contestable customer's data to any other person without the verifiable consent of the contestable customer, except in the circumstances defined.	<ul> <li>GPPL as retailer has treated all data relating to each of its contestable customers in accordance with the Code.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> <li>There have been no requests to disclose a contestable customer's data during the audit period based on the circumstances defined in the Code.</li> </ul>	■ Interview with Troy Forward	Nr
19	Electricity Industry (Licence Conditions) Regulations	Electricity Industry Customer Transfer Code, clause 3.9(4)	A retailer must keep a copy of the verifiable consent received from a contestable customer for two years.	GPPL as retailer has treated all data relating to each of its contestable customers in accordance with the Code.	<ul><li>Interview with Troy Forward</li></ul>	1



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
	regulation 5(2)			From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.		
23	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.2(2)	A retailer must submit a separate customer transfer request for each connection point, unless otherwise agreed.	<ul> <li>GPPL has not submitted a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
24	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.3	A retailer's reason for a transfer must be specified in the customer transfer request form as either to transfer a contestable customer to the retailer which submitted the customer transfer request or to reverse an erroneous transfer.	<ul> <li>GPPL has not submitted a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
25	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.4(1)	A retailer may only submit a customer transfer request if it has an access contract for the network, unless it is to reverse an erroneous transfer.	<ul> <li>GPPL has not submitted a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
26	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.4(2)	A retailer that submits a customer transfer request to reverse an erroneous transfer must ensure the transfer was made in error and, if it is an incoming retailer, confirm the identity of the previous retailer.	<ul> <li>GPPL has not submitted a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
27	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.5(1)	A retailer must submit a customer transfer request electronically and must not submit more than a prescribed number of customer transfer requests in a business day or with the same nominated transfer date, unless otherwise agreed.	<ul> <li>GPPL has not submitted a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
				transmission system covered by the Licence.		
28	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.6(3)	A retailer must withdraw a customer transfer request if the contestable customer's verifiable consent ceases to apply before the transfer occurs.	<ul> <li>GPPL has not submitted a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
29	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.7	A retailer must nominate a transfer date in a customer transfer request in accordance with specified timeframes, except if the customer transfer request is to reverse an erroneous transfer.	<ul> <li>GPPL has not submitted a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	<ul><li>Interview with Troy Forward</li></ul>	Nr
30	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.8(2)	A retailer must pay any reasonable costs incurred by a network operator for providing and/or installing a meter if a customer transfer request is withdrawn.	<ul> <li>GPPL has not submitted a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity</li> </ul>	■ Interview with Troy Forward	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
				transported through the transmission system covered by the Licence.		
34	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.9(6)	A network operator and retailer must agree to a revised nominated transfer date in certain circumstances.	<ul> <li>GPPL has not submitted a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
39	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.11(3)	A network operator and the retailer must take certain action if the contestable customer's meter is not read on the nominated transfer date.	There have been no such transfer requests  From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.	<ul><li>Interview with Troy Forward</li></ul>	Nr
40	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.12(3)	The parties to an access contract must negotiate in good faith any necessary amendments to the access contract arising from certain circumstances.	<ul> <li>There have been no such amendments within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity</li> </ul>	■ Interview with Troy Forward	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
				transported through the transmission system covered by the Licence.		
43	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.15	In the case of a transfer to reverse an erroneous transfer, a network operator and all affected retailers (and, if applicable, AEMO) must act in good faith to ensure that the affected contestable customer has the same rights and obligations as if the erroneous transfer had not occurred.	<ul> <li>There has been no such transfer to reverse an erroneous transfer within the audit period</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
44	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.16	A verifiable consent given by a contestable customer in relation to the lodgement of a customer transfer request must be retained by the incoming retailer for two years, except in the case of a customer transfer request to reverse an erroneous transfer.	<ul> <li>GPPL did not receive/submit a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
45	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 4.17	A previous retailer must not bill a contestable customer for charges incurred after the transfer time, except in the case of an erroneous transfer.	<ul> <li>GPPL did not receive/submit a customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer</li> </ul>	■ Interview with Troy Forward	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
				Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.		
48	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 5.2	A network's communication rules apply in respect of data and information communication between the network operator and a retailer under this Code.	<ul> <li>This is Western Power's responsibility as the network operator, not GPPL.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
48A	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 6.1	All notices must be in writing and delivered as described in subclauses 6.1(a)-(c).	<ul> <li>There have been no transfers in the audit period hence there have been no such communications.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
49	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 6.2	A licensee's notice in relation to a data request or customer transfer request must identify the connection point to which it relates.	<ul> <li>GPPL has not submitted a data request or customer transfer request within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail</li> </ul>	■ Interview with Troy Forward	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
				Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.		
52	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 6.4(1)	A retailer must notify its contact details to a network operator within three business days of a request.	<ul> <li>GPPL has received no such requests within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
53	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 6.4(2)	A retailer must notify the network operator of any change in its contact details at least three business days before the change takes effect.	<ul> <li>GPPL has not changed its contact details within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
54	Electricity Industry (Licence Conditions) Regulations	Electricity Industry Customer Transfer Code, clause 6.6	A network operator or a retailer must send required electronic communications to the applicable electronic communication address, in accordance with the communication rules.	GPPL as a retailer has complied with the communication protocols set by Western Power, the	<ul> <li>Interview with Troy Forward</li> </ul>	1



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
	regulation 5(2)			network operator, including electronic communications.  From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.		
55	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 7.1(1)	For a dispute in respect of a matter under, or in connection with, the Electricity Industry Customer Transfer Code, the disputing parties must meet, within five business days of a request by one of those parties, and attempt to resolve the dispute through negotiations that are conducted in good faith.	<ul> <li>GPPL has not been involved in any disputes within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
56	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 7.1(2)	If the negotiations in 7.1(1) of the Electricity Industry Customer Transfer Code do not resolve the dispute within 10 days after the first meeting, the dispute must be referred to the senior executive officer of each disputing party who must attempt to resolve the dispute through negotiations that are conducted in good faith.	<ul> <li>GPPL has not been involved in any disputes within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
57	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 7.1(3)	If the dispute is resolved, the disputing parties must prepare a written and signed record of the resolution and adhere to the resolution.	<ul> <li>GPPL has not been involved in any disputes within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	■ Interview with Troy Forward	Nr
58	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 7.2(4)	A disputing party that refers a dispute to the arbitrator must provide the arbitrator with prescribed details of the nature of the dispute.	<ul> <li>GPPL has not been involved in any disputes within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the transmission system covered by the Licence.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
59	Electricity Industry (Licence Conditions) Regulations regulation 5(2)	Electricity Industry Customer Transfer Code, clause 7.3(2)	A disputing party must, at all times, conduct itself in a manner which is directed towards achieving the objectives in clause 7.3(1) of the Electricity Industry Customer Transfer Code.	<ul> <li>GPPL has not been involved in any disputes within the audit period.</li> <li>From 1 July 2015 - In accordance with Schedule 2, Clause 2.1 under the Retail Licence, GPPL is not required to comply with Electricity Industry Customer Transfer Code as long as there is only one retailer selling electricity transported through the</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
				transmission system covered by the Licence.		
101	Electricity Industry Act section 13(1)	Electricity Industry Act, section 13(1)	A licensee must provide the ERA with a performance audit conducted by an independent expert acceptable to the ERA, not less than once every 24 months.	<ul> <li>2014 Performance Audit and Asset Management Review Report viewed. 2018 audit being undertaken (this audit).</li> <li>Interval between successive performance audits was extended to 48 months by the ERA in 2014.</li> </ul>	<ul> <li>Correspondence from ERA viewed.</li> <li>Audit Report – Performance Audit and Asset Management Review – October 2014</li> </ul>	1
102	Electricity Industry Act section 14(1)(a)	Electricity Industry Act, section 14(1)(a)	A licensee must provide for an asset management system.	<ul> <li>GPPL have provided for an effective asset management system to support their physical assets.</li> <li>Further details of SCE's asset management system are included in Table 5-2.</li> </ul>	Refer to Table 5-2	1
103	Electricity Industry Act section 14(1)(b)	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 ERA.	The Asset Management System was provided to the ERA as part of the Licence application. No substantial changes to the AMS have occurred throughout the period.	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
104	Electricity Industry Act section 14(1)(c)	Electricity Industry Act, section 14(1)(c)	A licensee must provide the ERA 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 ERA.	<ul> <li>2014 Performance Audit and Asset Management Review Report viewed. 2018 audit being undertaken (this audit). The audit includes assessment and reporting on the effectiveness of the asset management system.</li> <li>Interval between successive performance audits was extended to 48 months by the ERA in 2014.</li> </ul>	<ul> <li>2014         Performance             Audit and Asset             Management             Review Report.     </li> </ul>	1



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
105	Electricity Industry Act section 17(1)	Electricity Industry Act, section 17(1) Economic Regulation Authority (Licensing Funding) Regulations 2014	A licensee must pay the prescribed licence fees to the ERA according to clauses 6, 7 and 8 of the Economic Regulation Authority (Licensing Funding) Regulations 2014.	<ul> <li>Licence fees have been paid regularly, and within the required timeframes.</li> </ul>	<ul> <li>Two beneficiary advice notes from NAB bank regarding payment to ERA</li> </ul>	1
106	Electricity Industry Act section 31(3)	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.	<ul> <li>GPPL have taken reasonable steps to minimise the extent or duration of any unavoidable interruption, suspension or restriction of electricity.</li> <li>GPPL have introduced an Operational Integrity Program to review and identify equipment from a safety aspect (loss of primary containment) to ensure the asset does not fail and does not impact during the review period.</li> </ul>	<ul> <li>Interview with Troy Forward</li> <li>Operational Integrity Program documentation</li> </ul>	1
107	Electricity Industry Act section 41(6)	Electricity Industry Act, section 41(6)	A licensee must pay the costs of taking an interest in land or an easement over land.	GPPL has met all costs of taking an interest in land or easements over land e.g. rent, rates and taxes paid for easements.	<ul> <li>Interview with Troy Forward</li> <li>TransAlta Rates and Rents spreadsheet</li> <li>Examples of land payment invoices</li> <li>Examples of Department of Mines, Industry, Regulation and Safety Mining Rehabilitation Fund Payment Notices</li> </ul>	1



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
113	Electricity Industry Act section 115(2)	Electricity Industry Act, section 115(2)	A licensee that has, or is an associate of a person that has, access to services under an access agreement must not engage in conduct that hinders or prohibits access.	<ul> <li>There have been no formal requests for access by new customers within the audit period.</li> <li>GPPL as network provider has not engaged in prohibited conduct.</li> </ul>	■ Interview with Troy Forward	1
119	Electricity Industry Act, section 11	Generation Licence condition 12.1 Retail Licence condition 12.1	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.	<ul> <li>GPPL has complied with the requirements.</li> <li>Accounting records are prepared in accordance with AASB standards.</li> <li>TransAlta Energy (Australia) Financial Statements 2015, 2016, 2017 were reviewed. These are signed-off by Ernst &amp; Young as complying with the Australian Accounting Standards. The 2018 annual report that includes the last 6 months of the audit period has not yet been prepared. This is because GPPL use a calendar year as its financial year.</li> </ul>	<ul> <li>GPPL Financial Statements for calendar years ending 2015, 2016 and 2017 viewed.</li> <li>Subsequent letter from Ernst &amp; Young regarding satisfactory audit of these documents in accordance with Australian Accounting Standards.</li> </ul>	1
121	Electricity Industry Act, section 11	Generation Licence condition 14.2 Retail Licence condition 14.2	A licensee must comply, and require its auditor to comply, with the ERA's standard audit guidelines for a performance audit.	<ul> <li>GPPL has previously complied with, and continues to comply with the Authority's standard audit guidelines dealing with the performance audit.</li> <li>The previous performance audit was reported on in October 2014 and the subsequent audit is currently being undertaken (this audit).</li> </ul>	<ul> <li>Interview with Troy Forward.</li> <li>Compliance reports dated 2015, 2016 and 2017 viewed.</li> <li>Letter dated 12 July 2018 from ERA approving GPPL audit plan</li> </ul>	1
122	Electricity Industry Act, section 11	Generation Licence condition 20.5	A licensee must comply, and must require the licensee's expert to comply, with the relevant aspects of the ERA's standard audit guidelines for an asset management system review.	GPPL is complying with the relevant aspects of the Authority's standard guidelines by undertaking the	<ul> <li>Interview with Troy Forward.</li> <li>2014 Performance Audit and Asset</li> </ul>	1



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
				asset management system review.  The previous asset management system review was reported on in October 2014 and the subsequent audit is currently being undertaken (this audit).	Management Review Report Letter dated 12 July 2018 from ERA approving GPPL audit plan	
123	Electricity Industry Act, section 11	Generation Licence condition 15.1 Retail Licence condition 15.1	In the manner prescribed, a licensee must notify the ERA, 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.	<ul> <li>There has been no change to GPPL's circumstances or to its ability to meet its licence obligations</li> <li>GPPL has not been under external administration.</li> </ul>	<ul> <li>Interview with Troy Forward</li> <li>Correspondence with ERA viewed.</li> </ul>	Nr
124	Electricity Industry Act, section 11	Generation Licence condition 16.1 Retail Licence condition 16.1	A licensee must provide the ERA, in the manner prescribed, with any information that the ERA requires in connection with its functions under the Electricity Industry Act.	GPPL has complied with the requirements.	<ul> <li>Interview with Troy Forward</li> <li>Compliance reports from, 2015, 2016 and 2017.</li> <li>Correspondence with ERA viewed</li> </ul>	1
125	Electricity Industry Act, section 11	Generation Licence condition 17.1 and 17.2 Retail Licence condition 17.1 and 17.2	A licensee must publish any information as directed by the ERA to publish, within the timeframes specified.	GPPL has not been directed to publish any such information.	<ul> <li>Interview with Troy Forward</li> <li>Compliance reports dated 2015, 2016 and 2017 viewed.</li> <li>GPPL correspondence with the ERA</li> </ul>	Nr
126	Electricity Industry Act, section 11	Generation Licence condition 18.1 Retail Licence condition 18.1	All notices must be in writing, unless otherwise specified.	GPPL has provided the ERA with information in writing as required.	<ul> <li>Interview with Troy Forward</li> <li>GPPL correspondence with the ERA</li> </ul>	1



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
324	Generation Licence condition 5.1 Retail Licence condition 5.1	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.	There have been no circumstances of metering points which were previously not capable of bi-directional flow becoming capable of bi-directional flow within the audit period.	■ Interview with Troy Forward	Nr
354	Retail Licence condition 5.1	Electricity Industry Metering Code, clause 3.18(1)	The metering installation for the connection point must comply with the prescribed wholesale market metering installation requirements if the Electricity Retail Corporation supplies electricity to a contestable customer at a connection point under a non-regulated contract and in circumstances when, immediately before entering into the contract, the electricity retail corporation supplied electricity to the contestable customer under a regulated contract.	<ul> <li>This obligation is not applicable to GPPL.</li> </ul>	■ Interview with Troy Forward	Na
364	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 3.27	A person must not install a metering installation on a network unless the person is the network operator or a registered metering installation provider for the network operator doing the type of work authorised by its registration.	<ul> <li>GPPL has not installed any metering installations within the audit period.</li> </ul>	<ul> <li>Interviews with Troy Forward, Simon Broom, Jamie Crombie</li> </ul>	Nr
371	Generation Licence condition 5.1 Retail Licence condition 5.1	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 liaise to determine the most appropriate way to resolve the discrepancy.	There have been no such discrepancies with the data within the audit period.	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
372	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 4.5(1)	A Code participant must not knowingly permit the registry to be materially inaccurate.	<ul> <li>GPPL has not knowingly permitted the registry to be materially inaccurate.</li> </ul>	■ Interview with Troy Forward	1
373	Generation Licence condition 5.1	Electricity Industry Metering Code, clause 4.5(2)	Subject to subclause 5.19(6), if a Code participant, other than a network operator, becomes aware of a change to, or inaccuracy in, an item of standing data in the registry, then it must notify the network operator	<ul> <li>No such change or inaccuracy has occurred within the audit period.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
	Retail Licence condition 5.1		and provide details of the change or inaccuracy within the timeframes prescribed.			
388	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.4(2)	A user must, when reasonably requested by a network operator, assist the network operator to comply with the network operator's obligation under subclause 5.4(1).	<ul> <li>GPPL has assisted the network operator when requested.</li> </ul>	■ Interview with Troy Forward	Nr
401	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.16	If a user collects or receives energy data from a metering installation then the user must provide the network operator with the energy data (in accordance with the communication rules) within the timeframes prescribed.	GPPL as a user has not collected any data required to be provided to network operator Western Power.	■ Interview with Troy Forward	Nr
402	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.17(1)	A user must provide standing data and validated, and where necessary substituted or estimated, energy data to the user's customer to which that information relates where the user is required by an enactment or an agreement to do so for billing purposes or for the purpose of providing metering services to the customer.	<ul> <li>GPPL has complied with this obligation. The provision of information for these purposes is governed by a Power Purchase Agreement between GPPL and its customer.</li> </ul>	<ul> <li>Power Purchase Agreement between GPPL and its customer Newmont Power</li> </ul>	1
405	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.18	If a user collects or receives information regarding a change in the energisation status of a metering point then the user must provide the network operator with the prescribed information, including the stated attributes, within the timeframes prescribed.	GPPL as a user has not collected or received information regarding a change in the energisation status of a metering point that is required or requested by the network operator.	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
406	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.19(1)	A user must, when requested by the network operator acting in accordance with good electricity industry practice, use reasonable endeavours to collect information from customers, if any, that assists the network operator in meeting its obligations described in the Code and elsewhere, and provide that information to the network operator.	<ul> <li>There has been no requirement to collect any information from customers within the audit period.</li> </ul>	■ Interview with Troy Forward	Nr
407	Generation Licence condition 5.1	Electricity Industry Metering	A user must, to the extent that it is able, collect and maintain a record of the prescribed information in	GPPL has complied with the requirements.	<ul><li>Interview with Troy Forward</li></ul>	1



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
	Retail Licence condition 5.1	Code, clause 5.19(2)	relation to the site of each connection point with which the user is associated.			
408	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.19(3)	Subject to subclauses 5.19(3A) and 5.19(6), the user must, within 1 business day after becoming aware of any change in an attribute described in subclause 5.19(2), notify the network operator of the change.	<ul> <li>GPPL as a retailer and generator has not become aware of any change in attribute.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
410	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.19(6)	The user must use reasonable endeavours to ensure that it does not notify the network operator of a change in an attribute described in subclause 5.19(2) that results from the provision of standing data by the network operator to the user.	<ul> <li>GPPL has complied with the requirements.</li> </ul>	■ Interview with Troy Forward	1
416	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.21(5)	A Code participant must not request a test or audit under subclause 5.21(1) unless the Code participant is a user and the test or audit relates to a time or times at which the user was the current user or the Code participant is the IMO.	<ul> <li>No data tests or audits have been requested by GPPL within the audit period.</li> <li>The meter accuracies are tested annually in accordance with the requirements in GPPL's PPAs.</li> </ul>	<ul> <li>Interview with Troy Forward</li> <li>Power Purchase Agreement between GPPL and its customer Newmont Power</li> </ul>	Nr
417	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.21(6)	A Code participant must not make a request under subclause 5.21(1) that is inconsistent with any access arrangement or agreement.	<ul> <li>No request to test or audit has been made within the audit period.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
435	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 5.27	Upon request from a network operator, the current user for a connection point must provide the network operator with customer attribute information that it reasonably believes are missing or incorrect within the timeframes prescribed.	<ul> <li>No requests have been made by the network operator within the audit period.</li> </ul>	■ Interview with Troy Forward	Nr
448	Generation Licence condition 5.1	Electricity Industry Metering Code, clause 6.1(2)	A user must, in relation to a network on which it has an access contract, comply with the rules, procedures, agreements and criteria prescribed.	GPPL has adhered to the rules, procedures agreements and criteria prescribed.	<ul> <li>Interview with Troy Forward</li> </ul>	1



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
	Retail Licence condition 5.1					
451	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 7.2(1)	Code participants must use reasonable endeavours to ensure that they can send and receive a notice by post, facsimile and electronic communication and must notify the network operator of a telephone number for voice communication in connection with the Code.	<ul> <li>Email, phone and postal address available</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	1
453	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 7.2(4)	If requested by a network operator with whom it has entered into an access contract, the Code participant must notify its contact details to a network operator within 3 business days after the request.	<ul> <li>GPPL has not received any requests during the audit period in relation to clause 7.2(4) of the Electricity Industry Metering Code.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
454	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 7.2(5)	A Code participant must notify any affected network operator of any change to the contact details it notified to the network operator under subclause 7.2(4) at least 3 business days before the change takes effect.	<ul> <li>GPPL has not changed its contact details within the audit period.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
455	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 7.5	A Code participant must subject to subclauses 5.17A and 7.6 not disclose, or permit the disclosure of, confidential information provided to it under or in connection with the Code and may only use or reproduce confidential information for the purpose for which it was disclosed or another purpose contemplated by the Code.	<ul> <li>GPPL has not disclosed or permitted the disclosure of confidential information provided to it under or in connection with the Code.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	1
456	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 7.6(1)	A Code participant must disclose or permit the disclosure of confidential information that is required to be disclosed by the Code.	<ul> <li>There have been no requirements to disclose any confidential information within the audit period.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
457	Generation Licence condition 5.1	Electricity Industry Metering Code, clause 8.1(1)	If any dispute arises between any Code participants then (subject to subclause 8.2(3)) representatives of disputing parties must meet within 5 business days after a notice given by a disputing party to the other	There have been no such disputes within the audit period.	<ul> <li>Interview with Troy Forward</li> </ul>	Nr



2014 No.	Licence Condition	Obligations under Condition	Description	Observations – Cardno 2018 Audit	Evidence (Include Contact)	Compliance Rating
	Retail Licence condition 5.1		disputing parties and attempt to resolve the dispute by negotiations in good faith.			
458	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 8.1(2)	If a dispute is not resolved within 10 business days after the dispute is referred to representative negotiations, the disputing parties must refer the dispute to a senior management officer of each disputing party who must meet and attempt to resolve the dispute by negotiations in good faith.	<ul> <li>There have been no such disputes within the audit period.</li> </ul>	■ Interview with Troy Forward	Nr
459	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 8.1(3)	If the dispute is not resolved within 10 business days after the dispute is referred to senior management negotiations, the disputing parties must refer the dispute to the senior executive officer of each disputing party who must meet and attempt to resolve the dispute by negotiations in good faith.	<ul> <li>There have been no such disputes within the audit period.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
460	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 8.1(4)	If the dispute is resolved by representative negotiations, senior management negotiations or CEO negotiations, the disputing parties must prepare a written and signed record of the resolution and adhere to the resolution.	<ul> <li>There have been no such disputes within the audit period.</li> </ul>	<ul> <li>Interview with Troy Forward</li> </ul>	Nr
461	Generation Licence condition 5.1 Retail Licence condition 5.1	Electricity Industry Metering Code, clause 8.3(2)	The disputing parties must at all times conduct themselves in a manner which is directed towards achieving the objective in subclause 8.3(1).	There have been no such disputes within the audit period.	<ul> <li>Interview with Troy Forward</li> </ul>	Nr



# 5.2 Asset Management System Review

Table 5-2 provides detailed commentary based on the findings observed during the audit process.

Table 5-2 Asset Management System Review Observations

Asset Management Process / Effectiveness Criteria

**Observations / Comments** 

**Evidence (Include Contact)** 

#### Asset Planning - Overall Rating: A1

- Asset management plan covers key requirements
- 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

#### Overview

 There have been no changes to GPPL's assets, the functions of the business, the utilisation of the assets over the review period or the asset management approaches used to manage the assets.

### **Asset Management Plans**

- GPPL have developed an Asset Management Plan (AMP) during the review period. The GPPL AMP defines the activities required over the life of the asset to achieve the strategic objectives and desired customer levels of service. The plan represents an integrated view of financial, commercial, human resources, operations, maintenance and engineering perspective required to manage the facility.
- The AMP has been developed to be consistent with the requirements of ISO 55000 but GPPL are not looking to gain accreditation for its asset management.
- The AMP has a review process set up in Total Safety Documents, the corporate system. The next review of the document is due in 2021.

#### **Stakeholder Requirements**

- GPPL's operating strategy is aligned with Newmont's operating strategy until the time that the current PPA is re-negotiated.
- In addition to the PPA, there is an Operations and Maintenance Agreement (OMA) between Newmont and GPPL. Operating & Maintenance Costs are incurred directly by TECO under the terms of the OMA between TECO and GPPL. The OMA recovers these costs and incentivises TransAlta to improve availability and reliability to increase revenue.
- GPPL Asset Management Plan acknowledges that operating and maintenance strategies will need to be modified if there are changes to the PPAs depending on the extent of GPPL's customers' operations into the future.
- Depending on the future operating scenarios, this may involve pushing out major maintenance, reducing operating spares, changing duty/standby programs and decommissioning plant to meet changing demand.
- Alternatively, if GPPL's customers' operations are extended past the current end date of the PPA, gas turbine control systems may need to be upgraded, online condition monitoring

- Interview with Troy Forward, Jamie Crombie, Matthew Kenneday
- GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf
- PPS047 Operations & Maintenance Agreement with GPPL
- Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015 viewed
- Life Cycle Planning 20110201.ppt presentation viewed.
- 2019 Australia Budget Timelines memo, dated 16 July 2018, viewed.
- Budget Process PowerPoint, dated June 2017, viewed.
- Australia 2018 L01.xlsx long range forecast spreadsheet viewed
- AFE Policy document viewed.
- AFE (Authorisation For Expenditure) Standards document viewed
- Capital Actuals June 18.xlsx spreadsheet viewed. Shows actuals and forecast capital spend



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	improved and the machines upgraded to higher specifications. If the PPA is not renegotiated, decommissioning plans and budgets may need to be developed or the assets sold.	
	<ul> <li>Appropriate capital and operating plans and budgets will need to be developed by GPPL depending on the future energy requirements of its customers.</li> </ul>	
	Levels of Service	
	<ul> <li>The PPA and OMA specify the levels of service to the GPPL's customer.</li> </ul>	
	<ul> <li>The PPA specifies service level targets for installed capacity, heat rate, availability, and start reliability. There are financial incentives for GPPL to achieve the target service levels.</li> </ul>	
	<ul> <li>PPA obligations are managed through the Australian Contract Management Database. This database is set up to provide automatic notifications to the relevant owners, with an escalation mechanism to ensure the obligations are met.</li> </ul>	
	<ul> <li>Heat rates are required to be maintained at the optimum level through sound operating &amp; maintenance practices.</li> </ul>	
	The installed capacity is self-tested twice annually to prove Capacity Credits to the WEM.	
	<ul> <li>In addition to the requirements of the contracts, GPPL has internal performance indicators for gas turbine trip reliability, Root Cause Analysis (RCA) investigations and the Injury Frequency Rate (IFR). Safety KPIs are developed each year as part of TransAlta's "Target Zero Initiative"</li> </ul>	
	Asset Planning Processes	
	<ul> <li>TransAlta corporate has well-developed and documented asset management criteria, procedures and planning requirements which are applied across all of TransAlta's assets, including GPPL's.</li> </ul>	
	<ul> <li>Performance of existing assets are regularly monitored and checked against expected performance – underperforming assets are flagged for critical review for remedial actions and/or ultimately for disposal if justified.</li> </ul>	
	<ul> <li>Investments for new assets are critically reviewed in accordance with TransAlta's asset investment / asset creation criteria, including financial considerations, technology choices, technical alternatives, operations and maintenance considerations, etc.</li> </ul>	
	Asset replacements are based on asset performance, in many instances utilising hours run. This is monitored regularly. As with new assets, the justification for asset retirement is strictly considered and takes into account not only financial factors, but technological, environmental, commercial / legal and relative benefit, comparing continuation of operating and maintaining the underperforming asset versus replacing it.	
	<ul> <li>GPPL has a full governance structure across the development and finance for new projects.</li> <li>This is set out in the AMP.</li> </ul>	
	<ul> <li>For new asset projects, costs, risks, rate of return requirements, funding and approval processes are assessed. Once a project has been approved, it goes through the corporate</li> </ul>	



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	processes to form the arrangements for that specific project, e.g. expenditure and contract term sheets for the business unit responsible, legal and tax implications, etc. There are also approval processes for international approval as Canadian laws, under which TransAlta's global business operate, differ from Australian laws that there Australian operations are subject to.  Projects are screened to look at options and to assess risks, timeframes and technology in	
	order to arrive at the best solution. Hybrid solutions are also considered. Typically asset projects are funded from GPPL's balance sheet or from debt equity.	
	<ul> <li>Designs for plant augmentation and remedial work are typically done in-house (using TransAlta's corporate engineering and technical resources) but are also commonly outsourced to engineering companies who specialise in the various services and/or directly to competitive OEM's for new / significant asset modifications or additions.</li> </ul>	
	<ul> <li>External independent consultants are used to prepare and/or confirm financial models, performance analysis, comparisons between different technical solutions, preparation of tender documents, vetting of options analysis etc.</li> </ul>	
	Lifecycle Costs and Funding	
	GPPL have a detailed short-term forecast for the next three years. The long-term forecast goes out 2042 although this is not detailed. GPPL interacts with its customer to develop its future asset planning and identify the future asset portfolio.	
	<ul> <li>Lifecycle costs are taken into consideration when assessing new assets. However, lifecycle costs are not considered when like-for-like replacements are carried out.</li> </ul>	
	<ul> <li>Capital expenditure is analysed on a global basis across all of TransAlta's operations, including those in Australia. The assets are compared on an asset by asset basis, using normalised ranking methods. Costs, risks, timing and other considerations are factored.</li> </ul>	
	Capital funds are sourced from TransAlta in Canada.	
	Asset Planning and Management Post-Current PPA	
	<ul> <li>GPPL has developed operating strategies it is expecting to pursue if the current PPA ends and is not extended.</li> </ul>	
	Cost benefit analysis will be used to decide future operations of the PPS	
	<ul> <li>GPPL will need to maintain the facility at a sufficient level to pass the bi-annual AEMO testing if operations are to continue post-2021.</li> </ul>	
	<ul> <li>GPPL will need to sustain HSE, statutory compliance and security functions while the PPS is still under the ownership of GPPL and this will require some form of Operations and Maintenance agreement to remain in place. Accounting, HR and administrative functions will be scaled back in sync with the reduced revenue.</li> </ul>	



**Observations / Comments** 

**Evidence (Include Contact)** 

#### Asset Creation and Acquisition - Overall Rating: A1

- Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions
- Evaluations include all lifecycle 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

- Requests for new assets are generally driven directly by operational or customer needs.
   Utilisation of assets is assessed in order to review if an operations solution is feasible rather
   than a solution based on acquiring or creating a new asset. The example of capital projects we
   reviewed included provisions for options where a non-asset solution was considered in the
   options analysis.
- GPPL consider it unlikely that new gas turbine generators will be sourced before expiry of the current PPA contract. Capital purchases may occur for major components of the existing asset base as assessed through the MRF process.
- Requests for new assets are generally driven directly by customer needs. Utilisation of assets
  is assessed in order to review if an operations solution is feasible rather than a solution based
  on acquiring or creating a new asset. The example of capital projects we reviewed included
  provisions for options where a non-asset solution was considered in the options analysis.
- GPPL use the Australian Capital Process to summarise the capital projects and present the business case in order to receive funding.
- The Application for Expenditure (AFE) template includes associated operating costs impacting from the new capital spend, details of the people involved in the project, the project details, project alternatives and supplier.
- Gate checks, as part of the Australian Capital Process, are used to assess the options at an earlier stage prior to the preparation of the AFE template. Gate 2 is required to be passed in order to progress to developing the AFE. The corporate gateway documentation has been developed this year although the business was already using the process informally prior to this year. Approvals for individual spend/projects are granted by the Australian Managing Director once the Capital budget is approved. If the proposed project is estimated to cost more than \$0.5M, the project has to be approved by the Australian MD.
- GPPL are required to follow the corporate financial policies with regard to project planning and purchasing.
- Engineering and development teams are responsible for reviewing technical designs. Internal
  engineering standards are used for the development of new assets.
- The majority of GPPL's asset acquisitions during the review period have been for the replacement of assets.
- New assets that have been acquired have typically been for corporate/administration assets, including IT assets and vehicles, rather than for assets related to the generation and supply of electricity. Investments for new assets are critically reviewed in accordance with TransAlta's asset investment / asset creation criteria, which includes financial considerations, technology choices, technical alternatives, operations and maintenance considerations, etc.
- Ongoing legal, environmental and safety obligations in relation to asset planning are understood by GPPL (refer to Environmental Analysis section).

- Interviews with Troy Forward, Jamie Crombie, Matthew Kenneday
- GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf
- Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015 viewed
- GAS.07.1342 PROCUREMENT GOVERNING PRINCIPLES.pdf viewed.
- Financial Policy 230 (a) PP&E.pdf viewed. Describes capitalisation criteria for property, plant and equipment.
- Life Cycle Planning 20110201.ppt presentation viewed.
- 2019 Australia Budget Timelines memo, dated 16 July 2018, viewed.
- Budget Process PowerPoint, dated June 2017, viewed.
- Australia 2018 L01.xlsx long range forecast spreadsheet viewed
- AFE Policy document viewed.
- AFE (Authorisation For Expenditure) Standards document viewed
- Capital Actuals June 18.xlsx spreadsheet viewed. Shows actuals and forecast capital spend



<b>Asset Management Process /</b>
Effectiveness Criteria

#### **Observations / Comments**

#### **Evidence (Include Contact)**

### Asset Disposal – Overall Rating: A1

- Under-utilised and underperforming assets are identified as part of a regular systematic review process
- The reasons for underutilisation or poor performance are critically examined and corrective action or disposal undertaken
- Disposal alternatives are evaluated
- There is a replacement strategy for assets
- GPPL's polices for disposal are included in its Financial Policy. TransAlta corporate document "230(k) Decommissioning & Restoration Obligations" details the financial requirements for decommissioning and 230(a) describes de-recognition as capital of disposed asset.
- Performance of existing assets are regularly monitored and checked against expected performance. Underperforming assets are flagged for critical review for remedial actions and/or ultimately for disposal if justified.
- Hot section replacements are examples of scheduled and monitored major maintenance activities for GPPL's gas turbines.
- Condition based performance monitoring and testing results of which are considerations for any asset remedial and/or disposal decisions.
- At some point decommissioning of the PPS will involve dismantling and disposal of all equipment and the site remediated. Depending on when that occurs, it is likely that the machines will have some residual value and could be sold on the open market or redeployed as operational spares for other TransAlta operations.

- Interviews with Troy Forward, Jamie Crombie, Matthew Kenneday
- GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf
- Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015 viewed
- Asset register showing existence of all assets, newly created assets and major asset maintenance plans were viewed.
- 5 and 10 year asset major maintenance budget and NTA budgets were exhibited.
- Financial Policy 230 (a) PP&E.pdf viewed. Describes de-recognition as capital of disposed asset.
- Financial Policies 230(k)
   Decommissioning & Restoration
   Obligations viewed.

# Environmental Analysis - Overall Rating: A1

- 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

## **Opportunities and Threats**

- GPPL has assessed opportunities and threats in the system environment and included these in the GPPL Asset Management Plan.
- The requirements for site remediation when the plant is decommissioned will be determined and budgeted by GPPL in the future.

#### Asset Performance

 Asset performance is regularly monitored. Incentives and penalties are included in the PPA for fuel conversion efficiencies, plant availability and reliability, impact on production, unplanned outages, etc.

- Interview with Nigel Feletti
- GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf
- Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015 viewed
- TransAlta FY18 NPI & NGER V3.0 2366518 3.xlsx emissions register viewed.



#### **Observations / Comments**

- Penalties for unplanned outages are substantial. Strong commitment to root cause analysis
  for all incidents, particularly those causing loss of production and/or non-compliances with any
  statutory or PPA requirements.
- Utilisation of fuel and maintenance are cost drivers.

#### **Statutory and Regulatory Compliance**

- The PPA puts the onus on GPPL to take all reasonable measures to comply with all statutory regulations. These include but not limited to the Occupational Health & Safety, Environmental, and WA Electrical regulations. Management of this compliance is through the Environmental, Health & Safety Plan and associated procedures.
- GPPL holds a Network Access Contract with Western Power for connection to the SWIS. Grandfathering arrangements under the Technical Rules deem technical compliance of the PPS. Any change to the configuration of the power station can require compliance with the current technical rules. This is a costly exercise and asset management decisions, capital investment and plant modifications must take this compliance cost into consideration.
- The impact from carbon pricing on the business is yet to be determined due to government authorities currently changing the structure.
- An external third party is engaged by GPPL to provide information on legislative and environmental changes. A monthly bulletin that outlines any changes to State of Federal legislation is received and entered into GPPL's legislative register. The register is stored in an Excel spreadsheet. The spreadsheet is used to identify actions and assign responsibilities.

#### **Emissions Reporting**

- GPPL undertakes annual National Greenhouse and Energy Reporting (NGER) and National Pollutant Inventory (NPI) reporting. It also reports internally on a number of sustainability performance indicators.
- GPPL has a process to put its greenhouse gas data into a series of verification sheets for each of its sites. The Plant Managers at each site collect the sheets from the Operations staff and verify the data on a monthly basis. The data collected includes diesel and gas used for electricity generation and vehicles. There is a sense check of the information before GPPL forward this data to a third-party consultant to verify. The monthly sheets are consolidated into an annual report each year.
- GPPL has established thresholds for emissions limits from its sites.

## **Incident Reporting**

• GPPL uses the corporate Safety Performance Reporting for its incident reporting. This system utilises Synergi via a dashboard set-up that all the staff in the business can access.

## **Evidence (Include Contact)**

- The following policies/procedures were viewed:
  - GAS.03.0848 VEGETATION CLEARING PROCEDURE.pdf
  - GAS.03.0849 WASTE MANAGEMENT.pdf
  - GAS.03.0850 SOLID, LIQUID AND GAS SPILL RESPONSE.pdf
  - GAS.03.1037 FLORA AND FAUNA CONSERVATION.pdf
  - GAS.03.1059 SOIL AND GROUND WATER PROTECTION.pdf
  - GAS.04.1260 LEGIONELLA HEALTH RISK MANAGEMENT.pdf
  - GAS.03.0820
    ENVIRONMENTAL
    ASPECTS, HAZARD
    IDENTIFICATION, RISK
    ASSESSMENT AND
    DETERMINING
    CONTROLS.pdf
  - GAS.03.0876 HAZARDS, NEAR MISSES AND INCIDENT REPORTING.pdf
  - GAS.03.1061 SITE ENVIRONMENTAL LICENCES.pdf
- The following Annual Environmental Reports were viewed:
  - Parkeston Annual
     Environmental Report 2017
     2326090 1.DOCX
  - Kalgoorlie Annual
     Environmental Report 2017
     2326111 1.DOCX (SCE)



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	<ul> <li>Levels of Service</li> <li>The PPA specifies the levels of service to the client. Heat rates are required to be maintained at the optimum level through sound operating &amp; maintenance practices. PPA obligations are managed through the Australian Contract Management System Database. This database is set up to provide automatic notifications to the relevant owners, with an escalation mechanism to ensure the obligations are met.</li> <li>Costs are passed onto GPPL's customer if there is more demand for electricity generation above that which has been forecast. Revenues are primarily based on capacity, and because generation levels are driven by customer demand there is little scope for improving profit from energy sales.</li> </ul>	<ul> <li>Kambalda Annual         Environmental Report 2017         2326113 1.DOCX (SCE)</li> <li>Leinster Annual         Environmental Report 2017         2326116 1.DOCX (SCE)</li> <li>Mt Keith Diesel Annual         Environmental Report 2017         2326119 1.DOCX (SCE)</li> <li>Mt Keith Gas Annual         Environmental Report 2017         2326125 1.DOCX (SCE)</li> <li>The following NPI reports were viewed:         <ul> <li>WA0146 Emission Report 2016-2017.pdf</li> <li>WA0322 Emission Report 2016-2017.pdf (SCE)</li> <li>WA0323 Emission Report 2016-2017.pdf (SCE)</li> </ul> </li> </ul>
		■ The following site summary reports were viewed:  - PPS.pdf - KNO.pdf (SCE) - KNS.pdf (SCE) - LNO.pdf (SCE) - MKO - Diesel.pdf (SCE) - MKO - Gas.pdf (SCE)  ■ The following SRS Notifiable Events Reports were viewed:  - OC-293-276417 SummaryPopup.pdf (SCE) - OC-570-283188 SummaryPopup.pdf (SCE) - OC-889-301430 SummaryPopup.pdf (SCE) - POS-438-291442 Communications.pdf (SCE)



	EHS&T 2018 Programme V2.pdf
Er Er	viewed. This is TransAlta's Environmental, Health and Safety Training Programme
Asset Operations – Overall Rating: A1	
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  Overall Asset Operations  There is an Operations and Maintenance Agreement (OMA) between GPPL and TECO. Operating & Maintenance Costs are incurred directly by TECO under the terms of the OMA between TECO and GPPL. The OMA recovers these costs and incentivises TransAlta to improve availability and reliability to increase revenue.  GPPL Assets  The assets of GPPL fall into the following classes:  Gas Turbines – open cycle  Generators  Transformers from 11kV to 33kV  Transmission Lines – 33kV  Switchyards – 33kV  Switchyards – 33kV  Suitchyards – 33kV  Balack Start generation  Balance of Plant:  ancillaries such as gas and diesel fuel handling and water supply & treatment  buildings  fences  road and car parks  Overall Asset Operations  There is an Operations and Maintenance Agreement (OMA) between GPPL and TECO. Operating & Maintenance Costs are incurred directly by TECO under the terms of the OMA between TECO and GPPL. The OMA recovers these costs and incentivises TransAlta to improve availability and reliability to increase revenue.  GPPL (through TECO) runs a Regional Control Centre (RCC) which is manned 24/7/365, based at the Parkeston Power Station (PPS) in Kalgoorlie, WA. The RCC is used to operate all of GPPL's assets (as well as remote operation of Southern Cross Energy Partnership's assets).  The SCADA system is used to provide all real-time monitoring information, data trending, alarming and reporting, which is backed up on a Plant Historian system.  Operator intervention is executed on a real-time basis for any deviations (e.g. sudden departure from limits) or assets are removed from production and investigations carried out to remedy any n	Interviews with Troy Forward, Jamie Crombie, Simon Broom, Clinton Schick, Matthew Kenneday GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015 viewed PPS047 – Operations & Maintenance Agreement with GPPL Visit to PPS control room:  SCADA viewed (site level and detailed for Parkeston)  Example hard copy procedures in control room viewed The following fortnightly performance test reports were viewed:  KNO HR 2-8-18.xlsx (SCE)  KNS HR 030818.xlsx (SCE)  KNO HR 040818.xlsx (SCE)  MKO HR 040818.xlsx (SCE)  The following liquidated damages calculations were viewed:  LD Calculator - North — 2018.xlsm viewed. (SCE)



#### **Observations / Comments**

- Longer trending unfavourable performance is flagged for further investigation while assets still
  remain in operation, and maintenance schedules adjusted to ensure degraded performance is
  addressed proactively, in preference to reactively.
- Heat rate data is shown daily on production graphs but can be displayed half-hourly. The production information also shows a snapshot of operational (fuel) costs for week (or month if required). Trends are able to be used to determine if any there are issues with generators or other equipment.

### **Asset Register**

- GPPL uses SAP for the operational asset register. SAP is configured with a functional location structure, which sets out the hierarchy for all the assets. GPPL also uses SAP for as its materials master system.
- GPPL has a separate financial asset register for its assets in SAP.
- The asset registers include information on the asset attributes, including physical, structural condition and accounting data.

#### Operation of the PPS

- Newmont provide weekly import nominations on a half-hour, week ahead basis to GPPL.
- These nominations are loaded into the control system and the gas turbines follow these nominations while serving the internal mine load.
- Overnight, GPPL's operational generating unit is shut down. Should system conditions
  change throughout the night time, the permission to import can be retracted by System
  Management and a generating unit can be started.
- A high-speed load shedding scheme also operates between the System Management Control Centre and PPS to shed loads should the system conditions require near to real time load management.
- For market purposes, GPPL bids available generation capacity into the Wholesale Electricity Market. Due to the import status of the plant and the high cost to generate, GPPL is rarely dispatched for economic purposes.
- While infrequent, a successful GPPL bid would result in a generation position (Dispatch Instruction) being issued to GPPL through an Automatic Balancing Control (ABC) system operating on SCADA.
- An ABC signal contains a generation setpoint and ramp rate target. The ABC system at PPS
  receives the Dispatch Instruction and requires the RCC operator to accept the instruction. The
  PPS plant is then automatically controlled to meet the generation export requirements.
- The unit operating priorities and dispatch are set by GPPL to maximise the timeframes between major maintenance intervals.

#### **Evidence (Include Contact)**

- LD Calculator South 2018.xlsb. (SCE)
- The following weekly production ('heat rate') reports were viewed:
  - North Graphs 2018-07-17.pdf (SCE)
  - North Graphs 2018-07-24.pdf (SCE)
  - North Graphs 2018-07-31.pdf (SCE)
  - South Graphs 2018-07-17.pdf (SCE)
  - South Graphs 2018-07-24.pdf (SCE)
  - South Graphs 2018-07-31.pdf (SCE)
- The following KPI reports were viewed:
  - PSD KPI Overview.jpg
  - PSD KPI Priority Risk Control Area.pdf
  - PSD Maintenance Management KPI Overview.jpg
- Parkeston Weekly Schedule Example.pdf viewed
- Parkeston3 Monthly Schedule Example.pdf viewed.
- Equipment Register Example.txt viewed. This is an asset register in structured hierarchy showing all assets for Kalgoorlie. (SCE)
- The following daily reports were viewed:
  - Daily Meter Readings.xlsx
  - Pre-start Checklist.xlsx
  - Station Rounds.xlsx



	T OIL	omance Addit and Asset Management Nevic
Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	<ul> <li>Operational Levels of Service</li> <li>Levels of service are set out in the PPA and the OMA.</li> <li>In addition, there is a priority system for start-up of generators when demand requires it. GPPL has its own internal levels of service related to the merit levels of the plant which set out the order of assets to use. There are financial penalties related to how the assets are operated if GPPL is unable to meet reliability and availability targets.</li> <li>Operating Procedures</li> <li>Operational procedures are stored at the RCC. As the control room is common for all of GPPL</li> </ul>	<ul> <li>The following daily report proformas were viewed:         <ul> <li>Equipment Operating Hours Document.doc</li> <li>Eye Wash Station Checks.xlsx</li> </ul> </li> <li>The following operational reports were viewed:         <ul> <li>GPPL.DOCX</li> <li>Management Committee of</li> </ul> </li> </ul>
	sites (plus TransAlta's Southern Cross Energy Partnership sites), some of the operational procedures are common across the different sites, while some are site-specific. The operating procedures are also stored in TransAlta's document management system, allowing them to be accessed through the global system.  ■ GPPL does not currently have a documented operations plan detailing how to implement the requirements of the PPA, despite the PPA devoting a whole section to it. Procedural documents have been developed to ensure compliance with the WEM and managing compliance with dispatch instructions.	the Goldfields Power Joint Venture - Aug 01 2016.docx  - Management Committee of the Goldfields Power Joint Venture - Aug 16 2017.docx  - Management Committee of the Goldfields Power Joint Venture - Feb 16 2017.docx
	<ul> <li>Operational Reporting</li> <li>Operations and performance data is analysed to assess trends. The performance of the engines is reported fortnightly. Performance via graphical data from SCADA is reviewed and discussed at the weekly production meeting. The data reviewed at the weekly meetings includes:         <ul> <li>Availability</li> <li>Start rate reliability</li> <li>TEA revenue</li> <li>Diesel usage for unplanned outages</li> <li>Gas usage</li> <li>Performance and dispatch across sites</li> <li>Spinning reverse</li> <li>Machine performance (actual/target heat rates and outputs)</li> </ul> </li> <li>The operations and performance information is reported up to the Group Operations Manager.</li> <li>Monthly operation outcomes are included in the monthly invoice to Newmont Power, GPPL's primary customer, to allow the operations outcomes to be validated by the customer.</li> </ul>	<ul> <li>Management Committee of the Goldfields Power Joint Venture - May 17 2017.docx</li> <li>Management Committee of the Goldfields Power Joint Venture - Nov 09 2016.docx</li> <li>November JV Meeting.xlsx</li> <li>The following operational procedures were viewed:         <ul> <li>GAS.05.0963 S AND S FORTNIGHTLY HEAT RATE TEST.pdf</li> <li>GAS.05.0985 KNO AND KNS GT OR BLACK PLANT TRIP.pdf</li> <li>GAS.05.1369 BLACK START DIESEL TEST.pdf</li> </ul> </li> </ul>

**Operating Costs** 



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	<ul> <li>Through the terms of the OMA, GPPL pays TECO a fixed O&amp;M fee, a variable O&amp;M fee (based on the energy produced), an Availability Fee and a Start Rate fee. All the fees are adjusted for CPI annually.</li> <li>GPPL's budget process defines the expenditure requirements for a rolling three year period, with the next year budget being locked in at the end of each year's budget process. As GPPL's parent company is Canadian, all financial management is carried out with regard to a calendar year financial year. Monthly reporting is carried out to report against the budget.</li> <li>Fuel gas is sourced from Newmont as per the Gas Supply Agreement between Newmont Power and GPPL. The price is specified in the agreement, including escalation and review periods.</li> <li>Staff Resources and Training</li> <li>GPPL sources its own workforce independently of any other party. Turnover is considered to be very low, approximately one recruitment per year.</li> </ul>	
	<ul> <li>GPPL is at liberty to utilise subcontractors to support the operation and maintenance efforts. Subcontractors are qualified on an as-needed basis as specified by TransAlta's corporate contracting strategy document</li> <li>GPPL's training is split into compliance training directly related to work activities undertaken by each member of staff and individual development training to improve skills and knowledge. The EHS team identify training needs through a training matrix and schedule the required activities. Training is managed through the corporate DART system. The Training Coordinator Manager receives alerts from the system when training needs become overdue. GPPL staff also have a quarterly staff appraisal where training needs can be identified.</li> </ul>	
Asset Maintenance - Overall Rati	ng: A1	
<ul> <li>Maintenance policies and procedures are documented and linked to service levels required</li> <li>Regular inspections are undertaken of asset performance and condition</li> <li>Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule</li> <li>Failures are analysed and operational / maintenance plans adjusted where necessary</li> </ul>	<ul> <li>Overview</li> <li>There is an Operations and Maintenance Agreement (OMA) between Newmont and GPPL. Operating &amp; Maintenance Costs are incurred directly by TECO under the terms of the OMA between TECO and GPPL. The OMA recovers these costs and incentivises TransAlta to improve availability and reliability to increase revenue.</li> <li>The maintenance team located in Kalgoorlie are responsible for the maintenance at the PPS (and also the SCE sites in Kalgoorlie and Kambalda).</li> <li>Maintenance management information can be accessed through Total Safety Documents, the corporate system available through the intranet to everyone in the business.</li> <li>GPPL's service levels are set out in the contracts with its customers.</li> <li>Regular meetings are held to firm up the outage plans and ensure all stakeholders are engaged.</li> <li>Maintenance Management System</li> </ul>	<ul> <li>Interview with Brad Fanetti at Parkeston Power Station</li> <li>GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf</li> <li>Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015 viewed</li> <li>PPS047 – Operations &amp; Maintenance Agreement with GPPL</li> <li>SAP viewed live</li> </ul>



- Risk management is applied to prioritise maintenance tasks
- Maintenance costs are measured and monitored

#### **Observations / Comments**

- Since the last asset management review, GPPL has changed its maintenance management system from GP MaTe to a corporate version of SAP. GPPL uses SAP PM (Plant Maintenance) to manage the maintenance program. Backlog is managed well with the forward log being properly planned and scheduled. The WEM is informed of planned outages as required and output tracked in real time.
- GPPL also uses SAP for as its materials master system.
- History records from the GP MaTe legacy system have been stored in files in a shared folder on the network. Therefore, SAP has maintenance history that goes back to around December 2015.
- The GPPL AMP has identified that the SAP data conversion appears to have created some gaps in both asset records and detailed master data and may include registered equipment such as pressure vessels. These are being investigated by the Maintenance Process Specialist. Statutory compliance and efficient and effective maintenance relies on this data being readily available.
- GPPL has a separate financial asset register for its assets.
- We recommend that GPPL completes the improvement opportunity to rectify the asset record data gaps that it identified in the GPPL AMP.

#### **Maintenance Procedures**

- GPPL's maintenance management follows TransAlta's Maintenance Work Management procedure (AUS-243) which details:
  - Work identification and prioritisation
  - Planning work
  - Kitting and staging
  - Scheduling work
  - Work Execution
  - Work closure and documentation
  - Work meetings and communication
  - Work management compliance
- GPPL does not have Standard Operating Procedures as such, but instead uses maintenance plans stored within SAP which sets out the steps required to complete the cyclical maintenance activities.

## **Maintenance Strategies**

 Turbine maintenance is structured around the standard OEM guidelines and based on condition, hours run and operational experience. GPPL monitors equipment condition to optimise asset life prior to completion of hot sections and major overhauls. This is accepted

#### **Evidence (Include Contact)**

- GAS.06.1324 Maintenance Work Management.docx viewed.
   Covers environmental management; health, injury management and wellness initiatives; safety; training, learning and development; auditing and document control, contractor management; TSE reporting and measurement; budget management; and resourcing
- The following maintenance records were viewed:
  - PPS-90835766.pdf
  - PPS-90858457.pdf
  - KNO-90858861.pdf (SCE)
  - KNS-90838158.pdf (SCE)
  - Last 6 Months Of Notification
     History Example
- The following maintenance procedures were viewed:
  - GAS.06.0919 GAS VALVE CALIBRATION PROCEDURE TO S AND S PACKAGE.pdf
  - GAS.06.0946 VARIABLE GEOMETRY CALIBRATIONS.pdf
  - GAS.09.1029 TM2500 LOADING CODE INTO MICRONET-NETCON.pdf
- Maintenance Plans & Schedules.xlsx spreadsheet viewed. Lists preventive/planned maintenance activities.
- Maintenance Policy Engineering Standard - Example List.jpg viewed.



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	practice in the industry. No negative impact are considered to have been experienced by GPPL or its customer from using this strategy.	
	Major maintenance for the LM6000 gas turbines is conducted by GE under the Terms of the Customer Service Agreement (CSA), with minor servicing and repairs conducted by TransAlta site personnel and alternate third-party vendors.	
	<ul> <li>GPPL's maintenance strategy follows the standard GE servicing regime for the LM6000s.</li> <li>Ancillaries receive appropriate care through predictive and preventive maintenance.</li> </ul>	
	<ul> <li>GPPL has a long-term agreement with the OEM for the major maintenance servicing of the assets.</li> </ul>	
	<ul> <li>The most recent Major Maintenance overhaul was the hot section on G01 completed in May 2017. It is anticipated that there are no further major maintenance services required on the gas turbines before the end of contract.</li> </ul>	
	<ul> <li>Two spare LM6000s are available as drop-in replacements when major maintenance is required or major failure occurs. TECO also has a lease engine agreement with GPPL in the event of an unplanned failure of a LM6000.</li> </ul>	
	The gas turbines are conditioned-managed beyond their default major service intervals which has proven to be worthwhile for these machines. This can be in excess of 10% beyond their default major service intervals. Decisions about changing strategies are made by the Plant Maintenance Manager South with input from the Goldfields Regional Manager and the Canada-based Senior Rotating Engineer.	
	<ul> <li>The PPS has three transformers but there is no redundancy for them. If one fails a replacement transformer could take up to nine months to acquire.</li> </ul>	
	Maintenance Plans	
	Apart from SAP PMs and the major maintenance schedule there is no asset lifecycle maintenance plan. Major maintenance, including capital works, is planned by the Plant Manager South according to the TransAlta MRF and budgeting processes. There are multiple documents managing different parts of the Asset lifecycles. The GPPL AMP has identified that in reviewing these documents, there is poor correlation between planned work and budgeted work and a single document is required to address this.	
	<ul> <li>We recommend that GPPL develops a single document to manage the different parts of the asset lifecycles in accordance with the opportunity it identified in the GPPL AMP.</li> </ul>	
	GPPL are planning to ramp down minor and major maintenance, including capital, in the budgets as the current end date of the PPA approaches. The capital plans for GPPL have been reviewed in light of the end of contract term and planned expenditure that is either not absolutely necessary to operate without compromising safety of people, plant and the environment has been removed	
	<ul> <li>Capital expenditure is still available if it provides a return on investment during the remaining contract term of the current PPA.</li> </ul>	



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	Condition Monitoring, Inspections and Maintenance Tasks  Condition Monitoring tactics used throughout the facilities include: Online & offline vibration analysis On-line temperature monitoring Oil analysis Partial Discharge (annual test on the generators) Motor flux analysis (on the generators) Dissolved Gas Analysis (on transformers) Thermography GPPL has fleet-wide engineering standards that set out the inspection requirements, including the tests that need to be completed, the frequency of the tests and the required results that need to be returned. Within the Total Safety Documents system, there is a separate area for the standards that apply to TransAlta's Australian sites.  SAP is configured with a functional location structure, which sets out the hierarchy for all the assets. If notifications are received from the field, these can be recorded against the specific asset using the location structure.  There is a maintenance meeting every Wednesday morning to discuss the maintenance work coming up in the next three weeks. The schedule for the maintenance tasks to be completed during the upcoming Wednesday-Tuesday week is locked down by the Plant Manager after the meeting.  The SAP work orders are used to record the work history, including findings, work carried out, as well as the labour and material costs associated with completing the work orders.  Requisitions for parts are created manually because the SAP inventory / automatic ordering system is not adequately set up. GPPL has identified in its AMP there is an opportunity to improve cost performance by implementing SAP Materials Requirements Processing (MRP).  There is a semi-automated process built-in to SAP to report on work orders that have not been completed by the required due date. The results are presented in the weekly maintenance meetings and any outstanding maintenance tasks can be tracked and addressed.  GPPL minimises its warehouse inventory as much as possible while retaining an acceptable risk of non-availability of spares. Inventory is re	



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	• Six maintenance staff are located in Kalgoorlie to work on TransAlta's assets in Kalgoorlie and Kambalda, including the GPPL assets. There are three mechanical maintenance staff and three electrical maintenance staff. In addition, there are two staff members to carry out the maintenance on the HV assets.	
	<ul> <li>GPPL's maintenance staff are available 24/7, 365 days a year. Maintenance staff are rostered to be on-call to carry out any reactive maintenance on the turbines or HV assets. On call staff are able to call in addition internal and/or external support if required. Maintenance staff conduct the daily inspection rounds.</li> </ul>	
	Asset Failure Analysis	
	Although accurate tracking can assist with prediction of failure rates and cost estimates for major services, GPPL does not currently track the life cycles of critical parts. GPPL has identified in the GPPL AMP that in order to do this, a software upgrade on the LM6000 control system may be required and the Original Equipment Manufacturer (OEM) needs to be consulted to determine the applicability at GPPL. GPPL needs to perform an analysis of the benefit of a system to track the remaining life of major interchangeable components in order to assess whether it would be beneficial to implement this change.	
	The failure cause is able to be recorded on the work order but GPPL consider that the asset failure information captured in the field is not reviewed as much as it could be in order to complete more thorough root case failure analysis.	
	<ul> <li>GPPL has introduced TapRooT since the last audit and has developed the software to facilitate and the standards to specify when investigations should be undertaken. This analysis has been used for high risk events and critical assets during the review period.</li> </ul>	
	<ul> <li>GPPL is creating a Reliability Database for gas turbine-related reliability issues, however it is still under development.</li> </ul>	
	Maintenance Reporting	
	<ul> <li>GPPL uses a Process Safety Dashboard accessed through its intranet site to provide an overview of the operations and maintenance performance at each site against eight different areas.</li> </ul>	
	<ul> <li>GPPL has moved away from the maintenance management key performance indicators it previously used (e.g. percentage of work orders completed) to focus on the safety critical elements.</li> </ul>	
	■ This has been facilitated through ranking each piece of equipment with a criticality score based on engineering standards that determines whether an asset has a high, medium or low criticality. This change in approach allows GPPL to focus on the work orders for the most critical assets as opposed to the previous approach that treated all assets and their associated work orders as equal.	



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	<ul> <li>Each performance indicator has a document that sets out how the indicator has been calculated.</li> <li>Maintenance Costs and Forecasting</li> <li>TECO receives revenues through the terms of the OMA.</li> </ul>	
	The medium range forecast (MRF) is a budget for expenditure over a three year period and is built from minor and major maintenance activities. Major Maintenance intervals are tracked, updated and planned using an Excel spreadsheet. This sheet is updated at the budget and MRF intervals and any unplanned engine event.	
Asset Management Information S	system – Overall Rating: A1	
<ul> <li>Adequate system documentation for users and IT operators</li> <li>Input controls include appropriate verification and validation of data entered into the system</li> <li>Logical security access controls appear adequate, such as passwords and that appropriate system access and functionality is provided to users</li> <li>Physical security access controls appear adequate</li> <li>Data backup procedures appear adequate</li> <li>Key computations related to licensee performance reporting are materially accurate</li> <li>Management reports appear adequate for the licensee to monitor licence obligations</li> </ul>	<ul> <li>Overview</li> <li>Since the last asset management review, GPPL has changed its maintenance management system from GP MaTe to a corporate version of SAP. GPPL uses SAP PM (Plant Maintenance) to manage the maintenance program.</li> <li>SAP is also used for the operational asset register. SAP is configured with a functional location structure, which sets out the hierarchy for all the assets.</li> <li>GPPL also uses SAP for as its materials master system.</li> <li>GPPL has a separate financial asset register for its assets in SAP.</li> <li>GPPL use the Approval for Expenditure (AFE) process to develop capital projects and present the business case for approval for it to be added to the approved budget.</li> <li>GPPL uses the corporate Safety Performance Reporting for its incident reporting. This system utilises Synergi via a dashboard set-up that all the staff in the business can access.</li> <li>The SCADA system is used to provide all real-time monitoring information, data trending, alarming and reporting, which is backed up on a Plant Historian system</li> <li>GPPL uses the corporate Total Safety Documents (TSD) system for its risk management. The dashboard provides access to the consequence guidelines, risk matrices and responsibilities.</li> <li>Since the last review in 2014, GPPL has implemented its Operational Integrity Program (OIP). This has been used to review and identify equipment and safety aspects. The OIP is used to assess the loss of primary containment (the energy within the assets). The TSD and OIP are used to cover the management of assets and people.</li> <li>GPPL has introduced TapRooT since the last review for root cause failure analysis.</li> <li>SharePoint is used throughout business.</li> <li>There is extensive system documentation for users and IT operators stored on the corporate intranet site.</li> </ul>	<ul> <li>GAS.05.1406 ASSET         MANAGEMENT PLAN,         PARKESTON POWER         STATION.pdf</li> <li>Power Purchasing Agreement         between GPPL and Newmont         Power, 10 November 2015         viewed</li> <li>The following key GPPL asset         management information systems         were observed during the review:         <ul> <li>SAP Asset Register</li> <li>SAP PM (Plant maintenance)</li></ul></li></ul>
	Data Entry and Validation	TapRooT for Root Cause analysis



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	<ul> <li>Some readings are manual so checks and balances occur in GPPL's invoicing process (e.g. decimal point placement incorrect in HV reading). Readings are checked by separation of duties.</li> <li>Calculations are checked using financial settlement data and raw data.</li> <li>GPPL conducts daily and ongoing monitoring of its contract and market compliance. This</li> </ul>	<ul> <li>Examples of monthly operation and maintenance reports and financial reports were observed during the course of the review.</li> </ul>
	<ul> <li>overlaps with Western Power's technology rules.</li> <li>Operations data is entered manually into an operations spreadsheet that is stored on the business's server. This is uploaded into the Market database in .csv format every day.</li> </ul>	
	The Citect SCADA system is connected to the Aspen server located in Perth and is also mirrored on a server located in Canada.	
	Management Reports	
	<ul> <li>Operations and performance data is analysed to assess trends. The performance of the engines is reported fortnightly. Performance via graphical data from SCADA is reviewed and discussed at the weekly production meeting.</li> </ul>	
	The operations and performance information is reported up to the Group Operations Manager.	
	Monthly operation outcomes are included in the monthly invoice to Newmont Power, GPPL's primary customer, to allow the operations outcomes relevant to the terms of the PPA to be validated by the customer.	
	<ul> <li>A weekly report of scheduled vs completed work orders, high priority planned maintenance tasks and extra work orders is generated each Tuesday afternoon, along with forthcoming week's work, for discussion at Wednesday maintenance meeting.</li> </ul>	
	The weekly maintenance meeting is attended by all whole maintenance team, with minutes recorded.	
	GPPL's maintenance culture is very effective. Essentially, maintenance teams are self-scheduling and able to review, propose and execute the maintenance activities from the plan to prevent back-log, yet ensure the asset maintenance needs are met. This takes into account priorities, risks to operations, production, compliance, safety and financially.	
	A monthly financial pack is prepared and provided to management to show the financials for the month, year to date, balance of the year and the annual estimate. This financial pack provides overall profit and loss information and details of the capital expenditure program by site and project.	
	<ul> <li>In addition, each site has a separate monthly finance report that is prepared for the Plant Managers and which contains more detail.</li> </ul>	
	<ul> <li>The GPPL JV management committee meets quarterly to discuss safety, operational and financial results.</li> </ul>	



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	<ul> <li>Management reports are considered to be adequate for the licensee to monitor licence obligations. GPPL's licence obligations are reviewed annually during the preparation of the annual compliance reports.</li> </ul>	
	Security access of assets and systems	
	<ul> <li>Physical access to GPPL's site is strictly controlled and the security access controls are effective.</li> </ul>	
	<ul> <li>Access to the GPPL's servers is strictly controlled and a ticket needs to be lodged to gain access. Staff are only able to interface with the systems and are not able to edit the recorded information without going through an approval process to be able to carry out these functions. SQL queries have been set up for non-approved staff to get information when required.</li> </ul>	
	Password changes are required every 1-2 months.	
Risk Management - Overall Ratin	g: A1	
<ul> <li>Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system</li> <li>Risks are documented in a risk register and treatment plans are actioned and monitored</li> <li>The probability and consequence of risk failure are regularly assessed</li> </ul>	<ul> <li>Risk assessments and risk quantification are carried out throughout TransAlta's business activities. This includes pre-job planning, asset maintenance, justification for expenditure, asset creation / disposal, incident investigation and asset management.</li> <li>GPPL takes a consistent approach towards assessing and quantifying the risks based on well-defined risk assessment procedures, with likelihood and consequence considered. Risk rankings are consistent with Australian Risk Standards.</li> <li>GPPL's Asset Management Plan summarises the Known Risks – Capacity, Availability, Reliability in Section 6.2.</li> <li>GPPL's risk management is included in Section 13 of the AMP. The section includes the corporate risk matrix.</li> <li>If GPPL continues to operate and maintain the plant well there are considered to be relatively few risks for the contract term of the current PPA. The risks and the mitigation actions are summarised in Section 13 of the AMP.</li> <li>There is an Environmental Health and Safety team of two people (started within the current review period).</li> <li>GPPL uses the corporate Total Safety Documents (TSD) system for its risk management. The dashboard provides access to the consequence guidelines, risk matrices and responsibilities.</li> <li>Since the last review in 2014, GPPL has implemented its Operational Integrity Program (OIP). This has been used to review and identify equipment and safety aspects. The OIP is used to assess the loss of primary containment (the energy within the assets).</li> <li>The TSD and OIP are used to cover the management of assets and people.</li> <li>GPPL's corporate EHS portal is the business's system for reporting EHS issues and for accessing information on EHS policies, procedures and reporting. The portal also provides access to the chemical database, site licences, relevant Acts and other legislative documents, the learning management system and the TapRooT tool.</li> </ul>	<ul> <li>Interview with Nigel Feletti</li> <li>GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf</li> <li>Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015 viewed</li> <li>TransAlta Australia Risk Register on Synergi viewed.</li> <li>ERA #105 Risk Register Goldfields.xlsx</li> <li>TAC.09.0098 TECHNICAL RISK METHOD.pdf</li> <li>TAC.07.0118 TSMS ELEMENT 2 - OPERATIONAL RISK MANAGEMENT.pdf viewed.</li> <li>TAC.03.0069 RISK MATRIX STANDARD.pdf viewed</li> <li>TA Emergency Management Standard.pdf</li> <li>Mapping of TransAlta Current TSMA to TEA TS&amp;E Management</li> </ul>



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
	<ul> <li>All applicable EHS Management System controls appropriate to operate and maintain plant and equipment are documented within the site specific EHS Management Plan and supporting procedures.</li> <li>GPPL uses a corporate risk register. A separate Australian risk register is also being developed.</li> <li>Dashboard links provide access to the individual risk assessments recorded in GPPL's corporate Synergi system. The assessments include the controls used to manage the risks. The Synergi dashboards also provide links to business risks and non-WHS risks.</li> <li>Incident reports are completed when required and high-risk incidents are escalated to corporate level.</li> <li>GPPL uses the corporate TapRooT root cause analysis tool to assess asset failures.</li> <li>Hierarchy of site drills undertaken is as follows:  – Tabletop exercise  – Functional exercise  – Full scale exercise  – Full scale exercise  1 TransAlta engage a third-party consultant to provide the business with a monthly update of legislative changes regarding health, safety and the environment.</li> <li>Permits and training are required to carry out hot work activities, working at heights and confined space entry. Lock out tag out procedures are in place.</li> <li>GPPL's training requirements and management of compliance training are very comprehensive (refer to Asset Operations section).</li> </ul>	System hardcopy diagram viewed.  Safety Performance Report — 201806.xlsx viewed. (Newmont)  Synergi system on TransAlta intranet viewed.  EHS Portal on TransAlta intranet viewed.  Various EHS reports (screenshots) viewed.  The following incident investigation reports were viewed:  Incident Investigation Report 6830 V2.pdf (SCE)  Incident Investigation Report 9183 V6.pdf (SCE)  Incident Investigation Report 8853 v3.pdf (SCE)  ERA #023 Emergency Response Deed.pdf viewed (TEC)  GAS.06.1324 Maintenance Work Management.docx viewed.  TAC.13.0257 WORK MANAGEMENT WORK EXECUTION STANDARD.pdf viewed  TAC.13.0259 WORK MANAGEMENT DOCUMENT CLOSURE STANDARD.pdf viewed  TAC.09.0097 RISK INTOLERABILITY CRITERIA AND ALARP CONCEPT.pdf  The following Critical Task Analysis Forms (CTAs) were viewed



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evi	idence (Include Contact)
			<ul> <li>180809132435.pdf (Recommission PPS-BLD tie line)</li> <li>180809132712.pdf (Generator protection relay testing)</li> </ul>
			The following incident reports were viewed:
			<ul> <li>Synergi Life case no 5720</li> <li>PPS - 33kV CB161 Kaltails</li> <li>Feeder trip suspected</li> <li>lightning strike.msg</li> </ul>
			<ul> <li>Synergi Life case no 7253 KNS - Unit trip CO2 fire suppression system operated.msg (SCE)</li> </ul>
			<ul> <li>Synergi Life case no 8140</li> <li>Islanding event for SCE</li> <li>09052018.msg (SCE)</li> </ul>
			GAS.07.1418 TA AUSTRALIA DOCUMENT AND RECORDS CONTROL PROCEDURE.pdf
			TAC.07.0124 TSMS ELEMENT 7 - DOCUMENT AND RECORDS CONTROL.pdf
			The following monthly EMG meeting minutes were viewed:
			<ul> <li>2018 0531 EMG North Minutes.docx</li> </ul>
			<ul> <li>2018 0702 EMG North Minutes.docx</li> </ul>
			<ul> <li>2018 0723 EMG North Minutes.docx</li> </ul>
			<ul><li>EMG South Minutes</li><li>20180227.docx</li></ul>
			<ul><li>EMG South Minutes 20180328.docx</li></ul>
			<ul><li>EMG South Minutes 20180529.docx</li></ul>



Asset Management Process / Effectiveness Criteria	Observations / Comments	Evidence (Include Contact)
		<ul> <li>The following emails regarding safety improvements were viewed:         <ul> <li>NiW Email - Hood Breathers.msg</li> <li>NiW Email - Moulded Ear Plugs.msg</li> <li>NiW Email - Wash Bays.msg</li> </ul> </li> <li>NiW Email - Wash Bays.msg</li> <li>The following safety reports were viewed:         <ul> <li>Safety Report - June 2018.xlsx</li> <li>Safety Report - July 2018.xlsx</li> </ul> </li> <li>Safety Report - July 2018.xlsx</li> <li>The following monthly report pro formas were viewed:         <ul> <li>Emergency Light Tests.xlsx</li> <li>Oil, Chemical &amp; Gas storage area checks.xlsx</li> </ul> </li> <li>Fine following incident/hazard reports were viewed:         <ul> <li>ERA #93 GF MAY Synergi Reports Raised.xlsx</li> <li>ERA #93 GF JUNE Synergi Reports Raised.xlsx</li> <li>ERA #93 GF JULY Synergi Reports Raised.xlsx</li> <li>ERA #93 GF JULY Synergi Reports Raised.xlsx</li> <li>Example Asset Operations Report.PNG</li> </ul> </li> </ul>
Contingency Planning – Overall R	ating: A1	
<ul> <li>Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks</li> </ul>	<ul> <li>GPPL has an Emergency Management Policy and an Emergency Management Standard.</li> <li>The Emergency Management Policy includes individual plans for crisis management, threat responses, communications plan and IT contingency. There are also business unit plans for emergency response and continuity.</li> <li>The Emergency Management Standard defines the TransAlta Corporate Emergency Management Program through documentation, procedures and activities to be used by the TransAlta Corporation and its wholly owned subsidiaries. The standard specifies that it is to be used prior to, during and post emergency situations.</li> </ul>	<ul> <li>GAS.05.1406 ASSET         MANAGEMENT PLAN,         PARKESTON POWER         STATION.pdf</li> <li>Power Purchasing Agreement         between GPPL and Newmont         Power, 10 November 2015         viewed</li> </ul>



#### **Observations / Comments**

- The Emergency Management Standard sets out the emergency policies, the management program with all the relevant management plans, leadership and accountability details, training and evaluation requirements and processes and the executive review processes for the Standard.
- GPPL's corporate Emergency Response Guide for emergencies sets out the internal and external contacts for managing incidents and emergencies. GPPL also has site specific emergency response plans for the PPS site. GPPL's detailed Contingency and Risk Assessment Plan covers various operational scenarios and emergency situations.
- Contingency procedures covering various aspects of asset operation and maintenance have been developed.
- Emergency response drills are carried out twice a year.
- Contingency plans for business continuity is well-developed and includes back-up and off-site data storage for restoration of business.
- Contingency plans and procedures documents are stored on the corporate Total Safety Documents system.
- Operations and maintenance teams are aware of contingency documents and procedures.
   Procedures are reviewed on a regular basis and updated to suit outcomes of review processes.

#### **Evidence (Include Contact)**

- TA Emergency Management Standard.pdf
- TAC.02.0023 CORPORATE EMERGENCY MANAGEMENT STANDARD.pdf
- TAC.07.0130 TSMS ELEMENT 11 - EMERGENCY MANAGEMENT.pdf
- GAS.03.0913 EMERGENCY RESPONSE GUIDE.pdf
- GAS.02.1407 SOUTHERN CROSS ENERGY EMERGENCY RESPONSE PLAN V2.pdf
- ERA #031 Synergi History of Drills.xlsx
- The following drill reports were viewed:
  - 20170906 ER Report KNS.pdf (SCE)
  - 20180605 LNO ER Report.pdf plus photographs (SCE)
  - 20180515 ER Report MKO.pdf (SCE)

# Financial Planning - Overall Rating: A1

- 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 provides firm predictions on income for

## **Budgets and Forecasts**

- Annual budgets are prepared using justified expenditures. All business cases have the required criteria well-defined in their justification templates; including risks, financial returns, impact on commercial / contractual obligations, legal, legislative, maintenance, operations, personnel, timing, etc.
- GPPL has a long-range forecast (LRF) and a medium range forecast (MRF). The latest medium range forecast goes out three years from 2018 to 2020 and is developed between June and September each year. Between March and April each year a refresh of the budgets for these years is carried out and the LRF is also reviewed. The LRF currently goes out to 2042.
- The LRF includes estimates for revenue that includes lines for contract, merchant and miscellaneous revenue. The LRF has estimates for operating costs that include labour, staff costs, vehicles, office, materials, insurance and contract staff. The budgets/forecasts are developed for each site using a bottom-up approach.

- Interview with Marvin Menjivar
- GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf
- Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015 viewed
- The following monthly business planning forecasts were viewed:
  - Parkeston Jun18 F.xlsx (GPPL)



- 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

### **Observations / Comments**

Operational experience over the past 20 years has given GPPL sufficient knowledge to form
the basis of the annual budget development and review. The MRF supplements this process
and is used for identifying and planning large capital and O&M items.

#### **Financial Plan**

- GPPL's current financial plan is included in its Asset Management Plan. This includes forecasts for gross margin, operations and maintenance, property and business tax, EBITDA (earnings before interest, taxes, depreciation and amortisation) and EBIT (earnings before interest and tax). These are set out annually for the remaining contract term of the current PPA with estimated assumed budget items to cover the years after the PPA is expected to expire.
- The Financial Plan in the AMP also includes proposed capital expenditure and major maintenance items. The only major maintenance item is for a hot section on Generator No.1 that has now been completed.

#### **Financial Reporting**

- A monthly financial pack is prepared and provided to management to show the financials for the month, year to date, balance of the year and the annual estimate. This financial pack provides overall profit and loss information and details of the capital expenditure program by site and project.
- The monthly financial reports also include information on the availability of supply and power outages as there are financial impacts for these performance indicators under the conditions of the contract that GPPL has with its customer.
- The monthly reports data is extracted from SAP, the corporate financial system used by GPPL. The data extracted and reported is based on a transactional level. There is a monthly meeting to discuss the business finances.
- In addition, each site has a separate monthly finance report that is prepared and distributed to the Plant Managers which provides transactional detail.
- GPPL works to a calendar year for its financial planning, budgeting processes and reporting.
   This is due to GPPL's parent company being a Canadian company. Annual budgets are approved for use by November of the preceding year.
- The GPPL JV management committee meets quarterly to discuss safety, operational and financial results.

#### **Evidence (Include Contact)**

- SCE North Jun18 F.xlsx (SCE)
- SCE South Jun18 F.xlsx (SCE)
- Australia Capital Detail 2018 L01 Final.xlsx viewed. Long range forecast 2018-2042.
- Budget MRF 2018 BUD.xls viewed.
- 1806 Day 8 Report Jun18.xlsx viewed.
- Australia Jun18 F.xlsx viewed.
   Spreadsheet shows budget vs actual costs for each TransAlta
   Australia site for June 2018.

### Capital Expenditure Planning - Overall Rating: A1

- There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates
- Capital expenditure planning is included in GPPL's annual budgeting process.
- GPPL's capital plans and budgets are managed in spreadsheets. The annual capital plans out to 2021 are included in the GPPL AMP.
- Interview with Marvin Menjivar
- GAS.05.1406 ASSET MANAGEMENT PLAN,



- 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

### **Observations / Comments**

- At this time, no consideration has been given by GPPL to what capital expenditure should occur, if any, when the current contract terminates. Planning for decommissioning of the asset will be determined depending on the circumstances when the current PPA ends.
- At the current time there is no requirement to increase the capacity of the PPS asset's through additional capital investment, although there may be some opportunity for GGPL to secure additional capacity credits for the WEM after the PPA expires. A detailed analysis and enquiry with the AEMO will quantify any potential benefit.
- The costed schedule for capital purchases through to end of the contract provides clarity for GPPL's major expenditure into the future and provides a basis for optimisation of that spend.
- The capital forecast is reviewed each year to ensure that it meets TransAlta's business objectives and is tracked monthly throughout the year. GPPL will need to reassess any items removed from the plan as part of any decision to continue to operate the PPS beyond the existing PPA.
- In addition, GPPL have identified that the decision to continue to operate the PPS needs to take account of the size of the LM6000 gas turbine fleet in Australia and worldwide as this may effect availability of spares into the future.
- The possibility of selling the asset as a going concern will need to be factored into the asset management plan in the future.
- GPPL use the Australian Capital Process to summarise the capital projects and present the business case in order to receive funding.
- The Application for Expenditure (AFE) template includes associated operating costs impacting from the new capital spend, details of the people involved in the project, the project details, project alternatives and supplier.
- Gate checks, as part of the Australian Capital Process, are used to assess the options at an earlier stage prior to the preparation of the AFE template. Gate 2 is required to be passed in order to progress to developing the AFE. The corporate gateway documentation has been developed this year although the business was already using the process informally prior to this year. Approvals for individual spend/projects are granted by the Australian Managing Director once the Capital budget is approved. If the proposed project is estimated to cost more than \$0.5M, the project has to be approved by the Australian MD.
- GPPL are required to follow the corporate financial policies with regard to project planning and purchasing.

#### **Evidence (Include Contact)**

# PARKESTON POWER STATION.pdf

- Power Purchasing Agreement between GPPL and Newmont Power, 10 November 2015 viewed
- Australia Capital Detail 2018 L01
   Final.xlsx viewed. Long range forecast 2018-2042.



**Observations / Comments** 

**Evidence (Include Contact)** 

#### Review of Asset Management System - Overall Rating: A1

- 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
- Routine reviews of the asset management systems are undertaken.
- The current version of the GPPL Asset Management Plan was developed in February 2018. The next review date included in the document control table is February 2021.
- Improvement opportunities are included in Section 14 of the GPPL AMP. However, there is no Improvement Plan that sets out timeframes and responsibilities. We note that other improvements have been identified in the AMP. We recommend that an Improvement Plan is included in the AMP to summarise the opportunities that have been identified in the Plan and to assign responsibilities and timeframes.
- We recommend that an Improvement Plan is included in the AMP to summarise the opportunities that have been identifier in the Plan and to assign responsibilities and timeframes.
- An external review of the AMS was undertaken as part of Clause 20.4 of GPPL's current generation, operating licence under section 14(1)(c) of the *Electricity Industry Act*. The last review was undertaken for the period 1 July 2011 to 30 June 2014. No other intermediary reviews have been undertaken between the previous review and this review which covers the period 1 July 2014 to 30 June 2018.
- GPPL's AMS is considered appropriate, fit-for-purpose and suitable for the organisation.

- Interview with Troy Forward and Matthew Kenneday
- GAS.05.1406 ASSET MANAGEMENT PLAN, PARKESTON POWER STATION.pdf
- 2015, 2016 and 2017 Compliance Reports viewed



#### Recommendations 6

#### 6.1 **Performance Audit**

Table 6-1 Table of Current Non Audit Compliances and Recommendations

A. Resolved during	A. Resolved during current audit period			
Electricity compliance reporting manual 2017 (ref. no./ year)	(Compliance rating/ Legislative obligation / details of the issue)	Auditor's recommendation or action undertaken	Date resolved	Further action required (Yes/No/Not applicable) & details of further action required including current recommendation reference if applicable

B. Unresolved at end of o	current Audit period		
(Compliance rating/ Legislative obligation / details of the issue)	Auditor's recommendation or action undertaken	Date resolved	Further action required (Yes/No/Not applicable) & details of further action required including current recommendation reference if applicable

#### 6.2 **Asset Management Review**

Table 6-2 Table of Current Review Asset System Deficiencies/Recommendations

A. Resolved during current audit period Ref. **Asset System Deficiency** Date Resolved (& management **Auditor's Comments** action taken) (Rating / Asset Management System Component & Effectiveness Criteria / Details of Asset System Deficiency)

B. Unresolve	d at end of current Audit period		
Reference (no./year)	Asset System Deficiency (Rating / Asset Management System Component & Effectiveness Criteria / Details	Auditor's recommendation	Management action taken by end of Audit Period
	of Asset System Deficiency)  A1  Asset Maintenance  Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule.	We recommend that GPPL completes the improvement	
R1/2018	The GPPL AMP has identified that the SAP data conversion appears to have created some gaps in both asset records and detailed master data and may include registered equipment	opportunity to rectify the asset record data gaps that it identified in the GPPL AMP.	



# B. Unresolved at end of current Audit period

such as pressure vessels. These are being investigated by the Maintenance Process Specialist. Statutory compliance and efficient and effective maintenance relies on this data being readily available.

#### A 1

Asset Maintenance

Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule.

#### R2/2018

Apart from SAP PMs and the major maintenance schedule, there is no asset lifecycle maintenance plan. Major maintenance, including capital works, is planned by the Plant Manager South according to the TransAlta MRF and budgeting processes. There are multiple documents managing different parts of the Asset lifecycles.

The GPPL AMP has identified that in reviewing these documents, there is poor correlation between planned work and budgeted work and a single document is required to address this.

We recommend that GPPL develops a single document to manage the different parts of the asset lifecycles in accordance with the opportunity it identified in the GPPL AMP.

#### A1

Review of Asset Management System

A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current

### R3/2018

Improvement opportunities are included in Section 14 of the GPPL AMP. However, there is no Improvement Plan that sets out timeframes and responsibilities. We note that other improvements have been identified in the AMP.

We recommend that an Improvement Plan is included in the AMP to summarise the opportunities that have been identifier in the Plan and to assign responsibilities and timeframes.



# 7 Confirmation of the Audit/Review

I confirm that the audit/review carried out at GPPL on 13 - 16 August 2018 and recorded in this report is an accurate presentation of our findings and opinions.

Justin Edwards PhD MEng Cardno (QLD) Pty Ltd

JEdwalds.

515 St Paul's Terrace

Fortitude Valley QLD 4006

9 October 2018

**APPENDIX** 



RISK MANAGEMENT FRAMEWORK





# **Types of Compliance Risk**

Type of Risk	Examples
Supply quality and reliability	Delays in new connections, excessive supply interruptions, supply quality standards not met.
Consumer protection	Customer service levels not met, incorrect bills, disconnection and reconnection standards not met, customers unable to access financial hardship assistance.
Legislation/licence	Breach of industry Acts, regulations and codes, contravention of licence conditions.

# **Risk Assessment Rating Scales**

The consequence, likelihood, inherent risk and adequacy of internal controls are assessed using a 3-point rating scale as described below. The rating scale is as per the Audit and Review Guidelines: Electricity and Gas Licences, (Economic Regulation Authority), April 2014.

# **Consequence Rating**

The consequence rating scale is outlined below.

	D. 43		2 2 1	
	Rating	Supply Quality and Reliability	Consumer Protection	Breaches of Legislation or Other Licence Conditions
1	Minor	Breaches of supply quality or reliability standards – affecting small number of customers.  Delays in providing a small proportion of new connections.	Customer complaints procedures not followed in a few instances.  Small percentage of disconnections or reconnections not completed on time.  Small percentage of bills not issued on time.	Legislative obligations or licence conditions not fully complied with, minor impact on customers or third parties.  Compliance framework generally fit for purpose and operating effectively.
2	Moderate	Supply quality breach events that significantly impact customers; large number of customers affected and/or extended duration and/or damage to customer equipment.  Supply interruptions affecting significant proportion of customers on the network for up to one day.  Significant number of customers experiencing excessive number of interruptions per annum.  Significant percentage of new connections not provided on time/ some customers experiencing extended delays.	Significant percentage of complaints not being correctly handled.  Customers not receiving correct advice regarding financial hardship.  Significant percentage of bills not issued on time.  Ongoing instances of disconnections and reconnections not completed on time, remedial actions not being taken or proving ineffective. Instances of wrongful disconnection.	More widespread breaches of legislative obligations or licence conditions over time.  Compliance framework requires improvement to meet minimum standards.
3	Major	Supply interruptions affecting significant proportion of customers on the network for more than one day.  Majority of new connections not completed on time/ large number of customers experiencing extended delays.	Significant failure of one or more customer protection processes leading to ongoing breaches of standards.  Ongoing instances of wrongful disconnection.	Wilful breach of legislative obligation or licence condition. Widespread and/or ongoing breaches of legislative obligations or licence conditions. Compliance framework not fit for purpose, requires significant improvement.



## **Likelihood Ratings**

The likelihood rating scale is described below.

	Level	Description
Α	Likely	Non-compliance is expected to occur at least once or twice a year
В	Probable	Non-compliance is expected to occur once every three years
С	Unlikely	Non-compliance is expected to occur once every 10 years or longer

# **Inherent Risk Assessment Rating and Description**

The inherent risk rating is based on the combined consequence and likelihood rating. The inherent risk assessment rating scale and descriptions are outlined below.

Likelihood		Consequence	
Likeiiiiood	Minor	Moderate	Major
Likely	Medium	High	High
Probable	Low	Medium	High
Unlikely	Low	Medium	High

Level	Description
High	Likely to cause major damage, disruption or breach of licence obligations
Medium	Unlikely to cause major damage but may threaten the efficiency and effectiveness of service
Low	Unlikely to occur and consequences are relatively minor

## **Adequacy Ratings for Existing Controls**

The adequacy of existing internal controls is also assessed based on a 3-point scale as indicated below.

Level	Description
Strong	Controls that mitigate the identified risks to an appropriate level
Moderate	Controls that only cover significant risks; improvement required
Weak	Controls are weak or non-existent and have minimal impact on the risks

# **Assessment of Audit Priority**

The assessment of audit priority is used to determine the audit objectives, the nature of audit testing and the extent of audit testing required. It combines the inherent risk and risk control adequacy rating to determine the priority level.

Inherent Risk	Adequacy of Existing Controls			
	Weak	Medium	Strong	
High	Audit Priority 1	Audit Priority 2		
Medium	Audit Priority 3	Audit Priority 4		
Low	Audit Priority 5			

APPENDIX

В

ASSET MANAGEMENT PERFORMANCE RATING DEFINITIONS





# **Compliance Assessment Rating Scale**

In accordance with the Audit Guidelines – Electricity, Gas and Water Licences (ERA, April 2014), a 7-point rating scale has been adopted to assess the licensee's compliance against each licence condition. The rating scale and description of compliance is outlined below.

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

## **Asset Management Review Rating Scales**

The asset management review utilises a combination of asset management adequacy ratings and asset management performance ratings, which are outlined below. These are based on the Audit Guidelines – Electricity, Gas and Water Licenses (ERA, April 2014).

# **Asset Management Adequacy Ratings**

Rating	Description	Criteria
A	Adequately defined	<ul> <li>Processes and policies are documented.</li> <li>Processes and policies adequately document the required performance of the assets.</li> <li>Processes and policies are subject to regular reviews, and updated where necessary.</li> <li>The asset management information system(s) are adequate in relation to the</li> </ul>
В	Requires some improvement	<ul> <li>assets that are being managed</li> <li>Process and policy documentation requires improvement.</li> <li>Processes and policies do not adequately document the required performance of the assets.</li> <li>Reviews of processes and policies are not conducted regularly enough.</li> <li>The asset management information system(s) require minor improvements (taking into consideration the assets that are being managed)</li> </ul>
С	Requires significant improvement	<ul> <li>Process and policy documentation is incomplete or requires significant improvement</li> <li>Processes and policies do not document the required performance of the assets</li> <li>Processes and policies are significantly out of date</li> <li>The asset management improvement system(s) require significant improvement s (taking into consideration the assets that are being managed).</li> </ul>
D	Inadequate	<ul> <li>Processes and policies are not documented.</li> <li>The asset management information system is not fit for purpose (taking into consideration the assets that are being managed).</li> </ul>



# **Asset Management Performance Ratings**

Rating	Description	Criteria
1	Performing effectively	<ul> <li>The performance of the process meets or exceeds the required levels of performance</li> <li>Process effectiveness is regularly assessed and corrective action taken when necessary</li> </ul>
2	Opportunity for improvement	<ul> <li>The performance of the process requires some improvement to meet the required level</li> <li>Process effectiveness reviews are not performed regularly enough</li> <li>Process improvement opportunities are not actioned</li> </ul>
3	Corrective action required	<ul> <li>The performance of the process requires significant improvement to meet the required level</li> <li>Process effectiveness reviews are performed irregularly or not at all</li> <li>Process improvement opportunities are not actioned</li> </ul>
4	Serious action required	<ul> <li>Process is not performed or the performance is so poor that the process is considered to be ineffective.</li> </ul>