

Final Audit and Review Report

Performance Audit and Asset
Management Review

3608-88

Prepared for
Shell Energy

2 February 2022



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Document Information

Prepared for	Shell Energy
Project Name	Performance Audit and Asset Management Review
File Reference	360888 - RPT - 01-04 - Final Neerabup Audit and Review Report.docx
Job Reference	3608-88
Date	2 February 2022
Version Number	D

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Effective Date 2/021/2022

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Date Approved 2/02/2022

Document History

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
A	21/12/2021	Draft for review by Shell	J. Edwards P. Lamb	P. Lamb
B	2/12/2021	Draft for review by ERAWA	P. Lamb	P. Lamb
C	28/01/2022	Final for ERAWA	J. Edwards P. Lamb	P. Lamb
D	02/02/2022	Final	P. Lamb	P. Lamb

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Executive Summary

General

NewGen Neerabup Partnership is a 50:50 partnership between Shell Energy (previously ERM Power) and Energy Infrastructure Trust (EIT) that is managed by Infrastructure Capital Group (ICG). Shell Energy Australia Pty Ltd (Shell) completed the acquisition of ERM Power Limited in November 2019

NNP holds an electricity generation licence (EGL18) for the Neerabup power station.

The Neerabup Power Station is registered as a 330.6 MW open-cycle gas fired power station located in Western Australia and feeds into the South West Interconnected System (SWIS). The station has two 173MW turbines and was commissioned in 2009. The power station is designed as a peaking plant to provide additional capacity to the SWIS during periods of high demand.

Audit and review objectives

This audit has been conducted in order to assess:

1. NNP's level of compliance with the conditions of their electricity licences.
2. The adequacy and effectiveness of NNP's asset management system.

This report outlines the findings of the audit and review of NNP's to fulfil the above objectives, conducted on 11, 15 and 25 November 2021 and 2 December 2021 via videoconferencing and a site visit to the Neerabup Power Station was carried out on 7 December 2021.

The audit and review covers the operating period of 1 November 2016 to 31 October 2021.

The operating licence audit has been conducted as a reasonable assurance engagement. The asset management review has been conducted as a limited assurance engagement.

Previous Performance Audit – Findings

The previous audit did not identify any non-compliances against the applicable licence obligations. There were no recommendations from the previous audit.

Performance Audit - Effectiveness of controls

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

Performance Audit - Overall compliance

The overall compliance of NNP 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. During the current audit, no non-compliances have been observed.

		Compliance rating					Total
		1	2	3	4	N/R	
Controls rating	A	15	-	-	-	-	15
	B	-	-	-	-	-	-
	C	-	-	-	-	-	-
	D	-	-	-	-	-	-
	N/P	-	-	-	-	19	19
	Total	15	-	-	-	19	34

Asset Management System Review – Findings

There were no asset management system recommendations from the previous audit.

NNP has adequate controls in place for the various asset management system components.

Asset Management System Review – Control Environment

We consider that NNP 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 NNP's Asset Management System is provided in Section 4.3. All elements have been rated "A" for policy and procedures. All elements have been rated "1" for performance.

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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.

NewGen Neerabup Partnership is a 50:50 partnership between Shell Energy (previously ERM Power) and Energy Infrastructure Trust (EIT) that is managed by Infrastructure Capital Group (ICG). Shell Energy Australia Pty Ltd (Shell) completed the acquisition of ERM Power Limited in November 2019

NewGen Neerabup Partnership (NNP) holds an electricity generation licence (EGL18) for the Neerabup power station.

1.2 Overview of Neerabup power station

Neerabup is registered as a 330.6 MW open-cycle gas fired power station located in Western Australia and feeds into the South West Interconnected System (SWIS). The station has two 173MW turbines and was commissioned in 2009. The power station is designed as a peaking plant to provide additional capacity to the SWIS during periods of high demand.

1.3 Purpose of this report

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

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 – the effectiveness of systems and procedures in place throughout the audit period, including the adequacy of internal controls.
- > Outcome compliance – the actual performance against standards prescribed in the licence throughout the audit period.
- > Output compliance – the existence of the output from systems and procedures throughout the audit period (specifically, proper records which provide assurance that procedures are consistently followed and controls are maintained).
- > Integrity of reporting – the completeness and accuracy of the compliance and performance reports provided to the ERA.
- > Compliance with any individual licence conditions – the actual performance against the requirements imposed on the specific licensee by the ERA or specific matters raised by the ERA.

The asset management system reviews covers:

- > the period over which the audit or review has been performed
- > 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
- > 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
- > any other information the auditor considers relevant to the audit or review scope of work.

The *Electricity Industry Act 2004 (WA)* obligates 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 4 of EGL18 was issued on 1 July 2015 followed by version 5, issued 1 July 2018.

The previous Performance Audit and Asset Management Review covered the period of 1 April 2013 through 31 October 2016 and was finalised in April 2017.

This audit and review covers the period 1 November 2016 through 31 October 2021.

2 Audit/Review scope

2.1 Audit/Review objectives

The objectives of this audit were to:

1. Provide to the Authority an independent assessment of NNP's compliance with all of the relevant obligations under the licences
2. Provide to the Authority an independent assessment of the effectiveness of NNP's asset management system in relation to EGL18
3. Provide recommendations to address any non-compliance.

2.2 Scope of Works

The audit encompassed an assessment of the following four key areas using a risk based approach (to ISO 31000:2018):

- > 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:

- > Interview with key staff members from NNP to determine:
 - Performance against licence conditions for EGL18
 - Performance against each asset management process for EGL18
- > Review 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 and review report in accordance with the format outlined in the ERA Audit and Review Guidelines: Electricity and Gas Licences (March 2019).

The audit and review are both limited assurance engagements.

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	EGL18
3.7	Notices	✓
3.8	Publishing information	✓
3.9	Review of the Authority's Decisions	✓
4.1	Compliance	✓
4.2	Fees	✓
4.3	Accounting Records	✓
4.4	Reporting change in circumstances	✓

Clause	Licence Requirements	EGL18
4.5	Provision of information	✓
5.1	Asset Management System	✓
5.2	Individual Performance Standards	✓
5.3	Performance Audit	✓

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 NNP.

Table 2-2 Excluded conditions

2020 Compliance Manual Reference	Reference	Reason for exclusion
401	Electricity Industry Metering Code	The Licensee has no meters. Western Power owns the meters at its Neerabup Terminal substation and is responsible for the meter and is associated obligation.
402		
405		
406		
407		
408		
410		
435		

2.2.3 Asset Management System Review

The review of NNP's asset management system for EGL18 and ETL4 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.

Traditionally, the entire audit would be completed by our auditors at the facility location. Cardno's nominated team is primarily based out of the Brisbane office. As a result of Covid and potential lockdowns, the majority of the audit and review was performed remotely over videoconferencing. The requirements of physically

identifying the assets was undertaken by an individual from Cardno's Perth office under the supervision of the Brisbane audit team.

The key areas of our approach included:

- > A start-up discussion (by telephone) with NNP 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 and review plan for comment by the licensee. The audit and review 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 at the beginning of our audit and review work
- > Audit and review work comprising:
 - Videoconference interviews with business staff responsible for the audit and review areas
 - 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 the Neerabup Power Station on 7 December 2021 to meet with the NNP staff responsible for operating and maintaining the infrastructure.
- > Preliminary audit feedback at the audit close-out meeting
- > Preparation of a draft report for NNP'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 NNP.

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 3.7 Notices	4	<ul style="list-style-type: none"> Confirm all notices are issued in writing 	<ul style="list-style-type: none"> Correspondence register 	<ul style="list-style-type: none"> Issued notices
Clause 3.8 Publishing Information	4	<ul style="list-style-type: none"> Check if any requests have been issued by the Authority to publish any information relating to the performance of the Licensee and correlating response 	<ul style="list-style-type: none"> Correspondence register 	<ul style="list-style-type: none"> Letters of notification / requests from the Authority Response to the Authority
Clause 3.9 Review of the Authority's Decisions	4	<ul style="list-style-type: none"> Confirm if any requests of a reviewable decision has been issued to the Authority and correlating response 		<ul style="list-style-type: none"> Requests for review of decision (Correspondence)
Clause 4.1 Compliance	Various	<ul style="list-style-type: none"> Review legislative requirements and confirm compliance Identify any corrective action applied to correct / prevent breaches of compliance 	<ul style="list-style-type: none"> Work scheduling system 	<ul style="list-style-type: none"> Performance standards Compliance Summary Reports (record of breaches)
Clause 4.2 Fees	5	<ul style="list-style-type: none"> Review invoices from Authority and receipts of payment 		<ul style="list-style-type: none"> Invoices and receipts
Clause 4.3 Accounting Records	4	<ul style="list-style-type: none"> Check that financial statements are signed off as being to appropriate standards 	<ul style="list-style-type: none"> Finance system 	<ul style="list-style-type: none"> 2016-2021 Financial statements
Clause 4.4 Reporting change in circumstances	5	<ul style="list-style-type: none"> Review any correspondence with the Authority 	<ul style="list-style-type: none"> Correspondence register 	<ul style="list-style-type: none"> Correspondence with ERA
Clause 4.5 Provision of Information	4	<ul style="list-style-type: none"> Confirm that the licensee has provided the Authority with data required for performance monitoring purposes as set out in the Compliance Reporting Manual. 	<ul style="list-style-type: none"> Correspondence register 	<ul style="list-style-type: none"> Annual compliance reports Correspondence register
Clause 5.1 Asset Management System	Various	<ul style="list-style-type: none"> Confirm that the asset management policies and procedures meet legislative requirements. 	<ul style="list-style-type: none"> Enterprise Asset Management System Computerised Maintenance Management System 	<ul style="list-style-type: none"> Asset Management Policies Asset Management Plans Asset Management Systems and Procedures Manual Asset Register
Clause 5.2 Individual Performance Standards	NA	<ul style="list-style-type: none"> Confirm that it's not applicable 		
Clause 5.3	4	<ul style="list-style-type: none"> Review information reported to the Authority 		<ul style="list-style-type: none"> Performance Audit

Audit Area	Priority	Approach	Systems	Key Documents
Performance audit		<ul style="list-style-type: none"> Confirm methodology used to determine performance conforms to legislation and procedures. 		<ul style="list-style-type: none"> Annual Performance Reports Procedures / Policy Manual Correspondence between NewGen and Authority regarding review requirements

Table 2-4 Asset management review methodology

Audit Area	Effectiveness Criteria	Approach	Systems	Key Documents
Asset Management Review				
Asset planning	<ul style="list-style-type: none"> 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 (eg, 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 	<ul style="list-style-type: none"> Review and assess the adequacy of asset planning processes Review and assess adequacy of asset management plans Assess if asset management plans are up to date Assess implementation of asset management plans (status) Assess whether the asset management plan clearly assigns responsibilities and if these have been applied in practice 	<ul style="list-style-type: none"> GIS Asset database / information system 	<ul style="list-style-type: none"> Overview of planning approach Population projections Infrastructure Planning Reports Asset management plans Service level agreements Business Case/project justification
Asset creation and acquisition	<ul style="list-style-type: none"> Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions Evaluations include all life-cycle costs Projects reflect sound engineering and business decisions Commissioning tests are documented and completed Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood 	<ul style="list-style-type: none"> Review adequacy of policies and procedures in relation to asset creation and acquisition Review examples of creations / acquisitions to check if policies and procedures were followed and check costs against estimates 	<ul style="list-style-type: none"> Asset database / information system 	<ul style="list-style-type: none"> Policies and procedures for asset creating and acquisition. Accounting and engineering Overview of planning approach Business Case/project justification Asset management plans Commissioning certificates

Audit Area	Effectiveness Criteria	Approach	Systems	Key Documents
Asset disposal	<ul style="list-style-type: none"> ▪ Under-utilised and under-performing assets are identified as part of a regular systematic review process ▪ The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken ▪ Disposal alternatives are evaluated ▪ There is a replacement strategy for assets 	<ul style="list-style-type: none"> ▪ Review adequacy of policies and procedures in relation to asset disposal, asset replacement, identification of under-performing assets ▪ Determine if a review on the usefulness of assets are undertaken ▪ Review examples to check that policies and procedures are being followed 	<ul style="list-style-type: none"> ▪ Asset database / information system 	<ul style="list-style-type: none"> ▪ Policies and procedures for asset disposal. Accounting and engineering ▪ Asset management plans ▪ Decommissioning certificates
Environmental analysis	<ul style="list-style-type: none"> ▪ Opportunities and threats in the system environment are assessed ▪ Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved ▪ Compliance with statutory and regulatory requirements ▪ Achievement of customer service levels 	<ul style="list-style-type: none"> ▪ Review performance and service standards over audit period ▪ Review performance / identify any breaches and non-compliances and corrective action taken ▪ Review adequacy of reporting and monitoring tools 	<ul style="list-style-type: none"> ▪ Risk management system ▪ Asset management system ▪ Standard reports 	<ul style="list-style-type: none"> ▪ Relevant policies and procedures ▪ Planning reports ▪ Performance standards ▪ Compliance reports ▪ Strategic plans (if appropriate) ▪ Monthly KPI reports
Asset operations	<ul style="list-style-type: none"> ▪ Operational policies and procedures are documented and linked to service levels required ▪ Risk management is applied to prioritise operations tasks ▪ Assets are documented in an Asset Register, including asset assessment of assets' physical, structural condition and accounting data ▪ Operational costs are measured and monitored ▪ Staff receive training commensurate with their responsibilities 	<ul style="list-style-type: none"> ▪ Review adequacy of policies and procedures in relation to asset operations ▪ Review staff skills / training and resources available ▪ Check that operations procedures are being followed including testing of the asset register, observation of operational procedures and analysis of costs ▪ Identify any operational events and corrective actions 	<ul style="list-style-type: none"> ▪ Asset information system ▪ SCADA ▪ Finance system ▪ Works management system ▪ HR system 	<ul style="list-style-type: none"> ▪ Asset register ▪ Operations procedures ▪ Operational costs ▪ Daily / weekly / monthly check sheets ▪ Staff skills / resourcing structure ▪ Asset management plan ▪ Incident register
Asset maintenance	<ul style="list-style-type: none"> ▪ Maintenance policies and procedures are documented and linked to service levels required ▪ Regular inspections are undertaken of asset performance and condition 	<ul style="list-style-type: none"> ▪ Review adequacy of policies and procedures in relation to asset maintenance / maintenance functions ▪ Check that policies and procedures have been followed including testing of maintenance schedules, analysis of costs, 	<ul style="list-style-type: none"> ▪ Asset information system ▪ Works management system 	<ul style="list-style-type: none"> ▪ Maintenance procedures and schedules ▪ Record of maintenance ▪ Maintenance costs

Audit Area	Effectiveness Criteria	Approach	Systems	Key Documents
	<ul style="list-style-type: none"> ▪ Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule ▪ Failures are analysed and operational / maintenance plans adjusted where necessary ▪ Risk management is applied to prioritise maintenance tasks ▪ Maintenance costs are measured and monitored 	<ul style="list-style-type: none"> ▪ Review maintenance schedules / plans ▪ Identify any maintenance events and corrective actions 		
Asset Management Information System	<ul style="list-style-type: none"> ▪ Adequate system documentation for users and IT operators ▪ Input controls include appropriate verification and validation of data entered into the system ▪ Logical security access controls appear adequate, such as passwords and that appropriate system access and functionality is provided to users ▪ Physical security access controls appear adequate ▪ Data backup procedures appear adequate ▪ Key computations related to licensee performance reporting are materially accurate ▪ Management reports appear adequate for the licensee to monitor licence obligations 	<ul style="list-style-type: none"> ▪ Review adequacy of asset information system: ▪ Asset coverage ▪ Functionality ▪ Data coverage ▪ Security ▪ User functionality granted is appropriate ▪ Review outputs / reports generated by systems and assess suitability for reporting against performance standards / licence obligations 	<ul style="list-style-type: none"> ▪ Asset Management Information system 	<ul style="list-style-type: none"> ▪ Asset Management Information System manual ▪ AMIS data coverage and quality report ▪ Asset reports
Risk management	<ul style="list-style-type: none"> ▪ Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system ▪ Risks are documented in a risk register and treatment plans are actioned and monitored ▪ The probability and consequence of risk failure are regularly assessed 	<ul style="list-style-type: none"> ▪ Review risk assessment coverage ▪ Review sample of risk mitigation to check policies and procedures are followed ▪ Assess staff understanding of risk management and adequacy of risk management training for staff 	<ul style="list-style-type: none"> ▪ Risk management system 	<ul style="list-style-type: none"> ▪ Corporate Risk management framework ▪ Risk assessment ▪ Risk Register

Audit Area	Effectiveness Criteria	Approach	Systems	Key Documents
Contingency Planning	<ul style="list-style-type: none"> ▪ Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks 	<ul style="list-style-type: none"> ▪ Review adequacy / relevance and currency of contingency plans ▪ Review if plans have been tested and report on findings 	<ul style="list-style-type: none"> ▪ Asset management system ▪ Risk management system 	<ul style="list-style-type: none"> ▪ Contingency plans
Financial Planning	<ul style="list-style-type: none"> ▪ The financial plan states the financial objectives and strategies and actions to achieve the objectives ▪ The financial plan identifies the source of funds for capital expenditure and recurrent costs ▪ The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets) ▪ The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period ▪ The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services ▪ Significant variances in actual / budget income and expenses are identified and corrective action taken where necessary 	<ul style="list-style-type: none"> ▪ Review adequacy and effectiveness of financial planning and reporting processes ▪ Review current financial plan and assess whether the process is being followed 	<ul style="list-style-type: none"> ▪ Financial systems 	<ul style="list-style-type: none"> ▪ Financial Plan
Capital expenditure planning	<ul style="list-style-type: none"> ▪ There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates ▪ The plan provides reasons for capital expenditure and timing of expenditure ▪ The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan ▪ There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned 	<ul style="list-style-type: none"> ▪ Review adequacy and effectiveness of capital planning processes through examination of application of process and example documents 	<ul style="list-style-type: none"> ▪ Spreadsheets for capital planning and prioritisation 	<ul style="list-style-type: none"> ▪ Capital expenditure planning process outline ▪ Value engineering documents ▪ Risk management applied to investment planning ▪ Program management documents ▪ Review of capex estimate v outturn ▪
Asset management plan	<ul style="list-style-type: none"> ▪ A review process is in place to ensure that the asset management plan and the 	<ul style="list-style-type: none"> ▪ Review adequacy and currency of Asset Management Plan 	<ul style="list-style-type: none"> ▪ Asset management system 	<ul style="list-style-type: none"> ▪ Asset management plans

Audit Area	Effectiveness Criteria	Approach	Systems	Key Documents
	asset management system described therein are kept current <ul style="list-style-type: none"> ▪ Independent reviews (eg, internal audit) are performed of the asset management system 	<ul style="list-style-type: none"> ▪ Assess when the Asset Management Plan was last updated / reviewed ▪ Assess outcomes of independent review of AMPs ▪ Identify if AMP needs to be updated 		

2.4 Time period covered by the audit/review

This audit and review cover the period from 1 November 2016 to 31 October 2021.

2.5 Time period of the audit/review process

The audit/review commenced in October 2021 with preparation of the Audit Plan.

Interviews with NNP staff were carried out on 11, 15 and 25 November 2021 and 2 December 2021 via videoconferencing.

A site visit to the Neerabup Power Station was carried out on 7 December 2021.

2.6 Details of the licensee representatives participating in the audit/review

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

Table 2-5 Details of licensee representatives

Name	Organisation	Position
Bruno Lanciano	Shell Energy	Power Station Manager

2.7 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
Patrick Lamb	Cardno	Project Manager & Auditor/Reviewer	<ul style="list-style-type: none"> ▪ Project Management ▪ Audit Plan ▪ Audit preparation ▪ Audit ▪ Preparation of Report 	40
Justin Edwards	Cardno	Auditor/Reviewer	<ul style="list-style-type: none"> ▪ Audit preparation ▪ Audit ▪ Preparation of Report 	100
Robert Smith		Site visit	<ul style="list-style-type: none"> ▪ Site visit 	6

3 Licensee's response to previous audit recommendations

No actions were recommended or suggested to improve the existing controls in the previous operating licence audit and asset management review.

Table 3-1 Previous operating licence audit non-compliances and recommendations

A. Resolved during current Audit period				
Recommendation reference (no./year)	Non-compliance / Controls improvement (Rating / Licence obligation reference number and licence obligation / Details of non-compliance or inadequacy of controls)	Auditor's recommendation	Date resolved	Further action required (Yes/No/Not applicable) Details of further action required (including current recommendation reference, if applicable)
	Nil			
B. Unresolved at end of current Audit period				
Recommendation reference (no./year)	Non-compliance / Controls improvement (Rating / Licence obligation reference number and licence obligation / Details of non-compliance or inadequacy of controls)	Auditor's recommendation	Date resolved	Further action required (Yes/No/Not applicable) Details of further action required (including current recommendation reference, if applicable)
	Nil			

Table 3-2 Previous asset management review deficiencies and recommendations

A. Resolved during current Audit period				
Recommendation reference (no./year)	Process and policy deficiency / Performance deficiency (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Auditor's recommendation	Date resolved	Further action required (Yes/No/Not applicable) Details of further action required (including current recommendation reference, if applicable)
	Nil			
B. Unresolved at end of current Audit period				
Recommendation reference (no./year)	Process and policy deficiency / Performance deficiency (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Auditor's recommendation	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 is 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, March 2019. 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 NNP 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.

Auditors must provide a rating for the licensee's control procedures and control environment (controls rating) for licence obligations with an audit priority of 1, 2 or 3, or that have been assessed to be non-compliant in the audit.

Table 4-1 Audit compliance and controls rating scales

Controls Rating		Compliance Rating	
Rating	Description	Rating	Description
A	Adequate controls - no improvement needed	1	Compliant
B	Generally adequate controls - improvement needed	2	Non-compliant – minor impact on customers or third parties
C	Inadequate controls – significant improvement 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
N/P	Not performed – A controls rating was not required	N/R	Not rated – No activity took place during the audit period

Table 4-2 Asset management process and policy definition adequacy rating

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

Table 4-3 Asset management performance ratings

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

4.2 Performance audit compliance summary

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

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

N/R = 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

2020 Compliance Obligation Ref No.	Licence Reference	Audit Priority [rated 1 (Highest) to 5 (Lowest)]	Controls Rating					Compliance Rating						
			A	B	C	D	N/P	1	2	3	4	N/A	N/R	
101	Electricity Industry Act section 13(1)	4	✓					✓						
102	Electricity Industry Act section 14(1)(a)	5	✓					✓						
103	Electricity Industry Act section 14(1)(b)	4	✓					✓						
104	Electricity Industry Act section 14(1)(c)	5	✓					✓						
105	Economic Regulation Authority (Licensing Funding) Regulations 2014	5	✓					✓						
106	Electricity Industry Act section 31(3)	5	✓					✓						
107	Electricity Industry Act section 41(6)	4	✓					✓						
119	Electricity Industry Act, section 11	4	✓					✓						
120	Electricity Industry Act, section 11	5	✓					✓						
121	Electricity Industry Act, section 11	5	✓					✓						
122	Electricity Industry Act, section 11	5	✓					✓						
123	Electricity Industry Act, section 11	4	✓					✓						
124	Electricity Industry Act, section 11	5	✓					✓						
125	Electricity Industry Act, section 11	4	✓					✓						
126	Electricity Industry Act, section 11	4	✓					✓						
324	Electricity Industry Metering Code, clause 3.3B	5						✓					✓	
339	Electricity Industry Metering Code, clause 3.11(3)	5						✓					✓	
371	Electricity Industry Metering Code, clause 4.4(1)	5						✓					✓	
372	Electricity Industry Metering Code, clause 4.5(1)	5						✓					✓	

2020 Compliance Obligation Ref No.	Licence Reference	Audit Priority [rated 1 (Highest) to 5 (Lowest)]	Controls Rating					Compliance Rating						
			A	B	C	D	N/P	1	2	3	4	N/A	N/R	
373	Electricity Industry Metering Code, clause 4.5(2)	5					✓						✓	
388	Electricity Industry Metering Code, clause 5.4(2)	5					✓						✓	
416	Electricity Industry Metering Code, clause 5.21(5)	5					✓						✓	
417	Electricity Industry Metering Code, clause 5.21(6)	5					✓						✓	
448	Electricity Industry Metering Code, clause 6.1(2)	5					✓						✓	
451	Electricity Industry Metering Code, clause 7.2(1)	5					✓						✓	
453	Electricity Industry Metering Code, clause 7.2(4)	5					✓						✓	
454	Electricity Industry Metering Code, clause 7.2(5)	5					✓						✓	
455	Electricity Industry Metering Code, clause 7.5	5					✓						✓	
456	Electricity Industry Metering Code, clause 7.6(1)	5					✓						✓	
457	Electricity Industry Metering Code, clause 8.1(1)	5					✓						✓	
458	Electricity Industry Metering Code, clause 8.1(2)	5					✓						✓	
459	Electricity Industry Metering Code, clause 8.1(3)	5					✓						✓	
460	Electricity Industry Metering Code, clause 8.1(4)	5					✓						✓	
461	Electricity Industry Metering Code, clause 8.3(2)	5					✓						✓	

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.

NNP has adequate controls in place for the various asset management system components.

Although NNP does not have an AMP that provides an integrated view of financial, commercial, human resources, operations, maintenance and engineering perspective required to manage the facility contained in single document, this information is included in other documents and systems.

Instead of a document or suite of asset planning documents, NNP essentially uses MEX as its AMS, with SCADA used to automate the operation of the facility and SAP used to record and report financial information. The 2009 to 2032 Inspection Plan sets out the overall minor and major maintenance plans for the facility. The one, five and ten year financial operating plan and capital expenditure plan are developed and updated in the annual budget process and included in the Annual Business Plan submitted to the Partnership's Management Committee for approval.

Based on the type of assets and the primary function the facility serves as a peaking power station, we consider that these asset management system components are appropriate and adequate to manage the assets.

Table 4-5 Asset management review effectiveness summary

Asset management process & effectiveness criteria	Process and policy rating	Performance rating
1. Asset planning	A	1
1.1 Asset management plan covers the processes in this table	A	1
1.2 Planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning	A	1
1.3 Service levels are defined in the asset management plan	A	1
1.4 Non-asset options (e.g. demand management) are considered	A	1
1.5 Lifecycle costs of owning and operating assets are assessed	A	1
1.6 Funding options are evaluated	A	1
1.7 Costs are justified and cost drivers identified	A	1
1.8 Likelihood and consequences of asset failure are predicted	A	1
1.9 Asset management plan is regularly reviewed and updated	A	1
2. Asset creation/acquisition	A	1
2.1 Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options	A	1
2.2 Evaluations include all life-cycle costs	A	1
2.3 Projects reflect sound engineering and business decisions	A	1
2.4 Commissioning tests are documented and completed	A	1
2.5 Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood	A	1
3. Asset disposal	A	1
3.1 Under-utilised and under-performing assets are identified as part of a regular systematic review process	A	1
3.2 The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	A	1
3.3 Disposal alternatives are evaluated	A	1
3.4 There is a replacement strategy for assets	A	1
4. Environmental analysis	A	1
4.1 Opportunities and threats in the system environment are assessed	A	1
4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	A	1
4.3 Compliance with statutory and regulatory requirements	A	1
4.4 Service standard (customer service levels etc) are measured and achieved.	A	1

Asset management process & effectiveness criteria	Process and policy rating	Performance rating
5. Asset operations	A	1
5.1 Operational policies and procedures are documented and linked to service levels required	A	1
5.2 Risk management is applied to prioritise operations tasks	A	1
5.3 Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition	A	1
5.4 Accounting data is documented for assets	A	1
5.5 Operational costs are measured and monitored	A	1
5.6 Staff resources are adequate and staff receive training commensurate with their responsibilities	A	1
6. Asset maintenance	A	1
6.1 Maintenance policies and procedures are documented and linked to service levels required	A	1
6.2 Regular inspections are undertaken of asset performance and condition	A	1
6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	A	1
6.4 Failures are analysed and operational / maintenance plans adjusted where necessary	A	1
6.5 Risk management is applied to prioritise maintenance tasks	A	1
6.6 Maintenance costs are measured and monitored	A	1
7. Asset management information system	A	1
7.1 Adequate system documentation for users and IT operators	A	1
7.2 Input controls include appropriate verification and validation of data entered into the system	A	1
7.3 Security access controls appear adequate, such as passwords	A	1
7.4 Physical security access controls appear adequate	A	1
7.5 Data backup procedures appear adequate and backups are tested	A	1
7.6 Computations for licensee performance reporting are accurate	A	1
7.7 Management reports appear adequate for the licensee to monitor licence obligations	A	1
7.8 Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	A	1
8. Risk management	A	1
8.1 Risk management policies and procedures exist and are applied to minimise internal and external risks	A	1
8.2 Risks are documented in a risk register and treatment plans are implemented and monitored	A	1

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

5 Observations and recommendations

5.1 Performance audit

Table 5-1 Performance audit observations

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
			Electricity Industry Act					
101	Generation Licence, condition 5.3.1	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.	4	<ul style="list-style-type: none"> The requirement for the audit is monitored by the Neerabup Power Station Manager. The audit requirement is included in correspondence with the ERA and tracked in the MEX System. The April 2017 Performance Audit and Asset Management Review Report for the audit period 1 April 2013 through 31 October 2016 was viewed. The interval between successive performance audits was extended from 43 months to 60 months by the ERA on 27 June 2017. This audit covers the 60 month period from 1 November 2016 to 31 October 2021. The 2021 audit has been undertaken (this audit) and the observations and findings are included in this audit report. This is the fourth audit conducted by an independent expert since the licence first was granted in March 2008. 	<ul style="list-style-type: none"> Correspondence with ERA Interview with Neerabup Power Station Manager Geographe Environmental Services, Final Report, 2016 Performance Audit and Asset Management System Review for NewGen Neerabup Partnership (EGL18), 28 April 2017 	A	1
102	Generation Licence, condition 5.1.1	Electricity Industry Act section 14(1)(a)	A licensee must provide for an asset management system.	5	<ul style="list-style-type: none"> The Licensee has provided for an effective asset management system (AMS) to support their physical assets. Further details of the Licensee's asset management system are included in Table 5-2. 	<ul style="list-style-type: none"> Demonstration of the MEX AMS Interview with Neerabup Power Station Manager 	A	1
103	Generation Licence, condition	Electricity Industry Act	A licensee must notify details of the asset management system and	4	<ul style="list-style-type: none"> The Asset Management System was provided to the ERA as part of the Licence application. 	<ul style="list-style-type: none"> Interview with Neerabup 	A	1

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
	5.1.2 and 5.1.3	section 14(1)(b)	any substantial changes to it to the ERA.		<ul style="list-style-type: none"> No substantial changes to the AMS have occurred during the audit period. 	Power Station Manager		
104	Generation Licence, condition 5.1.4	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.	5	<ul style="list-style-type: none"> The requirement for the AMS review is monitored by the Neerabup Power Station Manager. The AMS review requirement is included in correspondence with the ERA and monitored in the MEX System. The April 2017 Performance Audit and Asset Management Review Report for the audit period 1 April 2013 through 31 October 2016 was viewed. The interval between successive AMS reviews was extended from 43 months to 60 months by the ERA on 27 June 2017. This review covers the 60 month period from 1 November 2016 to 31 October 2021 The 2021 audit has been undertaken (this audit) and the observations and findings are included in this audit report. This is the fourth audit conducted by an independent expert since the licence first was granted in March 2008. 	<ul style="list-style-type: none"> Correspondence with ERA Interview with Neerabup Power Station Manager Geographe Environmental Services, Final Report, 2016 Performance Audit and Asset Management System Review for NewGen Neerabup Partnership (EGL18), 2 	A	1
105	Generation Licence, condition 4.2.1	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.	5	<ul style="list-style-type: none"> Licence fees due to be paid within the audit period been paid in accordance with requirements. In addition, the Standing Charge Fees, which were introduced in Quarter 1 of 2015 were paid within the 30 Day requirement of date of issue and were paid as follows during the audit period.; Invoices and payment remittals were sighted for the following annual licence fee payments: <ul style="list-style-type: none"> ERA Invoice ERA101081 - Issued on 13/03/2017 and Paid 07/04/2017 ERA Invoice ERA101443 - Issued on 12/03/2018 and Paid 16/03/2018 	<ul style="list-style-type: none"> Annual licence fee invoices and confirmations of payment within the audit period Quarterly standing charge invoices and payment remittals within the audit period Interview with Neerabup Power Station Manager 	A	1

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
					<ul style="list-style-type: none"> - ERA Invoice ERA101872 - Issued on 13/03/2019 and Paid 22/03/2019 - ERA Invoice ERA102404 - Issued on 11/03/2020 and Paid 20/03/2020 - ERA Invoice ERA1000427 - Issued on 26/03/2021 and Paid 01/04/2021 			
106	Generation Licence, condition 4.1.1	Electricity Industry Act section 31(3)	A licensee must take reasonable steps to minimise the extent, or duration, of any interruption, suspension or restriction of the supply of electricity due to an accident, emergency, potential danger or other unavoidable cause.	5	<ul style="list-style-type: none"> ▪ The Licensee has taken reasonable steps to minimise the extent or duration of any unavoidable interruption, suspension or restriction of electricity. ▪ To manage the impacts of any unavoidable interruption, suspension or restriction of electricity, the Licensee has: <ul style="list-style-type: none"> - Emergency Response Plans and business continuity processes - Well-established condition monitoring systems - Reciprocal arrangements with other businesses to access parts, if required. - A detailed schedule in the MEX AMS for planned outages, which is regularly reviewed and monitored. ▪ The Licensee has an Incident Register to record any incidents, including unavoidable interruptions and suspensions or restrictions of electricity. ▪ Forced outages are submitted to AEMO when capacity has been impacted. The list of submitted outages is recorded in MEX and was observed during the audit. 	<ul style="list-style-type: none"> ▪ Incident Register ▪ Emergency Response Plan ▪ Examples of MEX PM policies and work orders ▪ SCADA set-up ▪ List of Forced Outage events recorded in MEX as submitted to AEMO ▪ Interview with Neerabup Power Station Manager 	A	1
107	Generation Licence, condition 4.1.1	Electricity Industry Act section 41(6)	A licensee must pay the costs of taking an interest in land or an easement over land.	4	<ul style="list-style-type: none"> ▪ There have been no changes in the interest of the land during the audit period. ▪ The land where the power station is sited is owned by the Licensee. ▪ We note that the Licensee owns a 30km pipeline that is used to supply gas to the Power Station which is located on easements that are not owned by the Licensee. 	<ul style="list-style-type: none"> ▪ Interview with Neerabup Power Station Manager ▪ Licence Area Plan ERA-EL-112 	A	1

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
					<ul style="list-style-type: none"> The operating licence granted by the ERA includes Licence Area Plans (Plan No. ERA-EL-112) in Schedule 2 of the licence. Although this sets out the power station site and the transmission line (covered under a different operating licence), it does not set out the extent of the gas pipeline. The Licensee considers that as the pipeline is covered by a different regulator, that it is not included under the generation licence. Based on the information in EGL18 and the Licence Area Plan, we consider that the easements that the gas pipeline sits on are outside the scope of the generation licence audit. 	<ul style="list-style-type: none"> Electricity Generation Licence - NewGen Neerabup Partnership EGL18, Version 4, 1 July 2015 Electricity Generation Licence - NewGen Neerabup Partnership EGL18, Version 5, 1 July 2018 		
			Electricity Licences					
119	Generation Licence, condition 4.3.1	Electricity Industry Act, section 11	A licensee and any related body corporate must maintain accounting records that comply with the Australian Accounting Standards Board Standards or equivalent International Accounting Standards.	4	<ul style="list-style-type: none"> The Licensee has complied with the requirements. Accounting records are prepared in accordance with AASB standards. Across the audit period the Licensee has been owned by two different entities: Shell Energy acquired ERM Power in November 2019. As a result, the accounting records across the audit period have been reported by the owning business at the time. The 2017, 2018 and 2019 accounting records related to the Licensee's operations are included in ERM Power's Annual Reports for these Financial Years. The accounting records for the period that the Licensee has been owned by Shell Energy are rolled-up in the overall financial statements for Shell Royal Dutch Shell. An overall financial statement for 2020 is included in the 2020 Annual Report but the 2021 Annual Report has not yet been published. The Financial Statements include in the 2017, 2018 and 2019 ERM Power Annual Reports 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager ERM Power Annual Reports 2017, 2018, 2019 Shell Royal Dutch Shell Annual Report 2020 	A	1

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
					<p>were reviewed. We confirmed that the records for each year have been signed-off by Deloitte as complying with the Australian Accounting Standards.</p> <ul style="list-style-type: none"> We reviewed the Financial Statement included in the Shell Royal Dutch Shell 2020 Annual Report. We confirmed that the report references Shell Energy Australia. We confirmed that the Financial Statements have been signed-off by Ernst and Young as being prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union. The sign-off notes that "...there are no material differences from IFRS as issued by the International Accounting Standards Board ("IASB"); therefore, the Financial Statements have been prepared in accordance with IFRS as issued by the IASB." Based on the evidence that was viewed, we consider that the Licensee has complied with the obligation. 			
120	Generation Licence, condition 5.2.4	Electricity Industry Act, section 11	A licensee must comply with any individual performance standards prescribed by the ERA.	5	<ul style="list-style-type: none"> The two versions of EGL18 that have been in place during the audit period do not include any individual performance standards that have been prescribed by the ERA. This was confirmed by the Neerabup Power Station Manager. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager Licence Area Plan ERA-EL-112 Electricity Generation Licence - NewGen Neerabup Partnership EGL18, Version 4, 1 July 2015 Electricity Generation Licence - 	A	1

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
						NewGen Neerabup Partnership EGL18, Version 5, 1 July 2018		
121	Generation Licence, condition 5.3.2	Electricity Industry Act, section 11	A licensee must comply, and require its auditor to comply, with the ERA's standard audit guidelines for a performance audit.	5	<ul style="list-style-type: none"> ▪ The Licensee has previously complied with, and continues to comply with the Authority's standard audit guidelines dealing with the performance audit. ▪ The previous performance audit for the period 1 April 2013 through 31 October 2016 was reported on in April 2018 ▪ The subsequent audit is currently being undertaken (this audit) to cover the period 1 November 2016 to 31 October 2021. ▪ This audit and review have been carried out in accordance with the Audit and Review Guidelines: Electricity and Gas Licences, March 2019. ▪ The audit and review plan for this audit and review was approved by the ERA in writing on 3 November 2021. 	<ul style="list-style-type: none"> ▪ Interview with Neerabup Power Station Manager ▪ Geographe Environmental Services, Final Report, 2016 Performance Audit and Asset Management System Review for NewGen Neerabup Partnership (EGL18), 28 April 2017 	A	1
122	Generation Licence, condition 5.1.5	Electricity Industry Act, section 11	A licensee must comply, and must require the licensee's expert to comply, with the relevant aspects of the ERA's standard audit guidelines for an asset management system review.	5	<ul style="list-style-type: none"> ▪ The Licensee is complying with the relevant aspects of the Authority's standard guidelines by undertaking the asset management system review. ▪ The previous asset management system review was reported on in April 2017 for the period 1 April 2013 through 31 October 2016. ▪ The subsequent review is currently being undertaken (this audit) to cover the period 1 November 2016 to 31 October 2021. ▪ This audit and review have been carried out in accordance with the Audit and Review Guidelines: Electricity and Gas Licences, March 2019. 	<ul style="list-style-type: none"> ▪ ERA, 2019 Audit and Review Guidelines - Electricity and Gas Licences, March 2019 ▪ ERA, Approval of audit plan – 2021 performance audit and asset management system review, 3 November 2021 	A	1

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
					<ul style="list-style-type: none"> The audit and review plan for this audit and review was approved by the ERA in writing on 3 November 2021. 			
123	Generation Licence, condition 4.4.1	Electricity Industry Act, section 11	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.	4	<ul style="list-style-type: none"> There has been no change to the Licensee's circumstances or to its ability to meet its licence obligations The Licensee has not been under external administration. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	A	1
124	Generation Licence, condition 4.5.1	Electricity Industry Act, section 11	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.	5	<ul style="list-style-type: none"> The Licensee has complied with the requirements. The Licensee has created a compliance schedule for reporting to the ERA in its MEX PM module. Reminders are sent to the responsible staff to ensure required information is prepared and submitted within the required timeframes. We confirmed that all the Licensee's Annual Compliance Reports during the audit period were provided to the ERA before due date and that no non-compliances were reported for the period. The annual compliance reports were sighted for: <ul style="list-style-type: none"> 1 July 2016 to 30 June 2017 –dated 21 July 2017, confirmed as received by the ERA on 23 August 2017 1 July 2017 to 30 June 2018 –dated 13 July 2018, confirmed as received by the ERA on 17 July 2018 1 July 2018 to 30 June 2019 –dated 24 July 2019, confirmed as received by the ERA on 30 July 2019 1 July 2019 to 30 June 2020 –dated 21 August 2020 confirmed as received by the ERA on 24 August 2020 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager Correspondence with the ERA Annual Compliance Reports for 2017, 2018, 2019, 2020, 2021 	A	1

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
					– 1 July 2020 to 30 June 2021 –dated 10 August 2021, confirmed as received by the ERA on 13 August 2021			
125	Generation Licence, condition 3.8.1 and 3.8.2	Electricity Industry Act, section 11	A licensee must publish any information as directed by the ERA to publish, within the timeframes specified.	4	<ul style="list-style-type: none"> The Licensee has not been directed to publish any such information by the ERA during the 1 November 2016 to 31 October 2021 audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager Correspondence with the ERA 	A	1
126	Generation Licence, condition 3.7.1	Electricity Industry Act, section 11	All notices must be in writing, unless otherwise specified.	4	<ul style="list-style-type: none"> The Licensee has provided the ERA with information in writing as required. Links to documents and correspondence related to reporting manual obligations and information forming evidence for future ERA licence audits are recorded in MEX for easy accessibility. Correspondence and other written documentation are saved on the Licensee's network drives. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager Correspondence with the ERA Information recorded in MEX 	A	1
			Electricity Industry Metering Code					
324	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 3.3B	If a user is aware of bi-directional electricity flows at a metering point that was not previously subject to a bi-directional flows or any changes in a customer's or user's circumstances in a metering point that will result in bi-directional flows, the user must notify the network operator within 2 business days.	5	<ul style="list-style-type: none"> There have been no changes to the meters during the audit period, therefore 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. Additionally, The Licensee has no meters and Western Power owns the meters at it's Neerabup Terminal substation and Western Power responsible for their quality control. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
339	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 3.11(3)	A Code participant who becomes aware of an outage or malfunction of a metering installation must advise the network	5	<ul style="list-style-type: none"> The Power Station Manager confirmed that there have been no metering installation malfunctions identified during the audit period. The network operator is responsible for the metering installations and routinely provides 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
			operator as soon as practicable.		metering data to the licensee. The licensee reviews the data and compares it to operation data to confirm its validity. <ul style="list-style-type: none"> This approach has identified one instance of a meter malfunction during a previous audit period (not this audit period) and therefore is a reasonable method of ensuring the accuracy of the metering data. 			
371	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 4.4(1)	If there is a discrepancy between energy data held in a metering installation and in the metering database, the affected Code participants and the network operator must liaise to determine the most appropriate way to resolve the discrepancy.	5	<ul style="list-style-type: none"> As noted in item 339, the network operator is responsible for the meter and the storage of the data associated with meter. The Licensee does not own or maintain any meters. The network operator does share data with the licensee who then compares that data to their operational data to confirm its accuracy. During the audit period there were no discrepancies identified. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
372	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 4.5(1)	A Code participant must not knowingly permit the registry to be materially inaccurate.	5	<ul style="list-style-type: none"> As noted in item 339, the network operator is responsible for the meter and the standing data associated with the meter. This obligation has not been relevant to the licensee for this audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
373	Generation Licence, condition 4.1.1	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 and provide details of the change or inaccuracy within the timeframes prescribed.	5	<ul style="list-style-type: none"> As noted in item 339, the network operator is responsible for the meter and the standing data associated with the meter. This obligation has not been relevant to the licensee for this audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
388	Generation Licence,	Electricity Industry Metering	A user must, when reasonably requested by a network operator, assist the network operator to	5	<ul style="list-style-type: none"> During the audit period the network operator has not requested assistance from the licensee. 	<ul style="list-style-type: none"> Interview with Neerabup 	N/P	NR

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
	condition 4.1.1	Code, clause 5.4(2)	comply with the network operator's obligation under subclause 5.4(1).			Power Station Manager		
416	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 5.21(5)	A Code participant must not request a test or audit 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.	5	<ul style="list-style-type: none"> The Licensee has not requested any tests or audits during the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
417	Generation Licence, condition 4.1.1	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.	5	<ul style="list-style-type: none"> The Licensee has not requested any tests or audits during the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
448	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 6.1(2)	A user must, in relation to a network on which it has an access contract, comply with the rules, procedures, agreements and criteria prescribed.	5	<ul style="list-style-type: none"> The Licensee has adhered to the rules, procedures, agreements and criteria prescribed and there have been no breaches during the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
451	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 7.2(1)	Code participants must use reasonable endeavours to ensure that they can send and receive a notice by post, facsimile and electronic communication and must notify the network operator of a telephone number for voice communication in connection with the Code.	5	<ul style="list-style-type: none"> The power station has a main telephone line, mobile phone coverage, and a postal address to receive communication. The Licensee has not been notified of any communication issues by the network operator during the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager Our communication with the licensee Confirmation of communication received from the regulator 	N/P	NR
453	Generation Licence,	Electricity Industry Metering	If requested by a network operator with whom it has entered into an access	5	<ul style="list-style-type: none"> The Licensee has not received any requests during the audit period in relation to clause 	<ul style="list-style-type: none"> Interview with Neerabup 	N/P	NR

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
	condition 4.1.1	Code, clause 7.2(4)	contract, the Code participant must notify its contact details to a network operator within 3 business days after the request.		7.2(4) of the Electricity Industry Metering Code.	Power Station Manager		
454	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 7.2(5)	A Code participant must notify any affected network operator of any change to the contact details it notified to the network operator under subclause 7.2(4) at least 3 business days before the change takes effect.	5	<ul style="list-style-type: none"> The Licensee has not changed its contact details within the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
455	Generation Licence, condition 4.1.1	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.	5	<ul style="list-style-type: none"> The Licensee has not disclosed or permitted the disclosure of confidential information provided to it under or in connection with the Code. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
456	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 7.6(1)	A Code participant must disclose or permit the disclosure of confidential information that is required to be disclosed by the Code.	5	<ul style="list-style-type: none"> There have been no requirements to disclose any confidential information within the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
457	Generation Licence, condition 4.1.1	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	5	<ul style="list-style-type: none"> There have been no such disputes within the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
			days after a notice given by a disputing party to the other disputing parties and attempt to resolve the dispute by negotiations in good faith.					
458	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 8.1(2)	If a dispute is not resolved within 10 business days after the dispute is referred to representative negotiations, the disputing parties must refer the dispute to a senior management officer of each disputing party who must meet and attempt to resolve the dispute by negotiations in good faith.	5	<ul style="list-style-type: none"> There have been no such disputes within the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
459	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 8.1(3)	If the dispute is not resolved within 10 business days after the dispute is referred to senior management negotiations, the disputing parties must refer the dispute to the senior executive officer of each disputing party who must meet and attempt to resolve the dispute by negotiations in good faith.	5	<ul style="list-style-type: none"> There have been no such disputes within the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR
460	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 8.1(4)	If the dispute is resolved by representative negotiations, senior management negotiations or CEO negotiations, the disputing parties must prepare a written and signed record of the resolution and adhere to the resolution.	5	<ul style="list-style-type: none"> There have been no such disputes within the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	NR

Ref No.	Licence Condition	Obligations under Condition	Licence obligation	Audit priority	Observations	Evidence	Controls rating	Compliance rating
461	Generation Licence, condition 4.1.1	Electricity Industry Metering Code, clause 8.3(2)	The disputing parties must at all times conduct themselves in a manner which is directed towards achieving the objective in subclause 8.3(1).	5	<ul style="list-style-type: none"> There have been no such disputes within the audit period. 	<ul style="list-style-type: none"> Interview with Neerabup Power Station Manager 	N/P	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

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
1	Asset planning Asset planning strategies focuses on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price).			A	1
1.1	Asset management plan covers the processes in this table	4	Overview <ul style="list-style-type: none"> There have been no changes to NewGen Neerabup Partnership's (NNP) 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. Ownership of the Licensee has changed during the review period from ERM Power to Shell Energy in November 2019. The facility is a peaking power station, meaning that it is able to come online at peaks of high demand, typically in the morning and evening, to allow the demand to be met. Due to its function, the main asset planning process is considered to have been completed when the power station was first constructed. Although there is a plan for a second stage, no expansion of the current site is expected to be required in the near future, especially if renewable power sources replace coal. No options are currently being considered for future planning. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>Asset Management Plans</p> <ul style="list-style-type: none"> ▪ NNP does not have an AMP per se. It does not have an integrated view of financial, commercial, human resources, operations, maintenance and engineering perspective required to manage the facility contained in single document. ▪ Instead of a document or suite of asset planning documents, NNP essentially uses MEX as its AMS, with SCADA used to automate the operation of the facility and SAP used to record and report financial information. The 2009 to 2032 Inspection Plan sets out the overall minor and major maintenance plans for the facility. <p>MEX</p> <ul style="list-style-type: none"> ▪ MEX is the computerised maintenance management system (CMMS) used by the NNP. It is used as the asset register, to create, track and report on work orders for inspections and planned maintenance, as well as other scheduled activities, e.g. compliance reporting, etc. ▪ MEX has an active work order list that is progressed through. Weekly meeting are held to discuss work on jobs that have been allocated. We viewed examples of annual fire system check in MEX and confirmed the work order included a check sheet and sign-off for the activity. ▪ Work orders have the associated procedures and other relevant documentation attached for carrying out each work activity ▪ The PM module within MEX is used for scheduling maintenance requirements. PM statutory has the legislative work orders that have a higher priority for completion. ▪ Corrective work orders can also be created in the system. ▪ Although NNP does not have a specific Asset Management Plan or a suite of asset management planning documents, the key systems that it uses to manage the facility cover the processes in this table. ▪ Based on our review of NNP’s asset planning framework documentation, we consider that the asset management planning cover the required processes. 		
1.2	Planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning	4	<p>Stakeholders</p> <ul style="list-style-type: none"> ▪ NNP’s two key commercial stakeholders are: 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> - AEMO, the grid operator - Synergy, the foundation customer ▪ NNP has a contract in place with Synergy to provide electricity. Under the terms of the contract, Synergy provide a nomination to NNP by 8:30am for the following day of what power they need to be generated. Examples of the email nominations were observed during the review. The nominations provide details of the gas to be provide for the day and the electricity to be generated in each hour of the following day, starting at 8am. As the power station is peaking plant, it typically is only online to provide service to Synergy for a small number of hours in each day. ▪ The daily nomination provided by Synergy is assessed by NNP's traders, and they input the details into the Operations Interface Neerabup spreadsheet to record the requirements for each hour and the Megawatts to be delivered. ▪ The dispatch targets and the ramp rate (MW/min) needed to meet Synergy's requirements are also calculated and input into the spreadsheet. ▪ Once the nomination has been input and confirmed, the generation details are automatically transferred into the power station's SCADA, automating the generation operations for the next day to provide to Synergy. ▪ Under the terms of the contract, Synergy provides the gas. The Dampier to Bunbury pipeline provides storage and is set up for peaking demand. Gas is typically flowed overnight when cheap and drawn down during the day. The agreement specifies that gas can be accessed at any time of the day. <p>Other generation opportunities</p> <ul style="list-style-type: none"> ▪ NNP's contract with Synergy gives them priority for one for the two gas turbine units at the facility. This provides NNP with flexibility to use the second unit. ▪ Synergy can ask to access the second generation unit but if NNP is using it for its own purposes it can respond that it is not available. The second unit also means that if one unit is unavailable, the other unit can be used to provide service to Synergy under the terms of the contract. ▪ The second unit allows NNP access to the balancing market of its own accord, and to bring it online if the trading price is considered 		

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>acceptable. This is opportunistic to maximise revenue, with the take-up being merit order based on the price.</p> <ul style="list-style-type: none"> ▪ A third option that is available to NNP is to generate for the market. This opportunity may occur if there are stresses on the system or outages and demand is not being able to be met. In these cases, NNP can be instructed to bring the facility online to generate power to export. This overrules the trading environment to maintain system security and is carried out on merit and not for commercial purposes. ▪ If NNP uses the second unit to generate for purposes other than serving Synergy, it has to provide its own gas to run the turbines. Gas in the pipeline that supplies the facility can be used but it has to be bought in and then topped-up so there is enough left in the storage pipeline. ▪ Based on our interviews with NNP and the documentation it has provided as evidence, we consider that planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning. 		
1.3	Service levels are defined in the asset management plan	4	<ul style="list-style-type: none"> ▪ The contract with Synergy sets out the levels of service for the supply to NNP's foundation customer. ▪ The levels of service include targets for performance and availability. This includes key performance indicators for number of outages, including planned maintenance outages and other service KPIs ▪ Staff bonus schemes are also related to a number of level of specific service performance indicators, including targets for Forced Outage Rate, Start Reliability and Plant Efficiency. ▪ Other indicators linked to NNP's annual staff bonus scheme include Performance to Operating Budget, Regulatory Infringements, Continuous Improvement, Lost Time Injuries, Environmental Incidents and Revenue Target. ▪ Based on our interview with NNP and the documentation provided as evidence, we consider that service levels are defined in the asset management plan. 	A	1
1.4	Non-asset options (e.g. demand management) are considered	4	<ul style="list-style-type: none"> ▪ Although there is a plan for Stage 2 expansion of the power station, no expansion of the current site expected to be realised at the current time. As a result of this, no future planning options are currently being considered for the power station. ▪ NNP has bilateral agreements for gas and power. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ NNP is able to purchase power from the market which allows electricity to be bought from the market to supply Synergy if required. This is undertaken at times of forced outages when the power station is not able to supply, with NNP informing the Grid Controllers that the site is unavailable and supply will be provided from buying from the market. ▪ The storage capacity of the 30km pipeline that supplies gas to the power station and other available storages are also used for demand management of the gas supply to the site. ▪ Based on our interview with NNP and the documentation provided as evidence, we consider that are adequately considered. 		
1.5	Lifecycle costs of owning and operating assets are assessed	4	<ul style="list-style-type: none"> ▪ Life cycle costing is completed for new works when required and NNP has budgets for lifecycle costings for its assets included in its financial forecasts. ▪ NNP has a 10 year operations budget (currently covering FY22 to FY32) that includes the proposed capital expenditure components and accounts for the operating expenditure requirements for the assets. The 10 year budget was viewed during the review. ▪ Ongoing asset costs are monitored and reported through the Business Manager's Monthly Reports. Examples of these reports were also viewed during the review. ▪ No detailed business case development or option assessments are carried out for the planned major overhaul of assets at the power station. The final decision to proceed with the major overhauls is largely dependent on whether the power station is going to be operated for another cycle. ▪ However, all proposed capital expenditure planning, including both major and minor overhaul activities, has to be carried out through Shell Energy's capital expenditure approval process, including a cost justification process. Examples of documentation for the capital expenditure justification process were observed during the review. ▪ Refurbishment or recoating of the turbine blades is undertaken based on the condition of the assets. This work has been certified by the OEM (Siemens). Although the current assets have been supplied by Siemens, NNP is not locked into a contract with the OEM and is able to purchase and install components such as blades and vanes from other manufacturers. 	A	1
1.6	Funding options are evaluated	4	<ul style="list-style-type: none"> ▪ NNP received revenue from Synergy during the review period via capacity credits for having electricity available to be supplied. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>even if Synergy had not provided a nomination for the power station to provide power.</p> <ul style="list-style-type: none"> ▪ In addition, NNP charges Synergy for each time the power station is started-up. ▪ NNP has additional revenue streams available from generating outside of Synergy nominations. The Short Term Electricity Market (STEM) allows NNP to bid for short runs in addition to providing Synergy. ▪ The STEM governs the gas and electricity prices and the trading decisions that are taken. Generation outside of the Synergy daily nomination is dependent on market conditions. ▪ NNP used long-term hedge funds for the original investments at the power station. As the facility is still considered to be relatively new, capital expenditures are low and sourced from within the Partnership. ▪ Based on our interview with NNP and the documentation provided as evidence, we consider that funding options are evaluated as part of NNP's asset planning processes. 		
1.7	Costs are justified and cost drivers identified	4	<ul style="list-style-type: none"> ▪ As noted above, all proposed capital expenditure planning, including both major and minor overhaul activities, has to be carried out through Shell Energy's capital expenditure approval process, including a cost justification process. Examples of documentation for the capital expenditure justification process were observed during the review. ▪ Separate papers have to be prepared for submission to the Partnership for significant expenditure items. Up to \$0.2M can be spent without the need for providing justification, above this approval has to be granted by the Partnership. ▪ The payback for investment proposals that are developed and submitted consider the lifecycle costs. ▪ New projects and capital expenditure proposals are presented at the management committee meeting for approval. ▪ Based on our interview with NNP and the documentation provided as evidence, we consider that proposed project and program costs are justified and cost drivers identified as part of NNP's asset planning processes. 	A	1
1.8	Likelihood and consequences of asset failure are predicted	4	<ul style="list-style-type: none"> ▪ As the facility is still considered to be fairly new, asset plant failures are considered to be rare events. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ The second gas turbine unit provides redundancy to allow the contract requirements with Synergy to be met if one of the units goes offline due to an asset failure or to allow planned maintenance to be undertaken. ▪ NNP's maintenance schedules are aligned to Original Equipment Manufacturer (OEM) schedules but revised where identified as appropriate. ▪ NNP has not adopted 100% of the OEM schedules as they are consider fit for the facility, e.g. as the facility is a peaking power station, the compressors don't operate as expected in the OEM manual. The OEM time based maintenance activities are evaluated to ensure the reflect run time and not idle time. ▪ A service contractor was engaged to carry out a risk assessment and monitor the schedule to better align with the operations of a peaking power station rather than the maintenance schedules only being based on run times. ▪ The OEM schedules has been maintained for the gas turbines assets. ▪ Based on our interview with NNP and the documentation provided as evidence, we consider that the likelihood and consequences of asset failure are predicted as part of NNP's asset planning processes. 		
1.9	Asset management plan is regularly reviewed and updated	4	<ul style="list-style-type: none"> ▪ NNP's AMS is continually monitored and updated. ▪ MEX is used every day for maintenance and other business action schedules and there are weekly reviews of upcoming work. ▪ In addition, the trading spreadsheet determines operation requirement for the power station, with the nomination data provided daily by the foundation customer and agreed trading outputs automatically transferred to the SCADA for automated start-up and shutdown of the plant when required. ▪ The facility's maintenance history is retained in MEX. Root cause analysis is carried out for all operational incidents. ▪ Based on our interview with NNP and the documentation provided as evidence, we consider that the asset management plan and other key asset planning documentation is regularly reviewed and updated. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
2	Asset creation and acquisition Asset creation/acquisition is the provision or improvement of assets.			A	1
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options	4	<ul style="list-style-type: none"> ▪ Requests for new assets are generally driven directly by operational or foundation customer needs. Typically, the utilisation of the existing 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. ▪ As noted in the previous section, all proposed capital expenditure planning, including both major and minor overhaul activities, has to be carried out through Shell Energy's capital expenditure approval process, including a cost justification process. ▪ An annual business plan is prepared each year for the Partnership that includes a summary of the capital works for the next year. ▪ NNP also prepares information on the funding of new major asset, which outlines how much will be needed to complete the works. ▪ There have been no major changes to the assets at the facility during the review period. No major new assets have been created or acquired. Some small improvements have been carried out over the period, including improving some processes/upgrades and asset reliability improvements. ▪ As a result, there has not been a need to provide any detailed project evaluations for new assets during the review process. ▪ We reviewed the fixed asset register and observed that approximately \$1M of assets has been capitalised over the review period. This has included expenditure on assets within the asset classes of power generation equipment, machinery and equipment, computer hardware, computer software, fixtures and fittings and vehicles. ▪ The three highest value assets that have been added to the fixed asset register during the review period are the installation of a new reverse osmosis (RO) unit, a Power Station Security System Upgrade and the Neerabup Pigging Project (Design and construction). ▪ The pigging project was a regulatory requirement related to building the gas pipeline. Pigging is used to assess the integrity of a pipe to assess items including corrosion and structural defects to make sure is safe to use for transferring gas. The pipeline was tested when first constructed but pigging was not carried out at this time as it was not a condition of the licence for 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>the pipeline at this time. The first pigging run on the 30km pipe was carried out after 10 years. Although the Condition Safety Case now requires it to be assessed every five years, NNP are reviewing this to see if the pipe pigging work can be extended to 10 years again.</p> <ul style="list-style-type: none"> ▪ For the new RO unit, the existing plant was modified to optimise the process and allow brine water to be treated to make evaporative process water. ▪ The Power Station Security System Upgrade involved automating perimeter beams, installing higher specification and more cameras and remoting the cameras to an external monitoring control room for offsite remote monitoring. The project was driven by reducing site operating costs over time as previously the facility had onsite security guards 24/7, 365 days a year. ▪ We viewed the cost proposal for the Power Station Security System Upgrade Project and confirmed that it included project justification/ risks of not carrying out the project, financial analysis and a conclusion for the recommendation. ▪ Capex approval forms were completed for each project and we observed examples of these during the review. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that they meet the required processes. 		
2.2	Evaluations include all life-cycle costs	4	<ul style="list-style-type: none"> ▪ As noted in the previous section (Asset Planning), life cycle costing is completed for new works when required and NNP has budgets for lifecycle costings for its assets included in its financial forecasts. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that lifecycle costs are adequately considered. 	A	1
2.3	Projects reflect sound engineering and business decisions		<ul style="list-style-type: none"> ▪ Generally the OEMs for specific assets are involved to provide expertise into NNP's key engineering decisions. Business decisions to invest are based on OEM expertise when required. ▪ As noted previously, NNP's maintenance schedules are aligned to OEM schedules but revised where identified as appropriate. ▪ As no new major asset creations or acquisitions have taken place during the review period, there has been no requirement to undertake any major engineering and business decisions. 		

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Based on our interviews with NNP and the documentation provided as evidence, projects reflect sound engineering and business decisions. 		
2.4	Commissioning tests are documented and completed	4	<ul style="list-style-type: none"> ▪ As no major assets have been created or acquired during the review period, no major commissioning tests for new assets have been completed and documented during the period. ▪ Although there has been no commissioning for a new assets, a Commissioning Test Plan has to be completed if any changes to the assets are carried out. These Plans are prepared after any major maintenance is carried out in order to protect the Business from being penalised for failing to meet its commercial obligations. This means that it does not incur refund payments if the facility fails to start after the maintenance or the assets trip out when re-started. ▪ The October 2021 Commissioning Test Plan was evidenced during the review. We confirmed that it was developed for the first start up to check that the Compressor Thrust bearing works and tested under a full load for this test. The test parameters and description are set out in the Plan. Details of the Contingency Plan are also provided in case of issues with the test. ▪ In addition, NNP is required to undertake capacity tests twice a year to meet the System Management requirements. One test is carried out in summer and one in winter in order to assess the capacity under the different demand requirements at these times of the year. ▪ Based on our interviews with NNP and the documentation provided as evidence, commissioning tests are documented and completed. 	A	1
2.5	Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood	4	<ul style="list-style-type: none"> ▪ Ongoing legal, environmental and safety obligations in relation to asset planning are understood by NNP. ▪ Regulatory reporting and other obligations have been set up in MEX under the Compliance category in the listing. Risks are set up in MEX for each listing to establish the priority of each entry. ▪ NNP's environmental obligations include reporting to the National Pollution Inventory, submissions to the National Greenhouse and Energy Reporting Scheme (NGERS), payment of an emissions fee to DWIR, including a spreadsheet of emissions and the Annual Environmental Licence for the facility. ▪ During the review we observed examples of the NGERS obligations set-up in MEX. A PM listing has been established for 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>reporting emissions data to the Brisbane Head Office, with timeframes for carrying out these activities each year and with supporting documents set-up as hyperlinks in the Documents tab of the PM listing. Examples of the submission to the regulator for NGRS annual reporting were observed.</p> <ul style="list-style-type: none"> ▪ Reporting for legal / environmental / safety obligations is included in the Monthly Business Manager's Report. ▪ Further details are provided in the Environmental Analysis section. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that legal/environmental/safety obligations are understood and assigned. 		
3	<p>Asset disposal Asset disposal is the consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets.</p>			A	1
3.1	Under-utilised and under-performing assets are identified as part of a regular systematic review process	4	<p>Overview</p> <ul style="list-style-type: none"> ▪ As the facility operates as a peaking power station, the life expectancy of its assets is expected to be longer than for a normal gas turbine power station. Although the facility is now 12 years old, it is still considered by NNP to be a young site. ▪ NNP has not disposed of any major assets in the review period. No assets have been replaced over the period. ▪ Minor visual inspections of the assets have been completed during the review period, with the first major inspection due to take place in 2023. ▪ Pressure safety valves (PSVs), pressure vessels (PVs) and the pipeline have had certified inspections. ▪ Although ancillary assets are expected to need to be replaced, the gas turbines and other major generation assets are expected to still be serviceable for a further 20 to 30 years. <p>Decommissioning Plan</p> <ul style="list-style-type: none"> ▪ An overall Preliminary Decommissioning Plan for the site was prepared in 2010 and is available on the Shell Energy website. The Plan was required to be prepared to satisfy Ministerial Conditions related to the original approval for the facility. ▪ The preliminary plan notes that detailed strategies for decommissioning will be progressively developed and outlined in the final decommissioning plan for the site. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Although there is no specific Disposal Policy, the requirements that would be expected for this document are generally included in the Preliminary Decommissioning Plan ▪ The Preliminary Decommissioning Plan also notes that a complete register of plant and equipment to be decommissioned and removed will be developed as part of the final decommissioning plan. ▪ The Preliminary Decommissioning Plan provides a preliminary list of plant and equipment with proposed management actions for ultimate disposal. This includes identifying assets to be removed for possible salvage, assets expected to be removed and disposed of at an approved landfill and assets to be recycled where possible. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that they adequately they identify under-utilised and under-performing assets as part of a regular systematic review process. 		
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	4	<ul style="list-style-type: none"> ▪ NNP undertakes performance and utilisation analysis of the facility and specific assets. ▪ An assessment of gas turbine and compressor performance is carried out twice a year. A PM listing in MEX is used to create the work order schedule for this activity. The work order history in MEX for this activity was viewed during the review. ▪ Examples of the gas turbine and compressor performance analysis was viewed and we confirmed that the performance has been tracked since 2009. ▪ The analysis shows that compressor washing can increase the gas turbine efficiency, although this has not taken place during the review period. The last compressor wash took place in 2015. The analysis shows that Gas turbine performance has remained consistent across the review period. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that they adequately examine under-utilised and under-performing assets and corrective actions or disposals are undertaken. 	A	1
3.3	Disposal alternatives are evaluated	4	<ul style="list-style-type: none"> ▪ As noted above, preliminary disposal options have been considered and documented in the Preliminary Decommissioning Plan. 	A	1

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			<ul style="list-style-type: none"> ▪ However, NNP is not considering reviewing this 2010 Plan this early in the facility's lifetime. ▪ More detailed evaluations of disposal alternatives are expected to be developed and outlined in the final decommissioning plan for the site. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that they adequately consider disposal alternatives. 		
3.4	There is a replacement strategy for assets	4	<ul style="list-style-type: none"> ▪ Although the current assets have been supplied by Siemens, NNP is not locked into a contract with the OEM and is able to purchase and install components from other manufacturers if it were to be required. ▪ NNP maintains an inventory of component assets that are likely to require replacing based on general wear and tear or asset failure (where these components are run to fail before being replaced). ▪ Some other general asset components are pre-ordered to be supplied when required. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that they have adequate replacement strategies for assets. 	A	1
4	Environmental analysis Environmental analysis examines the asset management system environment and assesses all external factors affecting the asset management system.			A	1
4.1	Opportunities and threats in the system environment are assessed	4	<ul style="list-style-type: none"> ▪ There are not considered to have been any significant changes to the asset management system environment or external factors affecting the operations of the facility or the asset management system during the review period. ▪ Opportunities and threats are considered in the Annual Business Plan are part of the supporting evidence for the Management Committee approval of the annual operating and capital expenditure budgets. ▪ Based on the function that the power station serves and the services it provides, there are not considered to be any significant factors impacting on the AMS environment as the current operating environment is relatively stable. ▪ Under the terms of the contract with Synergy, the foundation customer, is able to request primary access to the second generation unit at the power station. Two years notice needs to be provided to approve or deny the request, with NNP not 		

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			<p>compelled to agree to access. If the market forecasts showed that it would be more favourable to NNP to continue to operate the second unit for its own purposes, the Synergy request would be turned down.</p> <ul style="list-style-type: none"> ▪ As noted in previous sections, only one of the two generation units is required to provide the supply to Synergy and NNP is able to use both units to supply more than the daily Synergy nomination. Knowledge of the electricity market and the capabilities of the facility allow NNP to maximise its competitiveness. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that they adequately assess opportunities and threats in the system environment. 		
4.2	Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	4	<ul style="list-style-type: none"> ▪ NNP's ERA operating licence (EGL18) does not prescribe any individual performance standards in respect of NNP's obligations. ▪ Operational statistics and maintenance data is recorded and included in the monthly Business Manager reports. ▪ The operational performance data recorded includes the total monthly generation, number of starts, number of trips, number of failed starts, forced outage hours, equivalent forced outage hours, maintenance outage hours, planned outage hours and gas consumed ▪ The recorded datasets allow NNP to report on availability, capacity and efficiency performance each month. Examples of the Business Manager Monthly reports were viewed as evidence during the review. ▪ Performance standards are only reported internally and this information is not reported to Synergy. ▪ Staff bonus schemes are also related to a number of level of specific service performance indicators, including targets for Forced Outage Rate, Start Reliability and Plant Efficiency. ▪ Other indicators linked to NNP's annual staff bonus scheme include Performance to Operating Budget, Regulatory Infringements, Continuous Improvement, Lost Time Injuries, Environmental Incidents and Revenue Target. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that their performance standards (availability of service, capacity, continuity, emergency response, etc.) are adequately measured and achieved. 	A	1

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4.3	Compliance with statutory and regulatory requirements	4	<ul style="list-style-type: none"> ▪ As noted in previous sections, NNP's statutory and regulatory requirements are set up in the PM listings in MEX so that reporting process-related work orders can be created to complete actions by due dates. MEX allows the requirements to be regularly reviewed and updated where required. ▪ The regulatory reporting and other obligations have been set up in MEX under the Compliance category in the listing. Examples of the listing were observed during the review. ▪ In addition, NNP uses the web-based WHS_stats SQL Server Reporting for recording and reporting WHS stats. This data feeds into the reporting to management. ▪ The WHS_Stats report was viewed during the review and we confirmed that it includes data on safety incidents and investigations, staff injuries and compensation claims, and site safety statistics. The report also records and reports operations-related data, including the volume of bore water used, energy generated, power purchased, gas used, average heat rate, and greenhouse gas reporting data. ▪ We reviewed NNP's annual performance report submissions to the ERA over the reporting period and confirmed that it has not reported any non-compliances against its licence obligations over this time. ▪ No environmental breaches have been reported during the review period. ▪ Compliance with statutory and regulatory requirements is included in the Monthly Business Manager Report. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that they adequately comply with statutory and regulatory requirements. 	A	1
4.4	Service standard (customer service levels etc) are measured and achieved.	4	<ul style="list-style-type: none"> ▪ As noted above, NNP does not report directly to Synergy, its foundation customer, on the service standards it is required to meet under the terms and conditions of the agreement between the two entities. ▪ However, performance against the service standards is included in the data that is recorded and reported each month in the Monthly Business Manager Report. ▪ The recorded datasets allow NNP to report on availability, capacity and efficiency performance each month. Examples of 	A	1

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			the Business Manager Monthly reports were viewed as evidence during the review. <ul style="list-style-type: none"> ▪ Staff bonus schemes are also related to a number of level of specific service performance indicators, including targets for Forced Outage Rate, Start Reliability and Plant Efficiency. ▪ Other indicators linked to NNP's annual staff bonus scheme include Performance to Operating Budget, Regulatory Infringements, Continuous Improvement, Lost Time Injuries, Environmental Incidents and Revenue Targets. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that they adequately measure and achieve service standards. 		
5	Asset operations Asset operations is the day-to-day running of assets (where the asset is used for its intended purpose).			A	1
5.1	Operational policies and procedures are documented and linked to service levels required	4	General operations <ul style="list-style-type: none"> ▪ Generally the power station and the gas supply pipeline are fully automated and operations start and stop based on the nomination data that has been set in the SCADA. ▪ The Brisbane-based Traders put the bids into the system and once accepted they are transferred into the control system. The hourly generation requirements set out in the daily nominations from Synergy and any additional generation that NNP decides to produce and supply to the market allows the power station to automatically start and stop and ramp up production when required. SCADA <ul style="list-style-type: none"> ▪ The SCADA system is used to provide all real-time monitoring information, data trending, alarming and reporting. ▪ The SCADA was demonstrated during the review. We viewed the general overview screen, the individual turbine screens and other process units (e.g. compressors, demin plant). Examples of alarms set up in the system were also observed. ▪ Access to make changes to the SCADA set-up and controls are restricted to the member of staff with Administrator rights. ▪ There are emergency stops around the site for the generation units but the site can also be shutdown from the SCADA. The 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>SCADA shutdown is achieved via a two-click process in the system.</p> <p>Operating procedures</p> <ul style="list-style-type: none"> ▪ Documented procedures for the facility are stored digitally that can be accessed through MEX. ▪ A hardcopy of the SCADA manual was also witnessed during the review. ▪ The Preventive Maintenance (PM) listings of the work orders include a 'Documents' tab that includes links to the relevant procedures. Links to check sheets and other forms/templates are also accessible from the PM listing. Examples of the procedures and checklists were observed during the review. ▪ Although not all work orders have documented procedures, NNP considers that it has the procedures that are needed due to the automation of the facility. ▪ Operational performance is monitored and reported monthly. Further details on operational service levels have been provided in the Environmental Analysis section. ▪ Although the site is normally operated in the automatic mode, the facility can be manually operated if required. ▪ There is a manual start procedure that can be used to start the facility before transitioning it back to the automated mode of operation. An annual test for the manual start of the facility is carried out. We confirmed that a work order is set up in MEX for the annual manual start test and the documented procedure was provided. We confirmed that the procedure includes screenshots for logging into software, and step-by-step processes for the manual start operations. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that operational policies and procedures are adequately documented and linked to service levels required. 		
5.2	Risk management is applied to prioritise operations tasks	4	<ul style="list-style-type: none"> ▪ As noted in previous sections, the PM module within MEX is used for scheduling maintenance requirements. ▪ The maintenance work is based on the performance and the condition monitoring that is carried out and OEM recommendations for specific assets. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ PM's categorised as "statutory" have the legislative work orders that have a higher priority for completion. ▪ The analysis carried out by Shell Energy's Traders related to operating the site outside of the Synergy nominations is risk based and dependent on the predicted market prices, and this is reviewed on an ongoing basis. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that risk management is adequately applied to prioritise operational tasks. 		
5.3	Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition	4	<ul style="list-style-type: none"> ▪ NNP uses MEX for the operational asset register. MEX is configured with a functional location structure, which sets out the hierarchy for all the assets. The asset register hierarchy was observed during the review and specific assets and components were reviewed in detail to confirm the recorded attributes. ▪ The asset registers include information on the asset attributes, including asset type, location, model number, manufacturer, warranty details, size, P&ID reference, and Maintenance Manual Reference. ▪ Asset attributes are registered based on engineering drawings and information from the OEM. Assets in the field are tagged, with the asset ID number taken from the engineering drawings and used to record the asset in the asset register. ▪ The asset listing can be used to search for an asset field to view the work orders carried out related to a specific asset number. This includes both corrective and preventive maintenance tasks, meaning that the entire maintenance task history for an asset are documented. ▪ As the assets are either considered to be working/operational or need replacing, NNP does not record asset condition in the asset register. ▪ Condition assessments are completed on the assets, with work orders set up in MEX for these to take place on a cyclic basis relevant to the type of asset. The work orders are logged against the assets to allow the work history of inspections to monitored and reported. We viewed examples of four years of inspection and recertification work orders for a pressure vessel as evidence. Details of the pressure vessel inspection and maintenance are also recorded in an Excel register that records details for the pressure-related assets at the facility. This register was viewed 	A	1

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			and we confirmed that the details reconciled with the asset number and associated work order history recorded in MEX. <ul style="list-style-type: none"> Based on our interviews with NNP and the documentation provided as evidence, we consider that assets are documented properly in the asset register. 		
5.4	Accounting data is documented for assets	4	<ul style="list-style-type: none"> NNP has a separate fixed asset register for the financial data for its assets that is recorded in SAP. The fixed asset register includes details of each asset and includes the asset ID, asset description, asset class (e.g. power generation equipment, machinery and equipment, vehicles, fixtures and fittings, buildings, computer hardware, computer software), date of capitalisation, and estimated end of life. The financial information recorded for each asset includes the depreciation type, annual depreciation, accumulated depreciation, current Acquisition and Production cost, and current written down cost. Any new capital expenditure items are added to the fixed asset register. We reviewed the fixed asset register and observed that 32 new assets totalling approximately \$1M have been capitalised over the review period. This has included expenditure on assets within the asset classes of power generation equipment, machinery and equipment, computer hardware, computer software, fixtures and fittings and vehicles. Based on our interviews with NNP and the documentation provided as evidence, we consider accounting data is adequately documented. 	A	1
5.5	Operational costs are measured and monitored	4	<ul style="list-style-type: none"> Actual operating costs incurred each month are tracked against the budgeted forecasts. These are included in the Business Manager's Monthly Report. Examples of the Financial Performance to Operations budget were evidenced during the review. Monthly costs are reported internally to Shell Energy in a separate monthly report. The Partnership pays the operator (Shell Energy) a bonus based on the KPI for achieving the annual budget. Individual staff also receive an annual bonus payment for achieving the annual budget. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that operational costs are adequately measured and monitored. 		
5.6	Staff resources are adequate and staff receive training commensurate with their responsibilities	4	<p>Staff resources</p> <ul style="list-style-type: none"> ▪ As a result of the automation of the power station, the facility does not require someone to be in the control 24/7 monitoring the operations. ▪ The facility is currently operated by seven staff. There are four operator maintainers (two electrical, two mechanical) who carry out operating and maintenance tasks. ▪ The O&M Technicians are on call one week in every four to provide after hours duties. This includes dealing with alarms and faults and checking the overnight gas flow operations. The on call staff are paged to attend any alarms. ▪ In addition, the on call staff do the rounds for any work orders that can be completed overnight. ▪ Rest of staff are onsite during the day to carry out the normal operations and maintenance tasks. ▪ Staff resources are considered to be adequate to operate and maintain the facility, although it has been identified that the number of incomplete work orders is slowly increasing. ▪ An increase in staffing levels is not considered to be able to be justified based on the current work order count. ▪ Work is outsourced to specialist contractors where required. ▪ Although there has been change in owner during the review period (from ERM Power to Shell Energy), no staff were lost and there is a stable crew, all of who have been working at the facility for at least 10 years. <p>Staff Training</p> <ul style="list-style-type: none"> ▪ NNP maintains a training register in Excel that records staff training that has been completed. This includes details of the date of issue, certificate number and expiry dates for safety training, specific qualifications and cyclic training requirements ▪ New staff undertake comprehensive training with Siemens that talks through SCADA and the different phases of operations. Examples of operator training manuals were viewed during the review. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Based on our review of NNP, we consider that staff resources are properly trained and adequate. 		
6	Asset maintenance Asset maintenance is the upkeep of assets.			A	1
6.1	Maintenance policies and procedures are documented and linked to service levels required	4	<ul style="list-style-type: none"> ▪ Generally, the maintenance procedures have been driven by legislation e.g. thickness testing of gas pipelines, testing of Pressure safety valves, etc and specific OEM manuals and recommended scheduled maintenance requirements ▪ As noted previously, NNP's maintenance schedules are aligned to OEM schedules but revised where identified as appropriate. ▪ NNP has not adopted 100% of the OEM schedules as they are consider fit for the facility, e.g. as the facility is a peaking power station, the compressors don't operate as expected in the OEM manual. The OEM time based maintenance activities are evaluated to ensure the reflect run time and not idle time. ▪ A service contractor was engaged to carry out a risk assessment and monitor the schedule to better align with the operations of a peaking power station rather than the maintenance schedules only being based on run times. ▪ The OEM schedules have been maintained for the gas turbines' assets. ▪ Documented procedures for the facility are stored digitally and can be accessed through MEX. ▪ The PM listings of the work orders include a 'Documents' tab that includes links to the relevant procedures. Links to check sheets and other forms/templates are also accessible from the PM listing. Examples of maintenance procedures and checklists were observed during the review. ▪ As noted previously, operational statistics and maintenance data is recorded and included in the monthly Business Manager reports. ▪ The operational performance data recorded includes the total monthly generation, number of starts, number of trips, number of failed starts, forced outage hours, equivalent forced outage hours, maintenance outage hours, planned outage hours and gas consumed. ▪ The recorded datasets allow NNP to report on availability, capacity and efficiency performance each month, meaning that 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>service levels are directly linked to the maintenance tasks completed at the facility</p> <ul style="list-style-type: none"> ▪ In addition, staff bonus schemes are also related to a number of level of specific service performance indicators, including targets for Forced Outage Rate, Start Reliability and Plant Efficiency. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that maintenance policies and procedures are adequately documented and linked to service levels required. 		
6.2	Regular inspections are undertaken of asset performance and condition	4	<ul style="list-style-type: none"> ▪ Performance of the gas turbines and compressors is continually monitored through the SCADA software. Examples of bearing vibration and temperature monitoring data were observed in the SCADA for the generator and compressor assets. The recorded operating data can be trended to allow the performance to be analysed. The monitoring points are also set up with alarms in SCADA to provide notification if the readings go outside the normal operating parameters. ▪ Gas turbine and compressor performance analysis is carried out twice a year. A PM listing in MEX is used to create the work order schedule for this activity. The work order history in MEX for this activity was viewed during the review. ▪ Examples of the gas turbine and compressor performance analysis was viewed and we confirmed that the performance has been tracked since 2009. ▪ The analysis shows that compressor washing can increase the gas turbine efficiency, although this has not taken place during the review period. The last compressor wash took place in 2015. The analysis shows that Gas turbine performance has remained consistent across the review period. ▪ Efficiency data for the facility is automatically monitored in the SCADA and is able to be reviewed for tracking purposes. ▪ MEX includes a Job Type for Inspections that can be filtered to provide a listing of all the maintenance inspections that are carried out at the facility. The work orders are further split between preventative inspections and statutory inspections. ▪ Vibration data for the pumps and motors at the facility are not monitored in SCADA. The assets are inspected as part of the site's condition assessments using handheld vibration monitors ▪ Lube and coolant oils are sampled and tested by an external contractors. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Thermography inspections are carried out at switchboards. The test data is recorded in MEX against the asset. Examples of the PM work orders and the MEX listing of the assets that are checked were evidenced. Examples of externally completed thermography analysis reports were observed and examples of completed checklists were also viewed. ▪ NNP purchased a thermography gun as it was considered easier to carry out temperature testing inspections in-house. Previously this activity was outsourced but there were issues related to coordinating contractors to be on site when the plant was operating. Shell Energy has a procedure for undertaking thermography analysis and this was viewed during the review. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that they adequately undertake regular inspections of asset performance and condition. 		
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	4	<ul style="list-style-type: none"> ▪ NNP has a Forecasted Inspection Plan for the power station that covers the period 2009 to 2032. This plan sets out the overall maintenance plan for the facility. ▪ The Inspection Plan sets the inspection intervals to undertake minor inspections, major inspections and a life extension inspection for the gas turbine assets. The timing of these inspections is based on the Equivalent Operating Hours and the number of starts. ▪ The Inspection plan also sets out the gas turbine generator inspection intervals, with the timings for initial, short, intermediate and main inspections based on a range of minimum to maximum Equivalent Operating Hours. ▪ The scope of works for the minor and major inspections events are defined in the Inspection Plan ▪ The scope for the minor inspections includes entry to accessible regions for visual inspection on: <ul style="list-style-type: none"> – Compressor inlet including air intake – Burners and flame cylinder end plate – Ceramic tile lining of flame cylinders, hot gas path of mixing and inner casings – Turbine stage 1 and 4 – Exhaust casing and diffuser liner ▪ The scope for the major inspections includes: 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> – Extensive dismantling, detail visual inspection and non-destructive evaluation; – Refurbishment of coated airfoils in the turbine and compressor sections; – Scheduled and condition-based repair measures – Implementation of Lifetime Extension (LTE) measures. ▪ During the review period, two minor inspections have been carried out. The first major inspection is not scheduled to take place until 2023. ▪ For the gas turbine inspections, the minor inspection is scheduled to take three days, the major inspection 25 days and the Lifetime extension inspection 35 days. ▪ Similarly, the gas turbine generator inspections require four weeks for the initial inspection, three days for a short inspection, two weeks for the intermediate inspection and four weeks for the main inspection of the assets. ▪ Work orders for specific maintenance tasks to be carried out during the different inspections are set-up and monitored in MEX. ▪ Maintenance outages of the plant are planned in advance and reported in the Business Manager's Monthly Report. ▪ NNP has an annual shutdown process and have a plan for this activity. The most recent planned shutdown was carried out in October 2021. ▪ In the case of emergency shutdowns, an operational incident report is prepared, the issue investigated and corrective actions assigned to rectify the incident. ▪ Details of incidents are recorded in the Incident Report Register. This includes all incidents, not only those related to operational issues. The register was evidenced during the review. ▪ Incident reports are developed for incidents using a standard template and we reviewed an example of a completed report from within the review period for gas detection that caused the turbines to trip. The incident report included details of the incident, witness details, who the incident has been reported to, details of the staff involved in the investigation, root cause analysis information related to the incident, planned actions and a sign-off. 		
6.4	Failures are analysed and operational / maintenance plans adjusted where necessary	4	<ul style="list-style-type: none"> ▪ As noted above, root cause analysis (RCA) is included as a mandatory section on the standard template used for reporting 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>incidents that occur at the power station, including operational events due to asset failures.</p> <ul style="list-style-type: none"> ▪ We observed examples of RCA in completed incident reports. Planned actions are developed as part of the preparation of the incident report to address the root causes that have been identified. Actions are created as specific work orders in MEX, and responsibilities for completion assigned together with a target completion date. The work orders are tracked and followed-up as necessary. ▪ Operational events are included in the Business Manager's Monthly Report. ▪ Operational/maintenance plans are adjusted where required based on the outcomes of the RCA and incident reporting. ▪ Based on our interviews with NNP and the documentation provided as evidence, failures are analysed and operational/maintenance plans are adjusted accordingly. 		
6.5	Risk management is applied to prioritise maintenance tasks	4	<ul style="list-style-type: none"> ▪ A risk rating has been developed for every preventative (PM) listing in MEX to apply to the created work orders that sets the priority of the task. ▪ NNP has six priorities that can be applied to the work orders in MEX: <ul style="list-style-type: none"> – Priority 1: Extreme Risk (HSE/Stat) – Priority 2: High Risk – Priority 3: Medium Risk – Priority 4: Low Risk – Priority 5: Shutdown – Priority 6: RTPM (Real Time Predictive Maintenance) ▪ In addition, each work order has a 'Safety Critical Element' (SCE) tick box that is used to provide an additional rating to the maintenance task to highlight safety critical work orders. ▪ The MEX work orders can be filtered to report all work orders that have been designated as having a safety critical element and this report was evidenced during the review. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that risk management is appropriately applied to prioritise maintenance tasks. 	A	1
6.6	Maintenance costs are measured and monitored	4	<ul style="list-style-type: none"> ▪ Actual operations and maintenance costs incurred each month are tracked against the budgeted forecasts. These are included 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>in the Business Manager's Monthly Report. Examples of the Financial Performance to Operations budget were evidenced during the review.</p> <ul style="list-style-type: none"> ▪ Specific areas within the facility, specific asset types and specific maintenance activities have the costs broken down into more detail. This includes the demin plant, elect maintenance, HVAC (Heating, ventilation, and air conditioning), cranes, lifting gear, compressor servicing, minor maintenance inspections (for turbines). ▪ Each of these has its own General Ledger account code which allows the annual budget to be prepared in more detail based on the historic and forecast expenditure for each area. The monthly reporting process allows actuals versus budgets to be tracked for each of the relevant General Ledger account codes for the relevant maintenance that has been carried out in the month. ▪ Monthly costs are also reported internally to Shell Energy in a separate monthly report. ▪ The Partnership pays the operator (Shell Energy) a bonus based on the KPI for achieving the annual budget. Individual staff also receive an annual bonus payment for achieving the annual budget. ▪ Based on our interviews with NNP and the documentation provided as evidence, maintenance costs are measured and monitored adequately. 		
7	<p>Asset management information system An asset management information system is a combination of processes, data and software supporting the asset management functions.</p>			A	1
7.1	Adequate system documentation for users and IT operators	4	<ul style="list-style-type: none"> ▪ The key asset management information used by NNP to operate the power station are: <ul style="list-style-type: none"> – MEX: the asset register, CMMS, and overall AMS for managing tasks at the facility – T3000: the SCADA system. The SCADA system is used to provide all real-time monitoring information, data trending, alarming and reporting. – SAP: the fixed asset register and overall finance system – AGC/ABS: the software for automating the starting and stopping of the gas turbine units build into T3000. This was designed by NNP and maintained by the Licensee. Rigorous testing was completed when the software was installed. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ There is also a separate SCADA for the gas supply to the power station. This controls the gas pipeline outside of the power station's footprint. Although this was viewed during the review, as it is outside the operating area designated in the ERA's licence, we have deemed that it is outside the scope of this review. ▪ Support for the SCADA system and configuration is provided through Siemens, the OEM for the gas turbines. ▪ General IT support is provided via the Licensee's head office in Brisbane. ▪ All on-site staff have been trained in MEX and the control system. ▪ Examples of system documentation and training manuals were observed during the review. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider their IT systems have adequate documentation for users and operators. 		
7.2	Input controls include appropriate verification and validation of data entered into the system	4	<ul style="list-style-type: none"> ▪ MEX can only be accessed by the site-based staff. Read-only access is given to external contractors if required. We viewed the users set up for MEX during the review and confirmed that access was limited to the site-based staff. ▪ As the power station is only operated by seven staff, no specific access levels have been created for MEX. All site staff have administration access to allow them to create, edit and close PM work orders. Work order do not need to be escalated to be approved and closed. ▪ However, although not built into the system, there is an internal policy that creating a new PM listing or editing an existing one needs to be approved by the Power Station Manager. This is required as the PM policy generates the work orders under it so changing the PM changes all the future work orders. ▪ Access to the SCADA system and control software is controlled. Access to make changes to the SCADA set-up and set points are restricted to the member of staff with Administrator rights and the contractors from the OEM. ▪ Set points are rarely changed. Any edits that are carried out are processed through the Licensee's Management of Change (MoC) procedure and recorded on the MoC form. ▪ The MoC process is used to record any structural changes to the assets or to the systems. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Operations are continually monitored using the SCADA, including generation exports and gas usage. Generation is reported through Western Power’s meters. ▪ Traders in the Brisbane Head office have a trading tool that is used to process the Synergy nominations and any other additional generation at the site. This information is transferred into the spreadsheet used for setting the SCADA nomination each day to start, ramp up/down and stop the turbines from operating. The generation requirements are prepared every day and tracked onsite to confirm the supply requirements are being met. ▪ Operating information is included in the monthly reports. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider they have adequate input controls for verification and validation of data. 		
7.3	Security access controls appear adequate, such as passwords	4	<ul style="list-style-type: none"> ▪ Overall security access is managed by the Brisbane-based IT department. ▪ Access to the SCADA system and control software is controlled. Access to make changes to the SCADA set-up and controls are restricted to the member of staff with Administrator rights. ▪ Firewalls are in place and virus protection is active against cyber attacks. ▪ General computer access is limited to staff and passwords are in place. Two factor authentication is required to log-on. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider they have adequate security access controls. 	A	1
7.4	Physical security access controls appear adequate	4	<ul style="list-style-type: none"> ▪ The power station and gas compression station are monitored by CCTV cameras to the 24/7 control room. The site is set up with intrusion alarms and perimeter beams ▪ Door switches control access around the buildings. A swipe card is required for the main gate. ▪ The site uses different security keys to control access to different areas, e.g. contractors are not able to access the high voltage areas or the gas yard with the keys that are provided with when working on site. Site operators have master keys to access all areas of the site ▪ An external security company attends the site out of hours to investigate any alarms that have been set off 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ The last member of the onsite staff to leave each day is responsible for arming the system which transfer control to the external security company. All alarms are disarmed during the day when staff are on site. ▪ Based on our review of NNP's premises and policies, they have adequate physical security. 		
7.5	Data backup procedures appear adequate and backups are tested	4	<ul style="list-style-type: none"> ▪ Data back-up is to the local server, the head office IT system in Brisbane and external RAID drives that are stored offsite. ▪ The SCADA data is backed-up via Siemens maintenance, with scripts automating the process. The back-up includes the trend data as well as the general operating data. ▪ The PM listing is recorded each month as a historic back-up to allow the work orders to be rebuild from the previous listing if required. ▪ Data is backed-up onto an onsite server and a separate back-up is loaded onto a different onsite machine in a separate building. A back-up is also made onto a RAID drive and taken offsite every quarter. ▪ The administration-side of the business is also backed-up offsite, with the onsite file server replicated to the Brisbane server. Administration files are backed-up from the Brisbane head office to a cloud server. ▪ The licensee considers their backups to be robust yet they do not have a reliable way of testing them without putting plant operation at risk. ▪ They have determined that testing the backups comes with some risk in the event they cannot restore their system in time to meet potential production requirements. (They may lose production SCADA for a while or corrupt data historizing) ▪ Siemens has restored comparable systems using backed up data when required. ▪ Based on our interviews with NNP and the documentation provided as evidence, their data backup procedures are adequate. 	A	1
7.6	Computations for licensee performance reporting are accurate	4	<ul style="list-style-type: none"> ▪ The ERA has not prescribed any specific performance standards in the operating licence. ▪ NNP has created an ERA Compliance Reporting Manual spreadsheet that is updated with a new worksheet each year for the new report year. The ERA's Compliance Reporting Manual is 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>reviewed to confirm if there have been any changes to the obligations required under the operating licence. The spreadsheet is used to monitor the performance against the reporting requirements for submission to the ERA in the annual performance report.</p> <ul style="list-style-type: none"> ▪ As noted previously, performance against the service standards is included in the data that is recorded and reported each month in the Monthly Business Manager Report. ▪ The recorded datasets allow NNP to report on availability, capacity and efficiency performance each month. Examples of the Business Manager Monthly reports were viewed as evidence during the review. ▪ Staff bonus schemes are also related to a number of level of specific service performance indicators, including targets for Forced Outage Rate, Start Reliability and Plant Efficiency. ▪ Other indicators linked to NNP's annual staff bonus scheme include Performance to Operating Budget, Regulatory Infringements, Continuous Improvement, Lost Time Injuries, Environmental Incidents and Revenue Targets. ▪ Based on our review of NNP systems, there computations for licensee performance are reported accurately. 		
7.7	Management reports appear adequate for the licensee to monitor licence obligations	4	<ul style="list-style-type: none"> ▪ As noted in previous sections, NNP's statutory and regulatory requirements are set up in the PM listings in MEX so that reporting process-related work orders can be created to complete actions by due dates. ▪ The regulatory reporting and other obligations have been set up in MEX under the Compliance category in the listing. Examples of the listing were observed during the review. ▪ We reviewed NNP's annual performance report submissions to the ERA over the reporting period and confirmed that it has not reported any non-compliances against its licence obligations over this time. ▪ Additionally, no environmental breaches have been reported during the review period. ▪ A number of different management reports are prepared to allow performance against obligations to be reported. These include <ul style="list-style-type: none"> – Shell Leadership Team Report, which includes high level budget, safety and performance information 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> – Monthly Business Manager Report to the Partnership, which provides details of all operations in the month – Annual Business Plan Report to the Partnership, which provides a summary of the budget and includes the business plan for the next period – Annual KPI Bonus Report, which reports on the staff-related performance indicators for the year, with the bonuses ratified by management based on the information provided. ▪ Compliance with statutory and regulatory requirements is included in the Monthly Business Manager Report. ▪ Performance against the service standards is also included in the data that is recorded and reported each month in the Monthly Business Manager Report. ▪ Based on our interviews with NNP and the documentation provided as evidence, management reports appear adequate for the licensee to monitor license obligations. 		
7.8	Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	4	<ul style="list-style-type: none"> ▪ Both SCADA and MEX can only be accessed with a company laptop as the software needs to be installed in order to get access. There is no web version of the software that can be used to access the power stations key asset management information systems ▪ Firewalls are in place and virus protection is active against cyber attacks. ▪ General computer access is limited to staff and passwords are in place. Two factor authentication is required to log-on. ▪ Based on our review of NNP's security measures, we consider that they are adequate to protect asset management data from unauthorised access or theft by persons outside the organisation. 	A	1
8	Risk management Risk management involves the identification of risks and their management within an acceptable level of risk.			A	1
8.1	Risk management policies and procedures exist and are applied to minimise internal and external risks	4	<ul style="list-style-type: none"> ▪ Risk assessments and risk quantification are carried out throughout NNP's business activities. ▪ A risk rating has been developed for every preventative (PM) listing in MEX to apply to the created work orders that sets the priority of each task. ▪ In addition, PM listing has a 'Safety Critical Element' (SCE) tick box that is used to provide an additional rating to the maintenance task to highlight safety critical work orders. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ In addition, the PM policies in MEX consider the Major Accident Event (MAE) risk. NNP has three MAE documents for potential accident risks involving: <ul style="list-style-type: none"> – Driving Public Roads and Pipeline – Loss of Containment Event – Loss of Integrity – Loss of Containment Event - Excavation and Third Party External Interference ▪ The MAE documents essentially provides details on safety critical controls that apply to the document, the purpose of each control, the performance criteria that the control achieves and the assurance tasks to make sure the control is in place and meets the performance criteria. Availability/reliability to provide assurance for the functional capability of the control, Dependencies/Interactions with other control measures and survivability, to identify whether the control will continue to function if needed, after a hazardous event has occurred, are also recorded in each MAE. ▪ Each MAE also includes an Assurance Plan Matrix that sets out the review frequency for the assurance tasks and the relevant MEX PM policy numbers, where applicable, that ensure that the MAE controls are monitored, reviewed and can be updated if necessary. ▪ Operational incident reports are prepared for asset failures and emergency shutdown. The issue investigated and corrective actions assigned to rectify the incident. The Incident reports include a risk assessment to derive a 'Severity Rating'. The rating is based on the consequence and likelihood. NNP's consequence and likelihood scoring and the risk rating matrices are set out in the Incident Report Template. ▪ The risk assessment take into account levels of consequences for: <ul style="list-style-type: none"> – Injury or illness to ERM Team Members – Environmental impact – Public Personal Injury – Public Property Damage – Damage to asset and resources – Operational / Interruption – Damage to reputation. 		

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that risk management policies and procedures exist and are applied to minimise internal and external risks. 		
8.2	Risks are documented in a risk register and treatment plans are implemented and monitored	4	<ul style="list-style-type: none"> ▪ NNP has a number of different risk registers in place, including: <ul style="list-style-type: none"> – Environmental Management Plan Risk Register – Neerabup Pipeline Risk Register – A number of Pipeline Risk Registers developed to assess the risks for specific external factors, e.g. a risk assessment prepared when Telstra were laying cables over the pipeline, a different risk assessment when truck crossings were being constructed over the pipeline. – A site Risk Register that assesses risks across the different areas of the facility – A HAZID (Hazard Identification) Risk Register for OHS purposes related to the gas pipeline. ▪ The HAZID assessment for the gas pipeline is conducted annually based on the regulator’s requirements. ▪ The site risk register includes hazard groupings, type of hazards, control options, risk ratings and comments for the hazards related to the following areas at the power station: <ul style="list-style-type: none"> – Office – Potable water system – Fire Pump Skids – Water Treatment Plant – Storage-Dangerous Goods Shed – Workshop and Storage – PCC (Power Control & Communications) and BOP (Basic Operator Panel) – Gas Reception Area – Gas Turbine – UMB (Universal Mounting Box) – HV Transformers and Generators – Exhaust Stacks – Emergency Diesel Generator – Evaporation Ponds & Stormwater Pit 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Based on our interviews with NNP and the evidence views and provided, we consider that NNP's risks are documented in a risk register and treatment plans are implemented and monitored. 		
8.3	Probability and consequence of asset failure are regularly assessed	4	<ul style="list-style-type: none"> ▪ NNP conducts an annual review of all of the PM listing in MEX that are used to set up the work orders. This review is set up in MEX to issue a work order when the review is due. This review process allows the risk ratings that have been assigned to the PM policies to be assessed and changed if identified as being needed. ▪ As noted previously, a service contractor was engaged to carry out a risk assessment and modify the maintenance schedule to better align with the operations of a peaking power station rather than the maintenance schedules only being based on run times. Based on this risk assessment, NNP's maintenance schedules are aligned to OEM schedules but revised where identified as appropriate. ▪ Operational/maintenance plans are adjusted where required based on the outcomes of the RCA included in incident reporting. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that the probability and consequence of asset failure are regularly assessed. 	A	1
9	Contingency planning Contingency plans document the steps to deal with the unexpected failure of an asset.			A	1
9.1	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	2	<ul style="list-style-type: none"> ▪ NNP has an general Emergency Response Plan that covers: <ul style="list-style-type: none"> – Onsite injury/accident – Flammable gas leak – Fire, smoke or explosion – Hazardous material spill – Oil spill – Earthquake – Public alert – offsite emergency – Suspect mail – Bomb threat/threatening call ▪ Processes to be actioned are included in ▪ The Emergency Response Plan also provides information on the general site evacuation procedure, pipeline isolation, first aid, response to external enquiries. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Roles and responsibilities, drills and exercises, training and competencies, stakeholder communications, and internal and external reporting requirements are set out in the Plan. The document also includes a section on Supporting Forms that includes the recording forms and log sheets to manage the emergency response. ▪ Redundancy is built into the configuration and operation of the power station to allow any major outages to be managed. ▪ Generally only one of the two gas turbines is needed to be operated to meet the peaking demand requirements. ▪ The gas compressors, gas regulation and gas heating processes are duplicated at the facility to provide redundancy ▪ Turbines can be run without the compressor being operational. There is sufficient gas in the pipeline to run both gas turbine units for nine hours at full load. As the facility is only required to operate to meet peak demand, and only needs to operate one of the turbine units to meet its contract obligations, it would be expected that the facility would be able to work for some time without an operating compressor. ▪ If the power station is unable to operate, energy can be purchased from the market to provide Synergy with its requirements under the supply contract. ▪ If a forced outage was experienced, NNP would incur capacity credit penalties for not being available and would have to buy at whatever the market price was at that time. A forced outage would be initially managed onsite by staff at the power station who would inform the Brisbane-based traders and administrators to manage the activities that would need to be completed in order to meet its supply obligations. ▪ NNP has extensive contingency plan testing requirements. ▪ An Emergency Exercise Register is maintained to record all of the details for each test exercise. For each test event, the register records the date, name, type (whether mobilised or desktop), the scenario and location and any additional information. The register also records the number of corrective actions raised, the corrective actions completed and in progress actions. The corrective actions identified in the applicable Incident Report are recorded in a separate worksheet for each test exercise. 		

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			<ul style="list-style-type: none"> ▪ The following emergency response exercise have been completed during the review period (1 November 2016 to 31 October 2021): <ul style="list-style-type: none"> – Low Lube Oil - GT running (Desktop) – February 2021 – Earthquake - all assets (Mobilised) – October 2017 – Snakebite (Desktop) – February 2018 – Pipeline Leak (Mobilised) - October 2018 – Unit 12 330kV Step-up Tx Explosion (Desktop) – March 2019 – 25T Franna leaked 20L hydraulic oil at the Compressor Facility (Mobilised) – September 2019 – Chemical Burn - RO Plant (Desktop) – March 2020 – Exposure to unknown substance (Mobilised) – September 2020 – Transition Pipe Leak (Desktop) – March 2021 – Crane Contacts pipeline (Mobilised) – September 2021 ▪ A planning report is developed for each exercise and an Incident Report is prepared after each event. Examples were viewed during the review. The reports include copies of handwritten notes of what happened during the exercise, step-by-step actions that were completed and any corrective actions that were identified. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that their contingency plans are documented, understood and tested appropriately. 		
10	Financial planning Financial brings together the financial elements of the service delivery to ensure its financial viability over the long term.			A	1
10.1	The financial plan states the financial objectives and identifies strategies and actions to achieve those	4	<ul style="list-style-type: none"> ▪ An Annual Business Plan is prepare each year to inform the different entities in the Partnership of the proposed annual budget and to get approval from all parties. ▪ The annual budget include in the Annual Business Plan includes details of the operating and capital expenditure budgets, with comparisons with previous years' budgets to explain any variances. ▪ The Annual Business Plan provides details on expected maintenance, known operating and technical issues, opportunities and threats in the operating environment, performance against 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>KPIs in order to provide context and justification for the proposed budgets to the Partnership.</p> <ul style="list-style-type: none"> ▪ In addition to the annual budgets for the next year, the Business Plan also includes a five and ten year operating budget and a separate capital expenditure plan. ▪ As such, the Annual Business Plan states the overall financial objectives and identifies the strategies and actions to achieve the objectives. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that their financial plan adequately states the financial objectives and identifies strategies and actions to achieve those. 		
10.2	The financial plan identifies the source of funds for capital expenditure and recurrent costs	4	<ul style="list-style-type: none"> ▪ The annual Business Plan provides a breakdown of the different revenue stream and the capital expenditure and recurrent costs items. ▪ Funding for operating and capital expenditure is shared between the Partnership. ▪ The revenue streams from operating the power station are: <ul style="list-style-type: none"> – Synergy Capacity Revenue – Synergy TPA (Third Party Access) Energy Revenue – Other Bilateral Revenue – Non-Stem Capacity Revenue – Non-Stem Balancing Revenue – Stem Energy Revenue ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that their financial plan adequately identifies the source of funds for capital expenditure and recurrent costs. 	A	1
10.3	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	4	<ul style="list-style-type: none"> ▪ We confirmed that the financials included in the Annual Business Plan provide projections of operating statements (profit and loss) and statement of financial position (balance sheets). ▪ Financial performance against the budget are reported in Business Manager Monthly Reports to the Partnership. Forecast revenue, operating costs, the P&L and Balance actuals are compared against the budgeted amounts, with any variances investigated and explained in the report. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that their financial plan 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			adequately provides projections of operating statements and statement of financial position.		
10.4	The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period	4	<ul style="list-style-type: none"> ▪ As noted above, in addition to the annual budget information, the Annual Business Plan also includes a rolling five year financial forecast. This includes predicted revenue, operating costs and capital expenditure. ▪ Since the acquisition of ERM Power by Shell Energy in 2019, there has been a requirement for a ten year operations budget to be prepared. The current ten year financial plan was also viewed during the review. We confirmed that the ten year plan also provided predicted revenue, operating costs and capital expenditure for the period. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that their financial plan adequately provides firm projections of income for the next five years and reasonable indicative predictions beyond this. 	A	1
10.5	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	4	<ul style="list-style-type: none"> ▪ We confirmed that the annual, five year and ten year operations budget for the Neerabup Power Station included in the Annual Business Plan provides for the operations and maintenance, administration and capital expenditure requirements of the services. ▪ Account codes are assigned to the different components included in the budget (e.g. Salaries, Repairs and Maintenance, Tools and Equipment Servicing, Inspections, Training, etc to allows the budgets to be prepared bottom-up and the different activities tracked against the budget during the year. ▪ A separate capital expenditure plan is developed to provide the proposed projects and programs, with the predicted timings of the expenditure in the forecast. ▪ Based on our interviews with NNP and the documentation provided as evidence, we consider that their financial plan adequately provides for operation and maintenance, administration and capital expenditure requirements. 	A	1
10.6	Large variances in actual / budget income and expenses are identified and corrective action taken where necessary	4	<ul style="list-style-type: none"> ▪ Variances are reviewed monthly between the Power Station Manager and the business's Accountant. ▪ Financial performance against the budget are reported in Business Manager Monthly Reports to the Partnership Management Committee. Forecast revenue, operating costs, the P&L and Balance actuals are compared against the budgeted amounts, with any variances investigated and explained in the 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			report. Examples of the monthly reports were observed during the review. <ul style="list-style-type: none"> ▪ Based on our interviews with NNP and the documentation evidenced, we consider that large variances in actual / budget income and expenses are adequately identified and corrective action taken where necessary. 		
11	Capital expenditure planning The capital expenditure plan provides a schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure for these works over the next five or more years. Since capital investments tend to be large and lumpy, projections would normally be expected to cover at least 10 years, preferably longer. Projections over the next five years would usually be based on firm estimates.			A	1
11.1	11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	4	<ul style="list-style-type: none"> ▪ Capital expenditure planning is included in NNP's annual budgeting process. ▪ NNP's capital plans and budgets are managed in spreadsheets. The annual capital plans out to FY33 are included in the Annual Business Plan submitted to the Partnership Management Committee each year for approval for the next year's budget. ▪ Proposed capex in FY22 and FY23 are well defined for specific projects. ▪ The largest project in the next two years is for IT readiness to prepare for a new AEMO market, although the cost is still unknown and the proposed expenditure is a notional placeholder. ▪ The first major inspection and overhaul of the power station is due to start to take place in 2024 and expected to extend over three years in duration. ▪ The major overhaul of the first gas turbine unit is planned for August 2024, with the work on the second unit currently timetabled for September 2026. Expenditure has been allowed for in FY24 for parts purchase ahead of the overhaul. ▪ The Capital Plan includes a capex contingency in each for the outer years of the ten year plan, with specific projects to be developed closer to these years. ▪ Each proposed capital expenditure project is set up with specific project number for the capex budget. This allows progress on projects and the expenditure to be monitored using a capex tracking spreadsheet. The spreadsheet is also used to inform the accountants if the project has been finished and can be capitalised in the fixed asset register. 		

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ Responsibility for the overall management of the capital expenditure plan and the projects included lies with the Power Station Manager ▪ We reviewed NNP's financial plans and confirmed that there is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates 		
11.2	The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	4	<ul style="list-style-type: none"> ▪ As noted above, the ten year Capital Expenditure Plan provides reasons and the forecast timing for the expenditure. ▪ Information recorded in MEX, the risk register, condition monitoring, supplier recommendations and specialist consultant reports are used as basis for justifying capital expenditure. ▪ Wherever possible the capital works are scheduled during the winter months, when the demands on the power station to providing peaking power are less. ▪ Where required, time is allowed in the schedule for the procurement of long-lead items. Lead times were observed in the ten year Capital Expenditure Plan. ▪ We reviewed NNP's financial plans and confirmed that the capital expenditure plan provides reasons for capital expenditure and timing of expenditure. 	A	1
11.3	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	4	<ul style="list-style-type: none"> ▪ The power station's low capacity factor means little capital expenditure is anticipated until the first major overhaul, forecast to start in FY24. ▪ The major work on the gas turbine units is driven by the OEM specifications. ▪ Refurbishment or recoating of the turbine blades is undertaken based on the condition of the assets. This work has been certified by the OEM (Siemens). ▪ As noted previously, a service contractor was engaged to carry out a risk assessment and modify the maintenance schedule to better align with the operations of a peaking power station rather than the maintenance schedules only being based on run times. As a result, the asset lives have been extended longer than would have been expected if the power station was running continually. ▪ During the review period, as only minor inspections have taken place, the capital expenditure incurred has been driven more by improvements rather than O&M needs. ▪ The Capital Expenditure Plan includes an IT upgrade project in FY25/26 to replace assets that have been in place since the 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			facility came online in 2009 and are now unsupported. An asset life of 15-16 years for these IT control assets is more than reasonable. <ul style="list-style-type: none"> We reviewed NNP's financial plans and confirmed that the capital expenditure plan is consistent with the asset life and condition identified in the asset management plan. 		
11.4	There is an adequate process to ensure that the capital expenditure plan is regularly updated and implemented	4	<ul style="list-style-type: none"> An Annual Business Plan is prepared each year to inform the different entities in the Partnership of the proposed annual budget and to get approval from all parties. The annual budget include in the Annual Business Plan includes details of the capital expenditure budget, with comparisons with previous years' budget to explain any variances. Project status reports are included in the Business Manager Monthly Reports Variances in the Capital are reviewed monthly between the Power Station Manager and the business's Accountant. Financial performance against the budget is reported in Business Manager Monthly Reports to the Partnership Management Committee. Capital expenditure actuals are compared against the budgeted amounts, with any variances investigated and explained in the report. Examples of the monthly reports with reviews of the capital budget were observed during the review. We reviewed NNP's financial plans and confirmed that there is an adequate process to ensure that the capital expenditure plan is regularly updated and implemented. 	A	1
12	Review of AMS The asset management system is regularly reviewed and updated.			A	1
12.1	A review process is in place to ensure that the asset management plan and the asset management system described in it remain current	4	<ul style="list-style-type: none"> As noted in the Asset Planning section of this table, NNP does not have an Asset Management Plan document. As such, it does not have an integrated view of financial, commercial, human resources, operations, maintenance and engineering perspective required to manage the facility contained in single document. Instead of a document or suite of asset planning documents, NNP essentially uses MEX as its AMS, with SCADA used to automate the operation of the facility and SAP used to record and report financial information. The 2009 to 2032 Inspection Plan sets out the overall minor and major maintenance plans for the facility. There is an annual PM set-up in MEX for an annual review of the PM policies and associated work order to allow the operations 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<p>and maintenance tasks involved with the facility to be reviewed and updated if required.</p> <ul style="list-style-type: none"> ▪ The operational performance, O&M costs, and capital expenditure are reviewed regularly and reported monthly to the Partnership's Management Committee ▪ Incident Reports and the Management of Change processes are also used to review and revise processes and practices used at the power station. ▪ Emergency response exercises are conducted regularly, and corrective actions are raised where identified and progressed to implement the recommendations and improvement opportunities. ▪ We consider that NNP's review process meets the requirement that a review process is in place to keep the asset management system current. There is sufficient evidence to conclude that NNP has reviewed and updated its relevant policies and procedures during the review period. 		
12.2	Independent reviews (e.g., internal audit) are performed of the asset management system	4	<ul style="list-style-type: none"> ▪ A number of external audits are carried out at the Power Station. ▪ Under the licence requirements for the gas pipeline, an external audit has to be conducted every two years for the Department of Mines, Industry Regulation and Safety (DMIRS). The Pipeline Safety Case for the pipeline sets out the different areas that NNP can be audited in relation to the operation and maintenance of the pipeline. ▪ We viewed the most recent Pipeline Safety Case audit report and observed that the scope of work for this audit included a focus on: <ul style="list-style-type: none"> – Change management – Permit to Work issues – Competency and training – Contractor management – Incident reporting ▪ Section 3.18 of the Pipeline Safety Case is Maintenance and Repair, and this sets out the obligations that NNP must meet, including using a CMMS for inspections, testing, maintenance and repairs and developing and implementing and maintaining associated procedures to ensure the integrity and reliability of the asset. Although not included in the most recent external audit, these obligations could be included in a future audit if decided by the external auditor. 	A	1

Ref No.	Asset management process or effectiveness criterion	Review priority	Observations & Recommendations	Process and policy rating	Performance rating
			<ul style="list-style-type: none"> ▪ As a result of having stringent obligations from the pipeline regulator, NNP uses this to ensure that the standards it needs to maintain to satisfy the pipeline regulator are applied to the entire power station and all of its assets. ▪ Other external audits that are conducted include: <ul style="list-style-type: none"> – Annual DWER Environmental Licence audit – Annual DWER Stack Emissions Management Plan audit – ERA Electricity Licence Audit (this audit) – Five yearly DMIRS Operations Environmental Management Plan audit ▪ NNP also has an internal audit schedule for conducting its own audits. Some of these audits are related to the external audits that are completed. ▪ Internal audits carried out include: <ul style="list-style-type: none"> – Annual DMIRS Operations Environmental Management Plan internal audit – Annual DMIRS Pipeline audit – Two yearly DMIRS Emergency Response Plan audit ▪ NNP also conducts annual internal audits of the PM policies set up in MEX. This is a standard item include in the annual internal audit schedule. The PM policies are randomly sampled, with risk and any recent issues also taken into consideration, to ensure that the PM policies and the associated work orders are applicable and fit for purpose. ▪ Based on our interviews with NNP staff and the supporting evidence provided, we consider that independent reviews are performed of the asset management system. 		

6 Recommendations

6.1 Performance audit

Table 6-1 Table of current audit non-compliances and recommendations

A. Resolved during current audit period			
Licence obligation reference no. / Recommendation reference from previous audit (if applicable)	Non-compliance / Controls improvement <small>(Rating / Licence obligation / Details of non-compliance or inadequacy of controls)</small>	Date resolved & action taken by the licensee	Auditor's comments
	Nil		

B. Unresolved at end of current Audit period			
Recommendation reference <small>(no./year)</small>	Non-compliance / Controls improvement <small>(Rating / Licence obligation reference number & licence obligation / Details of non-compliance or inadequacy of controls)</small>	Auditor's recommendation	Action taken by the licensee by end of audit period
	Nil		

6.2 Asset management review

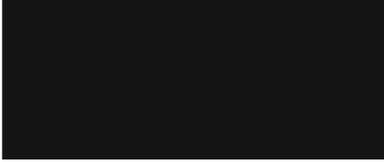
Table 6-2 Table of current review asset system deficiencies/recommendations

A. Resolved during current audit period			
Reference / Recommendation reference from previous review (if applicable)	Process and policy deficiency / Performance deficiency <small>(Rating / Asset management process & effectiveness criterion / Details of deficiency)</small>	Date resolved & action taken by the licensee	Auditor's Comments
	Nil		

B. Unresolved at end of current Audit period			
Recommendation reference <small>(no./year)</small>	Process and policy deficiency / Performance deficiency <small>(Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)</small>	Auditor's recommendation	Action taken by the licensee by end of review period
	Nil		

7 Confirmation of the audit/review

I confirm that the audit/review carried out at NNP on 11, 15 and 25 November 2021 and 2 and 7 December 2021 and recorded in this report is an accurate presentation of our findings and opinions.



Justin Edwards PhD MEng
Cardno (QLD) Pty Ltd
515 St Paul's Terrace
Fortitude Valley QLD 4006

02 February 2022

APPENDIX

A

RISK MANAGEMENT FRAMEWORK

Overview

The ERA's risk-based approach to the audits and reviews is set out in the *Audit and Review Guidelines – Electricity and Gas Licences* (March 2019).

The first stage of an audit or review is to conduct a preliminary assessment of the risk the licensee has not complied with one or more licence obligations or has not managed its assets effectively (preliminary risk assessment). The purpose of the assessment is to identify higher risk areas and focus the audit or review accordingly.

Our initial risk assessment has been documented in the audit/review plan that was prepared at the start of the project. The audit/review plan was approved by the ERA. During the fieldwork phase of the audit or review, the initial risk assessment has been reviewed and, if needed, amended to reflect the audit or review findings.

Identifying the risks

For licence audit, we identified the risks that may affect the licensee's compliance with its licence obligations. The risks were identified for each licence obligation.

For asset management review, we identified the risks that may affect the effectiveness of the licensee's asset management processes.

We identified the risks based on our knowledge and understanding of the licensee's business and the relevant regulatory framework.

Risk analysis

We have analysed the compliance risks using the following two-stage process, as set out in the ERA's *Audit and Review Guidelines – Electricity and Gas Licences* (March 2019):

1. Identify the consequences and likelihood of the inherent risks to give an overall inherent risk rating.
2. Identify and assess the strength of the existing internal controls mitigating the inherent risks.

An 'inherent risk' is the risk of an event occurring if there were no controls in place.

To calculate the 'inherent risk' for a licence obligation, we have identified the likelihood and consequences of the risk occurring using the classifications set out in the ERA's *Audit and Review Guidelines – Electricity and Gas Licences* (March 2019) for licence obligations included in the ERA's Electricity Compliance Reporting Manual (June 2020) for the obligations relevant to the licensee.

The likelihood and consequence ratings are outlined in the following sections.

Likelihood Ratings

The likelihood rating scale is described below.

	Level	Description
A	Likely	Non-compliance is expected to occur at least once or twice a year
B	Probable	Non-compliance is expected to occur once every three years
C	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		
	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

Following the identification and classification of the inherent risks, we have assessed the strength of the existing internal controls mitigating each inherent risk.

The internal control components that have been considered to assess the licensee's ability to manage its risks include:

- > Control environment – corporate culture, corporate governance, organisation structure, assignment of authority and responsibility, documentation of policies and procedures, human resource practices, records management.
- > Licensee's risk assessment process
- > Information systems – including management and regulatory reporting and the business processes relevant to the licence conditions.
- > Control activities – authorisation, segregation of duties, physical controls and security, IT controls.
- > Monitoring of controls – management review, internal audit, other audits, veracity of management information.

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 a suitable level
Moderate	Controls that only cover material risks; improvement required
Weak	Controls are weak or non-existent and do little to mitigate the risks

Assessment of Audit Priority

The assessment of audit priority has been 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 for each licence obligation.

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

B

ASSET MANAGEMENT PERFORMANCE
RATING DEFINITIONS

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 ERA's Audit Guidelines – Electricity and Gas Licenses (March 2019).

Asset Management Adequacy Ratings

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

Asset Management Performance Ratings

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

APPENDIX

C

DETAILS OF KEY DOCUMENTS AND
OTHER INFORMATION SOURCES

Details of key documents and other information sources

Operating Licence clauses

- > 2020-2021 ERA EGL18 Annual Compliance report_email.pdf
- > 210810 2020-2021 ERA Compliance Report_EGL18.pdf
- > Acknowledgement - 2021 Annual Compliance Report - EGL18 - NNP.pdf
- > RE_ ERA Annual Compliance report_Email re Condition 119.pdf
- > 170821 2016-2017 ERA Compliance Report_EGL18.pdf
- > 170821 ERA standing charges & Annual Complaince report letter.pdf
- > 180718 2017-2018 ERA Compliance Report_EGL18_ERA ack Reciept.pdf
- > 180710 2017-2018 ERA Compliance Report_EGL18.pdf
- > 180710 2017-2018 ERA Compliance Report_Email submisison.pdf
- > 2018-2019 ERA ACR signed_ ERA Received confirmation.pdf
- > 2018-2019 ERA ACR signed.pdf
- > 2018-2019 ERA ACR signed_ email submission.pdf
- > 200824 2019-2020 ERA Compliance Report_EGL18_Signed.pdf
- > Acknowledgement - 2020 Annual Compliance Report - EGL18 - NewGen Neerabup Partnership.pdf
- > 2019-2020 ERA EGL18 Annual Compliance report_Email submission.pdf
- > 2021 ERA compliance reporting manual.xlsx
- > 2021 ERA licence payment.pdf
- > 211006 EGL18 Auditor nomination letter.docx
- > 211006 EGL18 Auditor nomination letter.pdf
- > 44108597-PRP-A - Neerabup ERA Audit 2021.pdf
- > Approval of auditor - 2021 audit and review - EGL018 - Newgen Neerabup Partnership.pdf
- > Asset Management Plan (MEX PM Policy Schedule).xlsx
- > Notice - 2016 Audit & Review - EGL018 - NewGen Neerabup Partnership - Copy.pdf
- > 160616 Extension of Audit Review - EGL18 - NewGen Nerrabup Partnership.pdf
- > 161122 ERA Ext Audit Extn to 31Mar2017.pdf
- > Letter to licensee - Approval of plan - 2021 audit and review - EGL018 - Newgen Neerabup Partnership Ltd.pdf
- > Reminder letter - Commencement of 2021 Performance Audit - EGL018 - Newgen Neerabup Partnership.pdf
- > Reminder letter - Commencement of 2021 Performance Audit - EGL018 - Newgen Neerabup Partnership1.pdf
- > Screenshot of MEX listing for Forced Outages as submi9tted to AEMO where capacity has been impacted
- > 110401 Lot 100 Lease - Executed.pdf
- > GWL164093(6)-LICENCE TO TAKE WATER (current).pdf
- > 161208 ERA acceptance of Geographe as Ext Auditors.pdf
- > Screenshot of Work Order history in MEX for submitting the ERA Annual Compliance Report by 31 August
- > 2016 ERA licence payment.pdf
- > 2017 ERA licence payment.pdf

- > 2018 ERA licence payment.pdf
- > 2019 ERA licence payment.pdf
- > 2020 ERA licence payment.pdf
- > 2021 ERA compliance reporting manual (updated notes).xlsx

Asset Planning

- > Examples of Business Manager Monthly Reports
- > Examples of MEX PM policy listings
- > PM policy and work orders for Quarterly and Annual Fire System Checks
- > Contract Performance KPIs
- > Staff bonus operating KPIs
- > PM Policy 412 for the annual review of the MEX PM policy schedules
- > GT11 Compressor Performance tracking spreadsheet
- > Neerabup Preliminary Decommissioning Plan
- > Annual Business Plan, with one, five and ten year operating and capital expenditure budgets
- > Operations Interface Neerabup spreadsheet for daily gas nominations

Asset Creation

- > 211026 NewGen Neerabup Commissioning Test Plan_27-28Oct2021.xls
- > MEX Compliance PM listing.xlsx
- > Fixed Asset Register for Neerabup Power Station assets
- > Examples of capital expenditure approval forms
- > Power Station Security System Upgrade Project cost proposal

Asset Disposal

- > Neerabup Preliminary Decommissioning Plan

- > MEX work order history for Bi-Annual Gas Turbine and Compressor Performance Review
- > MEX work order for Bi-Annual Gas Turbine and Compressor Performance Review, with task details and related documents
- > GT11 Performance Tracking.xlsx
- > Fixed Asset Register for Neerabup Power Station assets

Environmental Analysis

- > Annual Business Plan
- > ERA EGL18 licence
- > Examples of Business Manager Monthly Reports
- > PM policy for submitting the NGERs annual report for greenhouse gas emissions
- > Work Order history for NGERs annual report
- > 2020 NGERs report for Neerabup Power Station
- > WHS Stats spreadsheet

Asset Operations

- > SCADA screens
- > Operational statistics and financial performance included in examples of the Business Manager Monthly Report
- > MEX PM policies and work orders for operational tasks
- > MEX asset register
- > Fixed Asset Register spreadsheet
- > PM policy for Annual Manual Start Policy
- > PM listing for annual manual start tests
- > NPS-PS-OPS-SOP-023 GT Manual Starting & Transition to AGC.pdf
- > Pressure Vessel and Pressure Safety Valve Testing Register
- > NPS-REG-TNG-01 Staff Training Register.xls
- > Siemens Training folder for Gas Turbine T3000 Screens and Selected Function Plans

Asset Maintenance

- > 190828 Thermographic Test Sheet.pdf
- > NPS-PL-OPS-011 Thermographic Survey Procedure.pdf
- > MEX work order history listing for Inspection job types
- > Examples of PM policies, work orders and work order history for maintenance tasks
- > 170228 Neerabup Inspection Plan 2009-2032 (official).xlsx
- > NPS-INC-102 GT11 Gas Detection Trip_closed.pdf
- > NPS-OHS-INC-REG NPS Incident Report Register.xlsx
- > MEX PM203_procedure NPS-PS-OPS-SOP-002 Transformer Instrumentation Testing.pdf
- > MEX PM203-WO10652 Checksheet history_Transformer Instrumentation Testing.pdf
- > MEX PM203-Work Order 10652 history_Transformer Instrumentation Testing.JPG
- > Incident Register
- > Examples of Incident Reports

Asset Management Information System

- > NPS-ENG-ECM-01 Engineering - Management of Change Procedure.pdf
- > NPS-PL-FRM-04 Management of Change Form.pdf
- > NPS-ENG-ECM-REG Management of Change Register.xlsx
- > ERA Compliance Reporting Manual spreadsheet

Risk Management

- > Examples of PM policy risk ratings and priorities in MEX
- > NPS-EHS-REG-RSK NPS Risk Assessment Register.xlsx
- > NPS-MAE-PS-01 Driving Public Roads and Pipeline.pdf
- > NPS-MAE-PS-02 LOC Loss of Integrity.pdf
- > NPS-MAE-PS-03 LOC Exc & 3rd Party Ext Int.pdf
- > R-SE-1816 Rev 0_2021 Operations HAZID Report.pdf
- > MEX PM MAE-SCE.JPG
- > Environmental Management Plan Risk Register

- > Neerabup Pipeline Risk Registers
- > Neerabup site Risk Register

Contingency Planning

- > NPS-PL-OPS-ERP-01 Emergency Response Plan.pdf
- > NPS-REG-EMG-EXI Emergency Exercises Register.xlsx
- > Emergency Exercise RHO Planning - Mobilised.pdf
- > Emergency Exercise Rho Report.pdf

Financial Planning

- > Annual Business Plan
- > Business Manager Monthly Reports

Capital Expenditure Planning

- > Annual Business Plan
- > 10 year Capital Expenditure Plan
- > Business Manager Monthly Reports
- > 170228 Neerabup Inspection Plan 2009-2032 (official).xlsx

Review of Asset Management System

- > Pipeline Safety Case
- > 2017 ERA Electricity Licence Audit
- > MEX PM and work order history for the annual internal audit of MEX PM policies