Ord Hydro

2025 EIRL4 Asset Management System Review

Final report

November 2025

ASSURANCE ADVISORY GROUP

Level 11, 251 Adelaide Terrace
PERTH WA 6000

18 November 2025

Varun Singh
Manager, Compliance and Risk Management
Pacific Blue

Dear Varun

Electricity Integrated Regional Licence (EIRL4) – 2025 Asset Management System review report

We have completed the Electricity Integrated Regional Licence Asset Management System Review for Ord Hydro Pty Ltd for the period 1 July 2022 to 30 June 2025 and are pleased to submit our report to you.

I confirm that this report is an accurate presentation of the findings and conclusions from our audit procedures.

If you have any questions or wish to discuss anything raised in the report, please contact Andrew Baldwin at abaldwin@assuranceadvisory.com.au or myself at slinden@assuranceadvisory.com.au.

Yours sincerely
Assurance Advisory Group

Stephen Linden
Director
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Table of Contents

1. Independent auditor's assurance report

Modified opinion

We have undertaken a limited assurance engagement on the effectiveness of Ord Hydro's Asset Management System (**AMS**), relating to its Electricity Integrated Regional Licence 4 (the **Licence**) for the period 1 July 2022 to 30 June 2025 (**review period**).

In our opinion, based on the procedures we have performed and the evidence we have obtained, except for the effects of the matters described in the Basis for modified conclusion paragraph below, nothing has come to our attention that causes us to believe that Ord Hydro has not established and maintained, in all material respects, an effective AMS for assets subject to the Licence, as measured by the effectiveness criteria in the March 2019 issue of the *Audit and Review Guidelines: Electricity and Gas Licences* (**the Guidelines**) issued by the Economic Regulation Authority (the **ERA**).

Basis for modified conclusion

During the period 1 July 2022 to 30 June 2025, Ord Hydro's asset management system had the following deficiencies that require correction or improvement in order to address the effectiveness criteria nominated in the Guidelines:

Key process & effectiveness criteria	Description
4. Environmental Analysis 4.1: Opportunities and threats in the asset management system environment are assessed	• for improvement items opportunities identified in the annual reports or the internal audit program, there is a need to more formally monitor their execution and completion • there was lack of familiarity within the operations team of the content of management and emergency plans and there were insufficient emergency drills being undertaken.
5. Asset operations *5.1: Operational policies and procedures are documented and linked to service levels required*	• to mitigate the risk of breaching the PPA with Horizon Power, PB have changed the schedule of turbine inspections from 12-months to 6 months and have hired a Load Bank from HP in the interim to provide additional 2 MW load during the dry 2025 season (commissioned on 1 Aug 2025). This needs to be reflected in the AMP • an operator walkdown checklist (formal inspection test plan) is not formally in place. On a weekly basis, the Site Supervisor conducts an inspection to review the functionality of key asset systems however, this is based on the Supervisors personal knowledge rather than a documented checklist.
5.6: Staff resources are adequate and staff receive training commensurate with their responsibilities	• two staff members had not received training in the Emergency Response Plan and were not familiar with the plan requirements • there was no training frequency outlined and hence no refresher courses offered to staff.
9. Contingency planning *9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.*	There is a need to define the testing requirements for each contingency plan and conduct tests as required (even if desktop exercises). Evidence was provided for the completion of testing of the control system and switchyard however, testing of powerline access or power transformers plans was not evident. In addition, there remains a need to update the Powerline Access Contingency Plan to reflect emergency repair processes.

Ord Hydro's responsibility for the AMS

Ord Hydro is responsible for ensuring that it has:

- Complied in all material respects with the requirements of the Licence as specified by the Review Guidelines
- Established and maintained an effective AMS for assets subject to the Licence, as measured by the effectiveness criteria detailed in the Guidelines.

Our independence and quality control

We have complied with the independence and other relevant ethical requirements relating to assurance engagements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. We applied Auditing Standard ASQC 1 *Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, and Other Assurance Engagements* in undertaking this assurance engagement.

Our responsibilities

Our responsibility is to express a limited assurance conclusion on the effectiveness of Ord Hydro's AMS for assets subject to the Licence for the period from 1 July 2022 to 30 June 2025. ASAE 3500 requires that we plan and perform our procedures to obtain limited assurance about whether Ord Hydro has established and maintained, in all material respects, an effective AMS for assets subject to the Licence, as measured by the effectiveness criteria in the Guidelines.

A limited assurance engagement in accordance with ASAE 3500, to report on the effectiveness of Ord Hydro's AMS for assets subject to the Licence involves performing procedures to obtain evidence about processes and controls designed and implemented within Ord Hydro's AMS for assets subject to the Licence. The procedures selected depend on our judgement, including the identification and assessment of risks of Ord Hydro's AMS for assets subject to a Licence being materially ineffective.

Our procedures included:

- Utilising the Review Guidelines as a guide for development of a risk assessment, which involved discussions with key staff and review of documents to perform a preliminary controls assessment
- Development of a Review Plan for approval by the ERA, and an associated work program
- Interviews with and representations from Ord Hydro representatives and key operational and administrative staff to gain an understanding of the development and maintenance of policies and procedural type documentation. A full list of staff engaged has been provided at Appendix B
- Examination of documented policies and procedures for key functional requirements and consideration of their relevance to Ord Hydro 's AMS requirements and standards
- Physical visit to the Ord Hydro site near Kununurra, in northern Western Australia
- Consideration of reports and references evidencing activity
- Consideration of activities performed by Ord Hydro that relate to operation of the assets.

Inherent Limitations

Because of the inherent limitations of an assurance engagement, together with the inherent limitation of any system of controls it is possible that fraud, error or non-compliance with the requirements of the Guidelines may occur and not be detected.

A limited assurance engagement relating to the period from 1 July 2022 to 30 June 2025 does not provide assurance on whether the effectiveness of Ord Hydro's AMS for assets subject to the Licence will continue in the future.

Restricted use

This report has been prepared for use by Ord Hydro for the purpose of satisfying its obligation under Section 14 of the Electricity Industry Act 2004. We disclaim any assumption of responsibility for any reliance on this report to any person other than Ord Hydro, or for any other purpose other than that for which it was prepared. We understand that a copy of the report will be provided to the ERA for the purpose of reporting on the effectiveness of Ord Hydro's AMS. We agree that a copy of this report will be given to the ERA in connection with this purpose, however we accept no responsibility to the ERA or to anyone who is provided with or obtains a copy of our report.

Assurance Advisory Group

Stephen Linden
Director

18 November 2025

2. Executive Summary

2.1 Introduction and Background

The Economic Regulation Authority (the **ERA**) has under the provisions of the Electricity Industry Act 2004 (the **Act**), issued to North Western Energy Pty Ltd, Pacific Hydro Group Two Pty Ltd & Energis Australia Pty Ltd (trading as **Ord Hydro**) an Electricity Integrated Regional Licence (EIRL4 - the **Licence**).

The Licence relates to Ord Hydro operating a hydroelectricity plant at Lake Argyle, approximately 45 kilometres south of Kununurra, in northern Western Australia. The plant has a nominal capacity of 30 megawatts and is forecast to produce 79.6 gigawatt hours of electricity in 2025. The power produced is delivered via a 132 Kilovolt transmission network. Ord Hydro has historically had two key customers – Horizon Power (to power the towns of Kununurra and Wyndham) and the Argyle Diamond Mine. The mine ceased operations in 2020, with electricity demand subsequently declining (expected to fall to no demand during 2025). The Ord Hydro Power Station is managed by Pacific Hydro Pty Ltd and jointly owned by North Western Energy Pty Ltd, Pacific Hydro Group Two Pty Ltd & Energis Australia Pty Ltd.

Section 14 of the Act requires Ord Hydro to provide to the ERA an asset management system review (the **review**) report conducted by an independent expert acceptable to the ERA not less than once in every 24-month period unless otherwise approved by the ERA. With the ERA's approval, Assurance Advisory Group (**AAG**) has been appointed to conduct the review for the period 1 July 2022 to 30 June 2025 (**review period**).

The review has been conducted in accordance with the ERA's March 2019 issue of the *Audit and Review Guidelines: Electricity and Gas Licences* (**Review Guidelines**), which set out 12 key processes in the asset management life-cycle.

2.2 Findings

In considering Ord Hydro's internal control procedures, structure and environment, compliance arrangements and information systems specifically relevant to those effectiveness criteria subject to review, we observed that:

- During the period subject to review, Ord Hydro had maintained a largely appropriate suite of procedures and controls for the effective operation and management of its assets
- Ord Hydro staff demonstrated a working understanding of their roles relevant to the asset management processes within their area of responsibility
- The annual asset management planning process is thorough and incorporates input from required stakeholders. For each year of the review, plans were completed on time, with evidence of appropriate review and approval
- Ord Hydro staff demonstrated an understanding of the risks and opportunities associated with the closure of the ADM, and the resulting impact on operations
- This review has identified four findings requiring corrective action. The action relating to contingency plans is a repeat from the 2022 review (although other contingency plan related actions from that review have been completed).
- The key observations include:
    - Within the operating environmental analysis process, there is a need to more formally manage improvement opportunities and strengthen management and emergency plans, such that drills are conducted on a regular basis
    - Under asset operations, 'walk down' checklists need to be developed and maintained to more formally document site inspections. The frequency of turbine inspections, changed in response to reduced loads from the ADM closure, should be noted in the AMP
    - Also within asset operations, emergency response training needs to be conducted on a regular basis for all required staff

- All relevant contingency plans need to be tested on a regular basis

- Some of the matters noted may have occurred due to long-standing, experienced site-based staff being in place and a strong operational and health & safety record. This may have contributed to a level of complacency around formalising some of the items identified
- There are several further opportunities for Ord Hydro to improve elements of its asset management processes and practices (where criteria are rated as "B" or "2"). In those instances, we raised the potential improvement opportunity with Ord Hydro staff.

  For those instances/opportunities where Ord Hydro had not already recognised and/or taken action to address the issue or opportunity, we raised the potential improvement opportunity with Ord Hydro staff.

This review assessed that, of the 58 elements of Ord Hydro's AMS:

- For the asset management process and policy definition ratings:
  - 51 are rated as "Adequately defined"
  - 6 are rated as "Requires some improvement"
  - 1 are rated as "Requires substantial improvement"
- For the asset management performance ratings:
  - 45 are rated as "Performing effectively"
  - 10 are rated as "Improvement required"
  - 3 are rated as "Corrective action required".

2.3 Ord Hydro's response to previous review recommendations

Ord Hydro has closed 2 of the actions raised in the 2022 review and 1 remains open (contingency planning). Details are provided at Section 5.

2.4 Recommendations to address current asset system deficiencies

A. Resolved during current review period

Not applicable.

B. Unresolved at end of current review period

Reference (no./year)	**Process and policy deficiency / Performance deficiency** (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	**Auditor's recommendation**	**Action taken**
1/2025	**B3** 4. Environmental analysis *4.1 Opportunities and threats in the asset management system environment are assessed* • for improvement items opportunities identified in the annual reports or the internal audit program, there is a need to more formally monitor their execution and completion. • there was lack of familiarity within the operations team of the content of management and emergency plans and there were insufficient emergency drills being undertaken.	• All improvement opportunities identified in the annual reports or the internal audit program need to identify any plans for execution in the report or include references to other documents that may provide this information. They should also be tracked through the CMMS system for execution and completion. The AMP's should also be updated accordingly. • Update all relevant management and emergency plans with requirements for drills/exercises to be conducted and ensure these are carried out on a more regular basis. Drills may need to include local services from time to time.	n/a

Reference (no./year)	Process and policy deficiency / Performance deficiency (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Auditor's recommendation	Action taken
2/2025	**C1** 5. Asset operations *5.1 Operational policies and procedures are documented and linked to service levels required* • to mitigate the risk of breaching the PPA with Horizon Power, PB have changed the schedule of turbine inspections from 12-months to 6 months and have hired a Load Bank from HP in the interim to provide additional 2 MW load during the dry 2025 season (commissioned on 1 Aug 2025). This needs to be reflected in the AMP. • an operator walkdown checklist (formal inspection test plan) is not formally in place. On a weekly basis, the Site Supervisor conducts an inspection to review the functionality of key asset systems however, this is based on the Supervisors personal knowledge rather than a documented checklist.	• Update the current AMP to reflect changes related to the frequency of turbine inspections and to add the 2MW load bank to their asset register. • Develop an operator walkdown checklist to be formally completed by the Site Supervisor during their weekly site visits.	n/a
3/2025	**A3** 5. Asset operations *5.6 Staff resources are adequate and staff receive training commensurate with their responsibilities* • two staff members had not received training in the Emergency Response Plan and were not familiar with the plan requirements. • there was no training frequency outlined and hence no refresher courses offered to staff.	Prepare training programs for the Emergency Response Plan and the relevant refresher courses.	n/a
4/2025	**B3** 9. Contingency planning *9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks* There is a need to define the testing requirements for each contingency plan and conduct tests as required (even if desktop exercises). Evidence was provided for the completion of testing of the control system and switchyard however, testing of powerline access or power transformers plans was not evident. In addition, there remains a need to update the Powerline Access Contingency Plan to reflect emergency repair processes.	Schedule and conduct exercises for all contingency plans on a regular basis and update the Powerline Access Contingency Plan to include emergency repair processes.	n/a

2.5 Scope and objectives

We have conducted a limited assurance engagement in order to state whether, in our opinion, based on our procedures, Ord Hydro has established and maintained, in all material respects, an effective AMS for assets subject to the Licence during the period 1 July 2022 to 30 June 2025, as measured by the effectiveness criteria in the Guidelines

Our engagement was conducted in accordance with Australian Standard on Assurance Engagements ASAE 3500 Performance Engagements, issued by the Australian Auditing and Assurance Standards Board and

provides reasonable assurance as defined in ASAE 3500. The procedures we performed are described in more detail in section 2.7 below.

A limited assurance engagement in accordance with ASAE 3500, to report on the effectiveness of Ord Hydro's AMS for assets subject to the Licence involves performing procedures to obtain evidence about processes and controls designed and implemented within Ord Hydro's AMS for assets subject to the Licence. The procedures selected depend on our judgement, including the identification and assessment of risks of Ord Hydro's AMS for assets subject to a Licence being materially ineffective.

ASAE 3500 also requires us to comply with the relevant ethical requirements of the Australian professional accounting bodies.

In accordance with the Review Guidelines, the review considered the effectiveness of Ord Hydro's existing control procedures within the following 12 key processes in the asset management life cycle:

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

Key processes	Effectiveness criteria
5. Asset operations	5.1 Operational policies and procedures are documented and linked to service levels required 5.2 Risk management is applied to prioritise operations tasks 5.3 Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition 5.4 Accounting data is documented for assets 5.5 Operational costs are measured and monitored 5.6 Staff resources are adequate and staff receive training commensurate with their responsibilities
6. Asset maintenance	6.1 Maintenance policies and procedures are documented and linked to service levels required 6.2 Regular inspections are undertaken of asset performance and condition 6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule 6.4 Failures are analysed and operational/maintenance plans adjusted where necessary 6.5 Risk management is applied to prioritise maintenance tasks 6.6 Maintenance costs are measured and monitored
7. Asset management information systems	7.1 Adequate system documentation for users and IT operators 7.2 Input controls include suitable verification and validation of data entered into the system 7.3 Security access controls appear adequate, such as passwords 7.4 Physical security access controls appear adequate 7.5 Data backup procedures appear adequate and backups are tested 7.6 Computations for licensee performance reporting are accurate 7.7 Management reports appear adequate for the licensee to monitor licence obligations 7.8 Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation
8. Risk management	8.1 Risk management policies and procedures exist and are applied to minimise internal and external risks 8.2 Risks are documented in a risk register and treatment plans are implemented and monitored 8.3 Probability and consequences of asset failure are regularly assessed
9. Contingency planning	9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks

Key processes	Effectiveness criteria
10. Financial planning	10.1 The financial plan states the financial objectives and identifies strategies and actions to achieve those 10.2 The financial plan identifies the source of funds for capital expenditure and recurrent costs 10.3 The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets) 10.4 The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period 10.5 The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services 10.6 Large variances in actual/budget income and expenses are identified and corrective action taken where necessary
11. Capital expenditure planning	11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates 11.2 The capital expenditure plan provides reasons for capital expenditure and timing of expenditure 11.3 The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan 11.4 There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented
12. Review of asset management system	12.1 A review process is in place to ensure the asset management plan and the asset management system described in it remain current 12.2 Independent reviews (e.g. internal audit) are performed of the asset management system

Each key process and effectiveness criterion is applicable to Ord Hydro's Licence and as such was individually considered as part of the review. The Review Plan details the risk assessments made for and review priority assigned to each key process and effectiveness criterion.

2.6 Approach

Our approach for this review involved the following activities, which were undertaken during September 2025:

- Utilising the Guidelines, development of a risk assessment, which involved discussions with key staff and review of documents to undertake a preliminary assessment of relevant controls
- Development of a Review Plan for approval by the ERA
- Correspondence and interviews with Ord Hydro staff to gain an understanding of process controls in place (see Appendix B for staff involved)
- Site visit to Ord Hydro with a focus on understanding the generation assets, their function, normal mode of operation, age and an assessment of the facilities against the AMS review criteria
- Review of documents, processes and controls to assess the overall effectiveness of Ord Hydro's AMS (see Appendix B for reference listing)
- Consideration of the resourcing applied to maintaining those controls and processes
- Reporting of findings to Ord Hydro for review and response.

3. Summary of ratings

In accordance with the Guidelines, the assessment of both the process and policy definition rating (refer to Table 1) and the performance rating (refer to Table 2) for each of the key AMS processes was performed using the below ratings.

Table 1: Process and policy rating scale

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

Table 2: Performance rating scale

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

This report provides:

- A breakdown of each function of the AMS into sub-components as described in the Guidelines. This approach is taken to enable a more thorough review of key processes where individual components within a larger process can be of greater risk to the business therefore requiring different review treatment
- A summary of the ratings applied by the review (Table 3) for each of:
  - Asset management process and policy rating
  - Asset management performance rating.
- Detailed findings, including relevant observations and recommendations (Section 4). Descriptions of the effectiveness criteria can be found in section 4 and the Review Plan.

Table 3: AMS effectiveness summary

Ref	Asset management process and effectiveness criteria	Review priority	Ratings	
			Process and policy	Performance
1. Asset Planning			**A**	**1**
1.1	Asset management plan covers the processes in this table	Priority 4	A	2
1.2	Planning processes and objectives reflect the needs of all stakeholders and is integrated with business planning	Priority 4	A	1
1.3	Service levels are defined in the asset management plan	Priority 4	A	2
1.4	Non-asset operations (e.g. demand management) are considered	Priority 4	A	1
1.5	Lifecycle costs of owning and operating assets are assessed	Priority 5	A	1
1.6	Funding options are evaluated	Priority 5	A	1
1.7	Costs are justified and cost drivers identified	Priority 5	A	1
1.8	Likelihood and consequences of asset failure are predicted	Priority 4	A	1
1.9	Asset management plan is regularly reviewed and updated.	Priority 4	A	1
2. Asset creation and acquisition			**A**	**1**
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options	Priority 4	A	1
2.2	Evaluations include all life-cycle costs	Priority 4	A	1
2.3	Projects reflect sound engineering and business decisions	Priority 4	A	1
2.4	Commissioning tests are documented and completed	Priority 4	A	1
2.5	Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood	Priority 4	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	Priority 4	A	1
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	Priority 4	A	1
3.3	Disposal alternatives are evaluated	Priority 5	A	1
3.4	There is a replacement strategy for assets	Priority 4	A	1

Ref	Asset management process and effectiveness criteria	Review priority	Ratings	
			Process and policy	Performance
4. Environmental analysis			**B**	**2**
4.1	Opportunities and threats in the asset management system environment are assessed	Priority 4	B	3
4.2	Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	Priority 4	A	1
4.3	Compliance with statutory and regulatory requirements	Priority 3	A	2
4.4	Service standard (customer service levels etc) are measured and achieved.	Priority 4	A	1
5. Asset operations			**B**	**2**
5.1	Operational policies and procedures are documented and linked to service levels required	Priority 4	C	1
5.2	Risk management is applied to prioritise operations tasks	Priority 4	A	2
5.3	Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition	Priority 3	A	2
5.4	Accounting data is documented for assets [new criteria]	Priority 4	A	1
5.5	Operational costs are measured and monitored	Priority 4	A	1
5.6	Staff resources are adequate and staff receive training commensurate with their responsibilities	Priority 4	A	3
6. Asset maintenance			**A**	**2**
6.1	Maintenance policies and procedures are documented and linked to service levels required	Priority 4	A	1
6.2	Regular inspections are undertaken of asset performance and condition	Priority 2	A	1
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	Priority 2	A	2
6.4	Failures are analysed and operational/maintenance plans adjusted where necessary	Priority 4	A	1
6.5	Risk management is applied to prioritise maintenance tasks	Priority 2	A	2
6.6	Maintenance costs are measured and monitored	Priority 4	A	1
7. Asset management information systems			**A**	**1**
7.1	Adequate system documentation for users and IT operators	Priority 5	A	1
7.2	Input controls include suitable verification and validation of data entered into the system	Priority 4	A	1
7.3	Security access controls appear adequate, such as passwords	Priority 4	A	1
7.4	Physical security access controls appear adequate	Priority 5	A	2
7.5	Data backup procedures appear adequate and backups are tested	Priority 4	A	1
7.6	Computations for licensee performance reporting are accurate	Priority 5	A	1

Ref	Asset management process and effectiveness criteria	Review priority	Ratings	
			Process and policy	Performance
7.7	Management reports appear adequate for the licensee to monitor licence obligations	Priority 5	A	1
7.8	Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	Priority 4	A	1
8. Risk management			**A**	**1**
8.1	Risk management policies and procedures exist and are applied to minimise internal and external risks	Priority 2	B	1
8.2	Risks are documented in a risk register and treatment plans are implemented and monitored	Priority 4	A	1
8.3	Probability and consequences of asset failure are regularly assessed	Priority 2	A	1
9. Contingency planning			**B**	**3**
9.1	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	Priority 1	B	3
10. Financial planning			**A**	**1**
10.1	The financial plan states the financial objectives and identifies strategies and actions to achieve those	Priority 4	A	1
10.2	The financial plan identifies the source of funds for capital expenditure and recurrent costs	Priority 5	A	1
10.3	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	Priority 5	A	1
10.4	The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	Priority 5	A	1
10.5	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	Priority 4	A	1
10.6	Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	Priority 4	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	Priority 4	A	1
11.2	The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	Priority 5	A	1
11.3	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	Priority 4	A	1
11.4	There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented	Priority 5	A	1
12. Review of asset management system			**A**	**1**
12.1	A review process is in place to ensure the asset management plan and the asset management system described in it remain current	Priority 5	A	1
12.2	Independent reviews (e.g. internal audit) are performed of the asset management system	Priority 5	B	2

4. Detailed findings and recommendations

The following tables contain:

- *Findings*: the reviewer's understanding of the process and any issues that have been identified during the review
- *Recommendations (where applicable)*: recommendations for improvement or enhancement of the process or control.

4.1 Asset Planning

Key process: Asset planning strategies are focused on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price)

Expected outcome: Integration of asset strategies into operational or business plans will establish a framework for existing and new assets to be effectively utilised and their service potential optimised

Overall Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

<table>
<tr><th>Effectiveness criteria</th><th colspan="2">Findings</th></tr>
<tr><td rowspan="2">1.1 Asset management plan covers the processes in this table</td><td colspan="2">The 2022, 2023, 2024 and 2025 Ord Asset Management Plans (AMP's) were obtained and reviewed. All were appropriately reviewed and approved after being updated in accordance with the Asset Management Plan Update Procedure. The key processes covered in the plans include:
Asset Overview
Lifecycle Overview
Key Performance Indicators
Condition Assessment
Risk
Improvement Opportunities
Cost Forecast
Major Works
Generation Forecast Development
Major Changes since previous AMP.
The AMP covers the key processes required with the exception of contingency planning. Ord Hydro maintains a number of contingency plans (detailed at section 9) however, there is no reference to these documents in the AMP.
We raised this matter with Ord Hydro staff as an improvement opportunity.</td></tr>
<tr><td>Process and Policy Rating: Adequately defined (A)</td><td>Performance Rating: Improvement required (2)</td></tr>
<tr><td rowspan="2">1.2 Planning processes and objectives reflect the needs of all stakeholders and is integrated with business planning</td><td colspan="2">Ord Hydro's AMP is prepared in accordance with the Asset Management Plan Update Procedure (last revised July 2024). The Strategic Asset Management Plan (SAMP) Procedure provides additional guidance on the role of the AMP and how it fits into the broader business context. To ensure the needs of stakeholders are considered, the annual update process involves the Generation, Finance and other relevant teams and runs over a 6 month period (May to June). Workshops are held to obtain feedback from executive management and final approval by the General Manager Generation.</td></tr>
<tr><td>Process and Policy Rating: Adequately defined (A)</td><td>Performance Rating: Performing effectively (1)</td></tr>
</table>

Effectiveness criteria	Findings	
1.3 Service levels are defined in the asset management plan	The AMP includes a section on KPI's (section 3) however, this does not include specific performance standards. A key risk noted in section 5 (Risk) however, is breach of Power Purchase Agreement (PPA) obligations (agreement with Horizon Power) around unplanned outages. System interruption and lost time KPI's are noted here. Historical performance trends and commentary are also provided in section 11 of the AMP. Service standards are defined in the Horizon Power Purchase Agreements. Performance is also documented in the 12 Monthly Operations Report. *We raised this matter with Ord Hydro staff as an improvement opportunity.*	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Improvement Required (2)
1.4 Non-asset operations (e.g. demand management) are considered	The AMP discusses the closure of the Argyle Diamond Mine (operations ceased in November 2020) and the resulting reduction in demand. Section 6 'Improvement Opportunities' discusses potential new customers, including estimated demand arising from those opportunities. Additional load has already been taken by Kimberley Cotton Gin via Horizon Power (there is no separate agreement with Ord Hydro). The expected annual load relating to this is eight gigawatt hours.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
1.5 Lifecycle costs of owning and operating assets are assessed	Lifecycle costs are maintained in the Life Cycle Model (LCM) and reviewed on an annual basis. Major works, capital and operating expenditure are described and the major works planned for the next 3 years are detailed in the AMP (section 8 – Major Works). The AMP also contains a section on current asset condition (section 4 – condition assessment) and a summary of the poor/critical components, detailing the future plans to replace or repair these components.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
1.6 Funding options are evaluated	Cost forecasts were calculated using the annual LCM's. Capital and operating expenditure driven from risk mitigation strategies was also assessed in the LCM in the Activity Forecast tables.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
1.7 Costs are justified and cost drivers identified	Costs of generation are calculated annually through the LCM and are included at section 7 of the AMP (Cost Forecast). A three year lookahead of major works and the associated costs is provided at section 8 (Major Works). Different overhaul options (with associated costs) and preferred solutions are provided.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
1.8 Likelihood and consequences of asset failure are predicted	Ord Hydro conducts risk and asset condition assessments. These were annually assessed as part of the business planning cycle and recorded in the LCM and AMP.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

Effectiveness criteria	Findings	
1.9 Asset management plan is regularly reviewed and updated.	We were provided the AMP's from 2022, 2023, 2024 and 2025. All plans were finalised in October in each respective year and include evidence of appropriate review and approval. The AMP is updated annually in accordance with the Asset Management Plan Update Procedure (last revised July 2024) and the Asset Management Planning Schedule.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

4.2 Asset creation and acquisition

Key process: Asset creation/acquisition is the provision or improvement of assets

Expected outcome: The asset acquisition framework is economic, efficient and cost-effective; it reduces demand for new assets, lowers service costs and improves service delivery

Overall Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness criteria	Findings	
2.1 Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options	Ord Hydro carried out a Unit A turbine overhaul and Generator A refurbishment during the review period. Major works to improve or replace asset components are conducted in accordance with Ord Hydro's procedures and are formally project managed. Project plans include justification for work being performed, based on risk assessments, asset inspections, performance data and consideration of the asset lifecycle.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
2.2 Evaluations include all life-cycle costs	Projects are evaluated for full lifecycle costs and are included in the LCM. Review of the LCM confirmed lifecycle costs are included.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
2.3 Projects reflect sound engineering and business decisions	Project plans include analysis of relevant technical and business information. These were sighted for the capital works completed during the review period.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
2.4 Commissioning tests are documented and completed	Project plans include a section on commissioning requirements, with a separate commissioning plan also prepared. Project completion reports provide confirmation of commissioning and detail any significant issues that may have occurred. These were sighted for the capital works completed during the review period.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
2.5 Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood	Project management plans include overviews of required regulatory approvals, health and safety and environment obligations and cultural heritage and social matters to be aware of. These were sighted for the capital works completed during the review period.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

4.3 Asset disposal

Key process: Asset disposal is the consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets

Expected outcome: The asset management framework minimises holdings of surplus and underperforming assets and lowers service costs. The cost-benefits of disposal options are evaluated

Overall Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness criteria	Findings	
3.1 Under-utilised and under-performing assets are identified as part of a regular systematic review process	Overall demand has decreased since the closure of the Argyle Diamond Mine in 2020. Ord Hydro is investigating alternative sources of demand and has advised up to 8 megawatt hours may be taken up by a cotton farm through the existing power purchase agreement with Horizon Power. The annual AMP update process includes consideration of current and forecast demand and is discussed in the AMP.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
3.2 The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	The annual AMP update process includes consideration of current and forecast demand and is discussed in the AMP. Asset performance is also monitored on an ongoing basis and included in management reports.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
3.3 Disposal alternatives are evaluated	Ord Hydro confirmed no assets were disposed of during the review period. Section 2.2 of the 2025 Asset Management Plan discusses the station's end of life and the status of the lease and potential extension. Ord Hydro is in the process of discussing options for the future use of the ADM transmission line with the Western Australian Government.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
3.4 There is a replacement strategy for assets	Critical assets are listed in the Asset Management Plan, along with an assessment of their current condition. Plans for overhauls/improvements are also discussed.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

4.4 Environmental analysis

Key process: Environmental analysis examines the asset management system environment and assesses all external factors affecting the asset management system

Expected outcome: The asset management system regularly assesses external opportunities and threats and identifies corrective action to maintain performance requirements

Overall Process and Policy/Performance rating: Requires some improvement (B) / Improvement required (2)

Effectiveness criteria	Findings
4.1 Opportunities and threats in the asset management system environment are assessed	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Due to reduced power demands through closure of ADM's operations over the last 4 years with final shutdown in February 2025, there has been an overall reduction in OPEX/CAPEX spend, which is a challenge for the site. However, the current period of reduced demand has created an opportunity to perform turbine overhaul works between May and August 2025. Hence, CAPEX for this year is much larger than for last year • The current lifecycle forecast is only presented to June 2036 in the AMP, however in practice operation well beyond this time is expected. This is not currently addressed in the AMP although it was acknowledged in all revisions of AMP since 2021 • Risks related to asset condition and site-based issues are listed in the AMP • Risks are determined and owned by the Operations team, guided by the Asset Management Process • Assessment is aligned with the Pacific Hydro Enterprise Wide Risk Management (EWRM) Framework • All risks are included in the Corporate Risk Register with any updates made following the AMP preparation • Refurbishment of the Unit A turbine has been noted as high risk since 2021. Capex works related to address this risk commenced in 2022 and has finally been executed by August 2025 • Opportunities for improvement identified in the annual report of 2022 remained unchanged in the annual report of 2023, which indicates that none of the opportunities for improvement were executed although were identified • Internal audit has identified the need to review the current environment compliance schedule, update actions in the CMMS compliance calendar and consolidate the Environmental Compliance Framework (now addressed) • To reduce the Risk of fire being initiated by the transmission line faults, or grass fires, bushfires, etc., internal audit identified the following action plan as noted in 12 Monthly Operations Report – December 2024: ▪ Implement Bushfire Management Plan (BMP) and Electric Line Clearance Management plans (ongoing) ▪ Weed management improvement (ongoing) ▪ Transmission line condition monitoring via vibration sensors (on going)

Effectiveness criteria	Findings	
	• Due to the dependence of site operations on remote control, internal audit identified failure of a SCADA system/server, loss of monitoring and control in an emergency as a high risk and recommended following implementation plan to reduce this risk to acceptable levels: ▪ SCADA server Back-ups (on and off site) (ongoing) ▪ Obsolescence strategy (ongoing) ▪ Virtualization of servers (ongoing) ▪ Redundant servers (ongoing) • For the improvement items noted above, although there are timeframes identified for execution in various project related overviews, it is recommended that PB update their AMP to reflect details and timelines of these projects • Environmental Management Plan (last revision dated 07/2024 with next revision in 5 years-time), Emergency Response Plan (last revision dated 08/2024 with next revision in 3 years-time) and Health and Safety Management Plan for the Ord Power Station (last revision dated 10/2023 with next revision due 10/2025) are in place and reviewed as part of this audit. We observed that there was lack of familiarity within the operations team of the content of the above plans **(refer to 5.6 regarding training for operational staff)**. Additionally, there were insufficient emergency drills being undertaken, nor was there a plan for drills outlined in the ERP. Due to the sole-operator scenario of Ord Hydro Power Station, it is critical that regular emergency drills are undertaken to ensure familiarity of the process for site personnel at the time of emergency. It is noted that 9.1 – Contingency Planning addresses gaps in contingency plan testing. The finding and recommendations from 4.1 and 9.1 should be considered concurrently to ensure effective implementation to address both areas. **Recommendation 1/2025** • All improvement opportunities identified in the annual reports or the internal audit program need to identify any plans for execution in the report or include references to other documents that may provide this information. They should also be tracked through the CMMS system for execution and completion. The AMP's should also be updated accordingly • Update all relevant management and emergency plans with requirements for drills/exercises to be conducted and ensure these are carried out on a more regular basis. Drills may need to include local services from time to time. Appropriate documented evidence should be maintained to support completion of this action.	
	Process and Policy Rating: Requires some improvement (B)	**Performance Rating:** Corrective action required (3)

Effectiveness criteria	Findings	
4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Performance KPIs are measured and achieved as outlined in the annual reports and monthly tracking • Availability of service, capacity and continuity have been measured throughout the audit period: ▪ In the calendar year 2022, YTD site availability was 97.3%, compared against the 96.6% budget ▪ In the calendar year 2023, YTD site availability was 97.3%, compared against the 96.7% budget ▪ In the calendar year 2024, YTD site availability was 96.2%, compared against the 96.6% budget ▪ YTD Net Generation Summary for 2022 was 28% of its capacity, for 2023 was 32% and for 2024 was around 33% ▪ Cost of generation has increased substantially since 2021 with the closure of ADM and operating substantially under capacity. There have been no H&S incidents through the audit period, hence emergency response has been a non-issue	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
4.3 Compliance with statutory and regulatory requirements	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • There were 3 low risk non-compliances identified in 2022/23 relating to the provision of information to the ERA, Metrology Procedure and non-compliant registry to the Code • There are no impacts on the Customer and/or other licensees • These items were closed after the 2023 audit.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Improvement required (2)
4.4 Service standard (customer service levels etc) are measured and achieved	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Customer Service Levels are measured and achieved as outlined in their PPA • There were no PPA breaches recorded in the audit period • Three non-compliances had no impact on the Customer and/or other licensees • There were no Customer complaints noted in this audit period.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

4.5 Asset operations

Key process: Asset operations is the day-to-day running of assets (where the asset is used for its intended purpose)

Expected outcome: The asset operation plans adequately document the processes and knowledge of staff in the operation of assets so service levels can be consistently achieved

Overall Process and Policy/Performance rating: Requires some improvement (B) / Improvement required (2)

<table>
<tr><th>Effectiveness criteria</th><th colspan="2">Findings</th></tr>
<tr><td rowspan="2">5.1 Operational policies and procedures are documented and linked to service levels required</td><td colspan="2">Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that:
The ADM closure and increase in roof-top solar installations, has resulted in the station operating at 30% of capacity. Loads frequently reduce below the Original Equipment Manufacturer (OEM) recommended minimum turbine load of 2.5MW/Turbine (5MW/Unit) in the dry season (particularly May, June and July). To mitigate the risk of breaching the PPA with Horizon Power, PB have changed the schedule of turbine inspections from 12-months to 6 months and have hired a Load Bank from HP in the interim to provide additional 2 MW load during the dry 2025 season (commissioned on 1 Aug 2025)
The KPI’s relating to site availability and historical performance trends has been positive to date
An operator walkdown checklist (formal inspection test plan) is not formally in place. On a weekly basis, the Site Supervisor conducts an inspection to review the functionality of key asset systems however, this is based on the Supervisors personal knowledge rather than a documented checklist. Having a formal checklist and documenting the inspection results is important for succession planning and for tracking instrument calibrations of the gauges installed on the assets.
Recommendation 2/2025
Update the current AMP to reflect changes related to the frequency of turbine inspections and to add the 2MW load bank to their asset register
Develop an operator walkdown checklist to be formally completed by the Site Supervisor during their weekly site visits.</td></tr>
<tr><td>Process and Policy Rating: Requires substantial improvement (C)</td><td>Performance Rating: Performing effectively (1)</td></tr>
</table>

Effectiveness criteria	Findings	
5.2 Risk management is applied to prioritise operations tasks	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Risks are determined and owned by the Operations team, assisted by the Asset Management Process. Assessment is completed in alignment with the Pacific Hydro Enterprise Wide Risk Management (EWRM) Framework • High and Extreme risks are deemed unacceptable by the company risk framework and require action to manage them • We have observed that, although AMP and/or the annual reports do not clearly outline the execution timeline and strategy of any improvement opportunities listed, there are CAPEX project overviews outlined in various other documents that have not been referenced in the AMP and/or annual reports • Since we have documented evidence of risk management being applied to prioritise operational tasks through various CAPEX projects, we advise that PB update their current AMP to include references of these documents.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Improvement required (2)
5.3 Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Assets are documented in an asset register and an assessment of assets' physical/structural condition is outlined in detail in the AMP • One of the risks identified is that Control documentation is not being updated reliably when changes are made. Review the document control procedure has been identified as a mitigation strategy that was pencilled in 2022 AMP document and continues to be an identified mitigation strategy in 2025 AMP. *We raised this matter with Ord Hydro staff as an improvement opportunity* • With the Unit A overhaul completed in August 2025, and 2MW load bank added, the assessment of assets' physical/structural condition for Unit A will be changed and should be reflected in the next revision of the AMP document.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Improvement required (2)
5.4 Accounting data is documented for assets	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that accounting data is appropriately documented for assets.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
5.5 Operational costs are measured and monitored	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that operational costs are measured and monitored against budget, on a monthly basis as outlined in the annual reports.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

Effectiveness criteria	Findings	
5.6 Staff resources are adequate and staff receive training commensurate with their responsibilities	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Staff resources are adequate for the operational tasks • Additional staff may be required to address improvement opportunities, execution of risk mitigation strategies and any major CAPEX projects • Staff receive training commensurate with their responsibilities and completion of actual training to the scheduled training is tracked as a KPI in the annual reports • The following gaps in training for operational staff were noted: ▪ two staff members had not received training in the Emergency Response Plan and were not familiar with the plan requirements ▪ there was no training frequency outlined and hence no refresher courses offered to staff. **Recommendation 3/2025** Prepare training programs for the Emergency Response Plan and the relevant refresher courses.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Corrective action required (3)

4.6 Asset maintenance

Key process: Asset maintenance is the upkeep of assets

Expected outcome: The asset maintenance plans cover the scheduling and resourcing of the maintenance tasks so work can be done on time and on cost

Overall Process and Policy/Performance rating: Adequately Defined (A) / Improvement required (2)

Effectiveness criteria	Findings	
6.1 Maintenance policies and procedures are documented and linked to service levels required	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • AMP outlines the condition of the assets in detail • Change Management Update, Defect Management Update etc. in the annual reports provide evidence of how maintenance procedures and policies are adjusted based on the condition assessment of the assets • Monthly downtime distribution is tracked as a trend and KPI in the annual reporting • Review of the recent decommissioning documentation of Unit A refurbishment provided evidence of Maintenance policies and procedures being documented • Scheduled maintenance tasks are evident in the CMMS Work Order system and completion of these tasks are tracked as a KPI on a monthly basis • Ratio of Scheduled tasks versus unscheduled corrective tasks are also tracked as a KPI on a monthly basis • Scope document for refurbishment of Unit A showed how the scope was linked to the required service levels.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
6.2 Regular inspections are undertaken of asset performance and condition	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Site personnel undertake regular inspections as scheduled in their Work Order system • Asset Management Plans provide detailed assessment of asset condition and its performance • Work order database captures all routine scheduled works and inspections, any reactive works that flow on from routine scheduled inspections (Reactive Planned) and any corrective works linked to asset failures (Reactive Unplanned) • Auditor confirms citing of internal safety audit document for 2024, with all corrective actions having been closed out by the due date.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

Effectiveness criteria	Findings	
6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Ord uses CMMS as their Work Order Management system • KPI's with ratios and quantum of scheduled and unscheduled works are tracked and reported on a monthly basis as can be seen in the annual reports • It was identified that site-personnel should more effectively utilise Risk Management processes when deferring any scheduled tasks or reactive planned tasks past their due dates (refer to 6.5) • This can be achieved through training and documenting decisions that the site-personnel make as part of their responsibilities in executing works on site.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Improvement required (2)
6.4 Failures are analysed and operational/maintenance plans adjusted where necessary	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Change Management Update, Defect Management Update etc. in the annual reports provide evidence of how failures are analysed and operational/maintenance plans adjusted based on the condition assessment of the assets • Monthly downtime distribution is tracked as a trend and KPI in the annual reporting • Any unscheduled tasks are differentiated into two categories, one being Reactive Planned Maintenance Activity and the second being Reactive Unplanned. Reactive Planned are the maintenance tasks that are identified as a result of scheduled maintenance inspection task. Reactive Unplanned are the maintenance tasks that are identified due to equipment or asset failure or breakdown • KPIs relating to Ratio of Scheduled to Unscheduled Maintenance Tasks and asset breakdowns are tracked, analysed and maintenance plans adjusted. Auditor confirms citing root cause analysis reports with identified corrective works being completed through PB's Work Order Management process.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

Effectiveness criteria	Findings	
6.5 Risk management is applied to prioritise maintenance tasks	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that: • Risks are determined and owned by the Operations team, assisted by the Asset Management Process. Assessment is completed in alignment with the Pacific Hydro Enterprise Wide Risk Management (EWRM) Framework • High and Extreme risks are deemed unacceptable by the company risk framework and require action to manage them • Opportunities for improvement identified in the annual report of 2022 remained unchanged in the annual report of 2023, which indicates that none of the opportunities for improvement were executed although were identified • ADM closure and the resulting reduction in loads has been a known risk since 2021, however the risks identified in 2022 AMP remain in the 2025 AMP, with the same mitigation strategies listed. Discussions with PB and by reviewing other documentation, it was evident that this risk has been adequately addressed, however the current AMP is not reflective of changes that have been made • Although an acceptable Risk Management framework is in place, the application of it has been deficient in some instances.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Improvement required (2)
6.6 Maintenance costs are measured and monitored	Based on discussions with Pacific Hydro Production Manager, Ord Power Station Site Manager and site personnel, and by reviewing relevant documentation, we established that maintenance costs are measured and monitored against budget, on a monthly basis as outlined in the annual reports.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

4.7 Asset management information systems

Key process: An asset management information system is a combination of processes, data and software supporting the asset management functions

Expected outcome: The asset management information system provides authorised, complete and accurate information for the day-to-day running of the asset management system. The focus of the review is the accuracy of performance information used by the licensee to monitor and report on service standards

Overall Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness criteria	Findings	
7.1 Adequate system documentation for users and IT operators	Ord Hydro uses Maintainly as its maintenance management system (CMMS). Asset performance is monitored through a Supervisory Control and Data Acquisition (SCADA) system and interpreted through the PI System. Ord Hydro personnel were responsible for operating the Maintainly in line with Pacific Hydro's corporate standards.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
7.2 Input controls include suitable verification and validation of data entered into the system	Site performance measurements are performed manually by the Site Manager on a monthly basis and included in management reports subject to further management review.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
7.3 Security access controls appear adequate, such as passwords	System user access controls are described in the Access Control Policy document. Access to systems is based on a formal provisioning process and Multi-factor authentication is also required for any external or Cloud based platforms to integrate with Pacific Blue systems.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
7.4 Physical security access controls appear adequate	Site is secured by fencing, signage and gates and CCTV is in place and is monitored remotely. It was noted that Unit A turbine blades removed during the recent refurbishment are stored outside on pallets (within fenced off site area). There is low risk of unauthorised removal due to the size and weight of the blades however, consideration should be given to storing them in a more secure area until they are disposed of. *We raised this matter with Ord Hydro staff as an improvement opportunity.*	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Improvement required (2)
7.5 Data backup procedures appear adequate and backups are tested	Ord Hydro confirmed that backup procedures were tested on an annual basis. Cyber security and IT controls were managed by head office in accordance with documented policies and procedures.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
7.6 Computations for licensee performance reporting are accurate	Data used to prepare performance reports was obtained from the CMMS, spreadsheets and the SCADA systems. Confirmation was provided that performance reporting was based on accurate computations.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

Effectiveness criteria	Findings	
7.7 Management reports appear adequate for the licensee to monitor licence obligations	Ord Hydro provided examples of management reports prepared during the review period (regular reports are prepared showing operational and financial performance). Review of the reports confirmed that they provide adequate information to monitor obligations.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
7.8 Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	The Pacific Blue Operational Technology System Standard details the minimum security requirements for operational technology systems, to maintain integrity confidentiality and availability of data. The Standard describes Pacific Blue's commitment to aligning to the following, to support system security: • Australian Energy Sector Cyber Security Framework (AESCSF) • Security of Critical Infrastructure (SOCI) Act • International Electrotechnical Commission (IEC) 62443 standards on operational technology in automation and control systems. Multi-factor authentication is also required for any external or Cloud based platforms to integrate with Pacific Blue systems and a privileged access management solution (CyberArk) is in place.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

4.8 Risk management

Key process: Risk management involves the identification of risks and their management within an acceptable level of risk

Expected outcome: The risk management framework effectively manages the risk that the licensee does not maintain effective service standards

Overall Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

<table>
<tr><th>Effectiveness criteria</th><th colspan="2">Findings</th></tr>
<tr><td rowspan="2">8.1 Risk management policies and procedures exist and are applied to minimise internal and external risks</td><td colspan="2">The Pacific Hydro Risk Management Framework document describes the company's overall enterprise risk management framework and procedures. Risks are determined and owned by the relevant teams, assisted by the and assessments completed in alignment with the framework. The framework consists of 5 key pillars:
Strategy
Risk management process
Governance
Compliance
Assurance.
Review of the documented noted that the most recent approval date is recorded as December 2019 with next review date of December 2020 (it is also noted that the most recent changes were made in November 2021). In addition, the document also states that Pacific Hydro has adopted key definitions for Risk Management based on the Australian Standard for Risk Management: AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines. This has subsequently been superseded by AS ISO 31000:2018 Standard - Risk management – Principles and Guidelines. The need to review and update the Risk Management Framework was raised this with Ord Hydro staff as an improvement opportunity.
Note: the application of risk management policies and procedures on maintenance and operations activities is detailed in 6.5 and 5.2.</td></tr>
<tr><td>Process and Policy Rating: Requires some improvement (B)</td><td>Performance Rating: Performing effectively (1)</td></tr>
<tr><td rowspan="2">8.2 Risks are documented in a risk register and treatment plans are implemented and monitored</td><td colspan="2">There are 6 Ord Hydro 'key risks' detailed in section 5 of the Asset Management Plan with a description, mitigation strategy, cost and timelines. The risks include turbine failure, breach of power purchase agreement, turbine damage and control system failure.
There are separate registers for health and safety and environment risks maintained at the corporate level.
Note: the application of risk management policies and procedures on maintenance and operations activities is detailed in 6.5 and 5.2.</td></tr>
<tr><td>Process and Policy Rating: Adequately defined (A)</td><td>Performance Rating: Performing effectively (1)</td></tr>
</table>

Effectiveness criteria	Findings	
8.3 Probability and consequences of asset failure are regularly assessed	The LCM containing Risk Register is reviewed every year during the annual business planning cycle. The probability and consequences were reviewed in addition to the current condition of the assets. Site personnel continually monitored and assessed the power stations operation and the reliability.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

4.9 Contingency planning

Key process: Contingency plans document the steps to deal with the unexpected failure of an asset

Expected outcome: Contingency plans have been developed and tested to minimise any major disruptions to service standards

Overall Process and Policy/Performance rating: Requires some improvement (B) / Corrective action required (3)

Effectiveness criteria	Findings
9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	Through examination of Ord Hydro's emergency response and contingency planning mechanisms, we determined that Ord Hydro has developed a suite of Contingency plans, including: • Ord Hydro Powerline Access - November 2022 (due for review November 2025) • Power transformer (covering all sites) – July 2025 (previous updates in 2021 and 2022) • Substations and Switchyards (covering all sites) - July 2025 (previous updates in 2021 and 2022) • Business Continuity Plan (BCP) Procedure – reviewed September 2025 (annual review). This is a corporate level document covering: ▪ crisis & emergency management (Ord Hydro has a separate site-specific emergency response plan) ▪ business recovery and IT disaster recovery (also refers to a technology and security related Disaster Recovery Plan and a Cyber Security Incident Response Plan) ▪ people recovery and process improvement. There is a need to define the testing requirements for each contingency plan and conduct tests as required. Evidence was provided for the completion of testing of the control system and switchyard however, testing of powerline access or power transformers plans was not evident. In addition, there remains a need to update the Powerline Access Contingency Plan to reflect emergency repair processes. Regarding training requirements, evidence was provided of training being completed by the required staff. However, there is an opportunity to clearly define the nature and timing of training required. *We raised this matter with Ord Hydro staff as an improvement opportunity.* It is noted that the previous two audits (2018 and 2022) included actions regarding the need to test contingency plans and for all relevant staff to receive training. This audit has confirmed the training aspect has been completed (noting the improvement opportunity above) however, completion of contingency plan testing remains incomplete. It is also noted that 4.1 – Opportunities and Threats in the Asset Management System, addresses gaps in management plan testing. The finding and recommendations from 9.1 and 4.1 should be considered concurrently to ensure effective implementation to address both areas. **Recommendation 4/2025** Schedule and conduct exercises for all contingency plans on a regular basis and update the Powerline Access Contingency Plan to include emergency repair processes. Appropriate documented evidence should be maintained to support completion of this action.
	Process and Policy Rating: Requires Some Improvement (B) / **Performance Rating:** Corrective action required (3)

4.10 Financial planning

Key process: Financial brings together the financial elements of the service delivery to ensure its financial viability over the long term

Expected outcome: The financial plan is reliable and provides for the long-term financial viability of the services

Overall Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness criteria	Findings	
10.1 The financial plan states the financial objectives and identifies strategies and actions to achieve those	The financial plan was included in the Business plans, the annual budgets, the LCM's and the AMP's which reflected the business objectives outlined in its business plans. The financial impact of the closure of the ADM and subsequent decline in revenue (and associated cost of sales) is reflected in financial statements and plans. It is also noted that Ord Hydro has recently seen an increase in demand through the Kimberley Cotton Gin (through the existing Horizon Power PPA) of approximately 8 megawatt hours. Ord Hydro continues to explore opportunities to supply power to other potential customers.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
10.2 The financial plan identifies the source of funds for capital expenditure and recurrent costs	It was confirmed that for the review period, all funding was sourced internally (through the Ord Hydro and Pacific Hydro group structure). Ord Hydro's annual budget and financial statements outlined the source of funds for its capital and operational expenditure requirements.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
F10.3 The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	Projections of financial statements (Profit and Loss and Balance sheet) were reported annually and budget forecast for life of asset (through to 2036). The LCM detailed financial modelling undertaken by Ord Hydro.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
10.4 The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	The LCM demonstrated generation for the power station revised annually and budget forecast for life cycle of assets. Detailed financial modelling is performed up to 2036.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
10.5 The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	Detailed lifecycle cost modelling was undertaken annually by Ord Hydro, including all costs associated with operating, maintenance, administration, and CAPEX to 2036.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

Effectiveness criteria	Findings	
10.6 Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	Ord Hydro confirmed during the review period, financials identified variances and comparisons were made against budget where required. Historical justifications were evident in the AMP's and the LCM's.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

4.11 Capital expenditure planning

Key process: 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

Expected outcome: The capital expenditure plan provides reliable forward estimates of capital expenditure and asset disposal income. Reasons for the decisions and for the evaluation of alternatives and options are documented

Overall Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness criteria	Findings	
11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	Ord Hydro confirmed that capital expenditure was assessed in the LCM's and included in the AMP's. The Capex costs were forecast and budgeted into the Life Cycle Model and included in the AMPs (review confirmed all AMP's within the review period included proposed capital expenditure).	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
11.2 The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	Capital expenditure is identified through ongoing risk assessments and based on factors including deterioration of equipment condition, obsolescence of equipment or improvements to provide additional system redundancy. The annual AMP's outlined proposed capital expenditure requirements, based on analysis and risk assessment detailed within the LCM.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
11.3 The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	Capital expenditure was included in the LCM's and included in the forecast budgets for the preceding years.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)
11.4 There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented	Capital expenditure projects were included in the annual AMP's, based on LCM analysis.	
	Process and Policy Rating: Adequately defined (A)	**Performance Rating:** Performing effectively (1)

4.12 Review of asset management system

Key process: The asset management system is regularly reviewed and updated

Expected outcome: The asset management system is regularly reviewed and updated

Overall Process and Policy/Performance rating: Requires Adequately defined (A) / Performing effectively (1)

<table>
<tr><th>Effectiveness criteria</th><th colspan="2">Findings</th></tr>
<tr><td rowspan="2">12.1 A review process is in place to ensure the asset management plan and the asset management system described in it remain current</td><td colspan="2">The following were noted regarding the processes in place to review the Asset Management System:
The Asset Management Plan is subject to annual review in accordance with the Asset Management Plan Update Procedure (last revised July 2024). We obtained the annual plans for 2022, 2023, 2024 and 2025 and confirmed they were updated in accordance with the Update Procedure. The AMP contains all the information listed in section 1.1
Other key deliverables from the annual review process include the:
Lifecycle Cost Model (LCM) - contains the data and modelling which underpin the AMP
Lifecycle Generation Model (LGM) Provided an assessment of expected generation based on historical data, site conditions and expected resource forecast.</td></tr>
<tr><td>Process and Policy Rating: Adequately defined (A)</td><td>Performance Rating: Performing effectively (1)</td></tr>
<tr><td rowspan="2">12.2 Independent reviews (e.g. internal audit) are performed of the asset management system</td><td colspan="2">From discussions with the Executive Manager, Asset Management, Ord Hydro has not had any independent reviews or audits conducted during the review period. In addition, no reviews are planned for the short term and asset management reviews are not included in scheduled assurance activity (such as the internal audit plan).
Pacific Hydro however, maintained certification to ISO 55001:ISO 5501:2014 – Asset Management Systems until 3 July 2024, providing independent assurance that it operated an AMS which complied with the requirements of that standard, until that point of the audit period (approximately 2 years of the 3 year audit period).
It is also noted that Ord Hydro’s AMP is prepared in accordance with the Pacific Blue Asset Management Plan Update Procedure. This ensures that the AMP meets the requirements of Pacific Blue more broadly and is subject to scrutiny and approval by senior Pacific Blue management not directly involved in the day-to-day operation of the site.
Notwithstanding Ord Hydro’s robust internal practices for reviewing and updating its asset management systems, there remains value in ensuring formal, independent reviews are conducted periodically to provide assurances on the effectiveness and performance of those systems.
We raised this matter with Ord Hydro staff as an improvement opportunity.</td></tr>
<tr><td>Process and Policy Rating: Requires Some Improvement (B)</td><td>Performance Rating: Improvement Required (2)</td></tr>
</table>

5. Status of recommendations addressing asset system deficiencies from the previous review

Reference (no./year)	**Process and policy deficiency / Performance deficiency** (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Reviewer's recommendation or action planned	Date resolved	**Further action required** (Yes/No/Not Applicable) **Details of further action required** (including current recommendation reference, if applicable)
A. Resolved during current review period				
10/2022	**Obligation 4.3 (rated as B3)** <u>Compliance with statutory and regulatory requirements</u> • Investigate any statutory or regulatory breaches and assess corrective action taken • Review the adequacy of reporting and monitoring tools • 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. The 2018 and 2019 Annual Compliance Reports and the 2020 and 2021 Standing Charges data were submitted outside the required timeframes. The Licensee updated the Breach Register in October 2022, however, for the duration of the audit period there were inconsistencies between the licensee's breach register and the annual compliance reports (Refer Appendix for details). Additionally, it was determined during the audit that the compliance reports were consistent with the details in the AMPs and LCM compliance data. It was noted that the Licensee had established a process for review of its non-compliances (i.e. Obligations Register, however, it was not specific enough to facilitate compliance and as such was not effective.	A comprehensive review of Ord Hydro's obligations is currently being undertaken. During this review, Ord Hydro will: a) Review its obligations relating to the Ord Hydro asset for completeness and accuracy, including the matters mentioned in the auditors' recommendation b) Update the obligations accordingly in CRIS/Obligations Register c) Establish a risk-based internal audit/review schedule for its annual compliance reporting process **Responsible person**: Manager Compliance and Risk Management **Target date**: 01/07/2023	2023	No – no further action required
11/2022	**Obligation 5.3 (rated as B3)** • Assets are documented in an asset register including asset type, location, material, plans of components and an assessment of assets' physical/ structural condition	Ord Hydro will undertake a review of the AMS systems and documentation and conduct a physical audit of assets against OEM drawings and asset registers.	2023	No – no further action required

Reference (no./year)	**Process and policy deficiency / Performance deficiency** (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Reviewer's recommendation or action planned	Date resolved	**Further action required** (Yes/No/Not Applicable) **Details of further action required** (including current recommendation reference, if applicable)
	• Confirm the policies and procedures have been followed during the review period by examining the asset register, observing operational procedures, analysing costs, etc. There were some deficiencies noted with regards to the Licensee's asset register. Whilst it was recognised the asset register mostly met the requirements the inclusion of all assets and the mechanism to ensure the assets were compliant with statutory requirements was not demonstrated. The familiarity with the asset tree was largely dependent on tacit knowledge of the experience plant managers and operators.	Ord Hydro will also review its statutory and contractual obligations as per 02/2022 and determine an appropriate risk-based approach to auditing against these obligations. **Responsible person**: Production Manager and Manager Compliance and Risk Management **Target date**: 01/09/2023		
B. Unresolved during current review period				
12/2022	**Obligation 9.1 (rated as B3)** • Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks. • During the review period, Ord Hydro has not tested its contingency plans or maintained evidence of the training required for all relevant staff in relation to the purpose and content of the plans.	Ord Hydro considers there may be unacceptable operational risk to carry out live-testing. Ord Hydro will schedule and carry out desktop testing of its contingency plans. Ord Hydro will also review contingency plans to address personnel and training requirements as described in the auditor's recommendation. The Powerline Access Contingency Plan will be updated to reflect emergency repair processes. **Responsible person**: Production Manager **Target date**: 01/09/2023	N/A	Yes – further action required. Specifically: • while evidence of training completion has been provided, there remains a need to document contingency plan testing requirements and for all plans to be tested (no evidence was provided that the powerline access or power transformers plans were tested during the audit period. • the Powerline Access Contingency Plan needs to be updated to include emergency repair processes. It is noted that deficiencies in contingency planning have been noted in the last two audits (2022 and 2018), both in relation to training and testing, While the training matter has been addressed, plan testing needs further improvement (refer to 9.1)

Appendix A - Review Plan

ASSURANCE ADVISORY GROUP

Ord Hydro

2025 EIRL4 Asset Management System Review

Review Plan

29 August 2025

Table of Contents

Introduction

Overview

The Economic Regulation Authority (the **ERA**) has, under the provisions of the Electricity Industry Act 2004 (the **Act**), issued to North Western Energy Pty Ltd, Pacific Hydro Group Two Pty Ltd & Energis Australia Pty Ltd (trading as **Ord Hydro**) an Electricity Integrated Regional Licence (EIRL4 - the **Licence**).

Section 14 of the Act requires Ord Hydro to provide to the ERA, an asset management system review (the review) report, conducted by an independent expert acceptable to the ERA not less than once in every 24-month period unless otherwise approved by the ERA. With the ERA's approval, Assurance Advisory Group (**AAG**) has been appointed to conduct the review for the period 1 July 2022 to 30 June 2025 (**review period**).

The Licence relates to Ord Hydro operating a hydroelectricity plant at Lake Argyle, approximately 45 kilometres south of Kununurra, in northern Western Australia. The plant has a nominal capacity of 30 megawatts and is forecast to produce 79.6 gigawatt hours of electricity in 2025. The power produced is delivered via a 132 Kilovolt transmission network. Ord Hydro has two key customers – Horizon Power (to power the town of Kununurra) and the Argyle Diamond Mine. The mine ceased operations in 2020, with electricity demand subsequently declining (expected to fall to no demand during 2025).

The Ord Hydro Power Station is managed by Pacific Hydro Pty Ltd and jointly owned by North Western Energy Pty Ltd, Pacific Hydro Group Two Pty Ltd & Energis Australia Pty Ltd.

The review will be conducted in accordance with the ERA's March 2019 *Audit and Review Guidelines: Electricity and Gas Licences* (**Review Guidelines**). In accordance with the Review Guidelines this document represents the Review Plan (the **Plan**) that is to be agreed upon by AAG and Ord Hydro and presented to the ERA for approval.

Objective

The objective of the review is to independently examine the effectiveness and performance of the asset management system established for the asset subject to Ord Hydro's Licence during the review period.

Scope

In accordance with the Review Guidelines, the review will consider the effectiveness of Ord Hydro's existing control procedures within the 12 key processes in the asset management life cycle as outlined below at Table 1. Each key process and effectiveness criteria is applicable to Ord Hydro's Licence and as such will be individually considered in this review.

Table 1 – Asset management system key processes and effectiveness criteria

Key processes	Effectiveness criteria
1. Asset Planning	1.1 Asset management plan covers the processes in this table 1.2 Planning processes and objectives reflect the needs of all stakeholders and is integrated with business planning 1.3 Service levels are defined in the asset management plan 1.4 Non-asset operations (e.g. demand management) are considered 1.5 Lifecycle costs of owning and operating assets are assessed 1.6 Funding options are evaluated 1.7 Costs are justified and cost drivers identified 1.8 Likelihood and consequences of asset failure are predicted 1.9 Asset management plan is regularly reviewed and updated
2. Asset creation and acquisition	2.1 Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options 2.2 Evaluations include all life-cycle costs 2.3 Projects reflect sound engineering and business decisions 2.4 Commissioning tests are documented and completed 2.5 Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood
3. Asset disposal	3.1 Under-utilised and under-performing assets are identified as part of a regular systematic review process 3.2 The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken 3.3 Disposal alternatives are evaluated 3.4 There is a replacement strategy for assets
4. Environmental analysis	4.1 Opportunities and threats in the asset management system environment are assessed 4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved 4.3 Compliance with statutory and regulatory requirements 4.4 Service standard (customer service levels etc) are measured and achieved
5. Asset operations	5.1 Operational policies and procedures are documented and linked to service levels required 5.2 Risk management is applied to prioritise operations tasks 5.3 Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition 5.4 Accounting data is documented for assets 5.5 Operational costs are measured and monitored 5.6 Staff resources are adequate and staff receive training commensurate with their responsibilities
6. Asset maintenance	6.1 Maintenance policies and procedures are documented and linked to service levels required 6.2 Regular inspections are undertaken of asset performance and condition 6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule 6.4 Failures are analysed and operational/maintenance plans adjusted where necessary 6.5 Risk management is applied to prioritise maintenance tasks 6.6 Maintenance costs are measured and monitored

Key processes	Effectiveness criteria
7. Asset management information systems	7.1 Adequate system documentation for users and IT operators 7.2 Input controls include suitable verification and validation of data entered into the system 7.3 Security access controls appear adequate, such as passwords 7.4 Physical security access controls appear adequate 7.5 Data backup procedures appear adequate and backups are tested 7.6 Computations for licensee performance reporting are accurate 7.7 Management reports appear adequate for the licensee to monitor licence obligations 7.8 Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation
8. Risk management	8.1 Risk management policies and procedures exist and are applied to minimise internal and external risks 8.2 Risks are documented in a risk register and treatment plans are implemented and monitored 8.3 Probability and consequences of asset failure are regularly assessed
9. Contingency planning	9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks
10. Financial planning	10.1 The financial plan states the financial objectives and identifies strategies and actions to achieve those 10.2 The financial plan identifies the source of funds for capital expenditure and recurrent costs 10.3 The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets) 10.4 The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period 10.5 The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services 10.6 Large variances in actual/budget income and expenses are identified and corrective action taken where necessary
11. Capital expenditure planning	11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates 11.2 The capital expenditure plan provides reasons for capital expenditure and timing of expenditure 11.3 The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan 11.4 There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented
12. Review of asset management system	12.1 A review process is in place to ensure the asset management plan and the asset management system described in it remain current 12.2 Independent reviews (e.g. internal audit) are performed of the asset management system

Ord Hydro's responsibility for maintaining an effective asset management system

Ord Hydro is responsible for putting in place policies, procedures and controls, which are designed to provide for an effective asset management system for assets subject to the Licence.

AAG's responsibility

Our responsibility is to express a limited assurance conclusion on whether, based on the procedures performed and the evidence obtained, anything has come to our attention that causes us to believe that Ord Hydro's AMS for assets subject to its Licence have not been established and maintained, in all material respects, in accordance with the Licence as measured by the effectiveness criteria in the Guidelines for the period from 1 July 2022 to 30 June 2025. The review will be conducted in accordance with Australian Standard on Assurance Engagements ASAE 3500 Performance Engagements (**ASAE 3500**), issued by the Australian Auditing and Assurance Standards Board.

ASAE 3500 requires that we plan and perform the review to obtain limited assurance about whether the AMS for assets subject to the Licence is materially ineffective. A limited assurance engagement conducted in accordance with ASAE 3500 involves identifying areas where the AMS for assets subject to a Licence is likely to be materially ineffective, addressing the areas identified and considering the process used to prepare the AMS for assets subject to the Licence. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

Limitations of use

Our report will be produced solely for the information and internal use of Ord Hydro and is not intended to be and should not be used by any other person or entity. No other person or entity is entitled to rely, in any manner or for any purpose, on our report.

We understand that a copy of our report will be provided to the ERA for the purpose of meeting Ord Hydro's reporting requirements of section 14 of the Act. We agree that a copy of our report may be provided to the ERA for its information in connection with this purpose, however we accept no responsibility to the ERA or to anyone who is provided with or obtains a copy of our reports.

This plan is intended solely for the use of Ord Hydro for the purpose of its reporting requirements under section 14 of the Act.

Inherent limitations

A review consists primarily of making enquiries, primarily of persons responsible for the management of assets, applying analytical and other review procedures, and examination of evidence for a small number of transactions or events. A review is substantially less in scope than a reasonable assurance "audit" conducted in accordance with ASAEs. Accordingly, we will not express an audit opinion in the asset management system review report.

Independence

In conducting our engagement, we will comply with the independence requirements of the Australian professional accounting bodies.

Approach

The review will be conducted in three distinct phases, being a risk assessment, system analysis/policy and procedure review and examination of performance. From the review results, a report will be produced to outline findings, overall assessments and recommendations for improvement in line with the Review Guidelines. Each step of the review is discussed in detail below.

Risk assessment

The review will focus on identifying or assessing those activities and management control systems to be examined and the matters subject to review. Therefore, the purpose of conducting the risk assessment as a preliminary phase enables the reviewer to focus on pertinent/high risk areas of Ord Hydro's asset management systems established for the assets subject to Ord Hydro's licence. The risk assessment considers changes to Ord Hydro's relevant systems and processes and any matters of significance raised by the ERA and/or Ord Hydro. The level of risk and materiality of the process determine the level of review required i.e. the greater the materiality and the higher the risk, the more effort will be applied.

The first step of the risk assessment is the rating of the potential consequences of Ord Hydro not effectively maintaining an asset management system for the assets subject to its licence, in the absence of mitigating controls. The consequence classification descriptions listed at Table 1 of the Reporting Manual, provides the risk assessment with context to enable the appropriate consequence rating to be applied to each component of the asset management system subject to review.

Once the consequence has been determined, the likelihood of Ord Hydro not effectively maintaining an asset management system for the assets subject to its licence (with reference to the defined effectiveness criteria) is assessed using the likelihood rating listed at Table 17 of the Review Guidelines (refer to Appendix 1). The assessment of likelihood is based on the expected frequency of non-performance against the defined criteria, over a period of time.

Table 2 below (sourced from Table 18 of the Review Guidelines) outlines the combination of consequence and likelihood ratings to determine the level of inherent risk associated with each individual effectiveness criteria

Table 2: Inherent risk rating

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

Once the level of inherent risk has been determined, the adequacy of existing controls is assessed in order to determine the level of control risk. Controls are assessed and prioritised as weak, moderate or strong dependant on their suitability to mitigate the risks identified. The control adequacy ratings used by this risk assessment are aligned to the ratings listed at Table 18 of the Audit Guidelines (refer to Appendix 1-3). Once inherent risks and control risks are established, the audit priority can then be determined using the matrix listed at Table 21 of the Audit Guidelines (refer to Table 3 below). Essentially, the higher the level of risk the more substantive testing is required.

Table 3: Assessment of Review Priority

	Preliminary adequacy of existing controls		
Inherent Risk	Weak	Moderate	Strong
High	Review priority 1	Review Priority 2	
Medium	Review priority 3	Review Priority 4	
Low	Review Priority 5		

The following table outlines the review requirement for each level of review priority. Testing can range from extensive substantive testing around the controls and activities of particular processes (including physical inspection of asset infrastructure, which will be given greater attention for those processes with a review priority of 1, 2 or 3) to confirming the existence of controls through discussions with relevant staff.

Table 4: Review Priority Table

Priority rating	Audit requirement
Review Priority 1	• Via interview and walkthrough, understand relevant processes and controls as they apply to each asset management system effectiveness criteria • Examine relevant documents, registers and reports as they apply to each asset management system effectiveness criteria • Obtain evidence of policies, procedures and controls being in place and working effectively • Controls testing and extensive substantive testing of activities and/or transactions as they apply to each asset management system effectiveness criteria, including physical inspection of applicable asset infrastructure • Follow-up and if necessary, re-test matters previously reported.
Review Priority 2	• Via interview and walkthrough, understand relevant processes and controls as they apply to each asset management system effectiveness criteria • Examine relevant documents, registers and reports as they apply to each asset management system effectiveness criteria • Obtain evidence of policies, procedures and controls being in place and working effectively • Controls testing and moderate substantive testing of activities and/or transactions as they apply to each asset management system effectiveness criteria, including physical inspection of applicable asset infrastructure • Follow-up and if necessary, re-test matters previously reported.
Review Priority 3	• Via interview and walkthrough, understand relevant processes and controls as they apply to each asset management system effectiveness criteria • Examine relevant documents, registers and reports as they apply to each asset management system effectiveness criteria • Limited controls testing (moderate sample size) of activities and/or transactions as they apply to each asset management system effectiveness criteria, including physical inspection of applicable asset infrastructure. Only substantively test transactions if further control weakness found • Follow-up of matters previously reported.
Review Priority 4	• Confirmation of existing controls via walk through of key processes and examination of key documents including policies and procedures, compliance/breach registers and reports • Follow-up of matters previously reported.
Review Priority 5	• Confirmation of existing controls via observation, discussions with key staff and/or reliance on key references including policies and procedures, compliance/breach registers and reports ("desktop review").

The risk assessment has been discussed with Ord Hydro stakeholders to gain their input as to the appropriateness and factual accuracy of risk and control ratings and associated explanations. The key sources considered in reaching our preliminary assessment of the risk and control ratings were based on:

- Prior assessments of the state of controls during the 2022 EIRL4 AMS review
- Our understanding of Ord Hydro's assets and internal processes
- Any other factors that may influence the level or strength of controls
- Consideration of relevant circumstances and activity that trigger specific performance issues

At this stage, the risk assessment can only be a preliminary assessment based on reading of documentation and interviews by the auditors. It is possible that the ratings and risk assessment comments may be revised as we conduct our work and new evidence comes to light. The risk assessment is attached at Appendix 2.

System analysis / policy and procedure review

The level of policy and procedure review required will be determined utilising the priority scale. Once the priority level has been defined, the review will consist of:

- Interviewing Ord Hydro representatives and key operational and administrative staff responsible for the development and maintenance of policies and procedural type documentation
- Examination of documented policies and procedures for key functional requirements and consideration of their relevance to Ord Hydro's asset management system requirements and standards.

The policy and procedure definition element of the asset management system review will be performed to provide a rating as defined under Table 5 (refer below).

Key documents which may be subject to review include the following(a full list of documents examined will be included in the review report):

- Asset Management Plan(s)
- Asset Maintenance Policies and Procedures
- Asset Performance Reports
- Regulatory Register and Compliance Reports
- Environment Management Plan
- Risk Register
- Asset and Critical Spares Register
- Information Management and Security Policies and Procedures
- Contingency and Disaster Recovery Plans
- Financial Planning Procedures and Financial Reports
- Reports from other Asset Management Reviews conducted (if any)
- Emergency Response Management Plan

Testing/review

Using the results of the risk assessment and systems analysis, detailed testing and analysis will be performed to compare those standards maintained by Ord Hydro with the relevant requirements.

Control testing is performed for those obligations with an audit priority 3 and above and where there is relevant activity. This method of testing will involve:

- Understanding the population of transactions
- Selecting a sample of transactions to examine compliance with relevant sections of applicable legislation, codes and regulations
- Comparing the sample selected to expected requirements as mandated by relevant sections of applicable legislation, codes and regulations.

A full work program will be completed to record the specific aspects of our testing and analyses for each obligation. This work program will be based on:

- The audit priority determined by the risk assessment applicable to each obligation
- The results of the systems analysis performed, as described above
- AAG's sampling methodology, which is in accordance with the Audit Guidelines and ASA 530 (Audit Sampling) and takes account of the volume and frequency (e.g. daily, weekly, monthly ,annual) of relevant transactions. Sample sizes typically range from 1 to 20, increasing with the volume and frequency of transactions as well as the audit priority rating
- The location of personnel and transactions to be tested.

Examination of performance

The actual performance of the relevant controls and processes in place will then be examined via:

- Consideration of reports and references evidencing activity
- Interviews with Ord Hydro representatives and key operational and administrative staff
- Physical visit to the facility's site
- Consideration of the facility's function, normal modes of operation and age.

A full work program will be completed to record the specific aspects of our review and examination of the performance of each asset management system key process. This work program will be based on:

- The review priority determined by the risk assessment to be applicable to each effectiveness criteria
- The results of the policy and procedure review, as described above
- The location of personnel and activity to be tested.

Review fieldwork will include a visit to the Ord Hydro site near Kununurra, plus meetings with Ord Hydro staff who are located primarily in Melbourne. Meetings will be virtual where appropriate.

The performance effectiveness element of the asset management system review will be performed to provide a rating as defined under Table 6 (refer below).

Reporting

In accordance with the Review Guidelines, the reviewer must provide an assessment of both the process and policy definition rating (refer to Table 5 below and Table 9 of the Guidelines) and the performance rating (refer to Table 6 below and Table 10 of the Guidelines) for each of the key processes in Ord Hydro's asset management system.

Ord Hydro is responsible for providing a separate post review implementation plan, if required.

Table 5: Asset management process and policy definition adequacy ratings

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

Table 6: Asset management performance ratings

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

Resources and team

Key Ord Hydro contacts

The key contacts for this review are:

- Varun Singh - Manager, Compliance and Risk Management | Pacific Blue (Melbourne based)
- Adrian Ciccicioppo - Production Manager | Pacific Blue (Victoria based)
- Raymond Monck - Ord Hydro Manager | Pacific Blue (site based)
- Graeme Cornell - Ord Hydro Manager | Pacific Blue (site based)

AAG Staff

AAG staff who will be involved with this assignment are:

- Andrew Baldwin - Executive Director | Lead Auditor
- Preston Bayley - Executive Director | Support Auditor
- Tanuja Sanders - Senior Engineer | Support Auditor / Engineer Consultant

Resumes for key AAG staff are outlined in the proposal accepted by Ord Hydro and subsequently presented to the ERA.

Timing

The initial risk assessment phase was completed, after which the draft review plan and risk assessment were presented to Ord Hydro for comment prior to submission to the ERA for review and approval.

The remainder of the fieldwork phase is scheduled to be performed over the period mid-August to late September 2025 (including a site visit in early September 2025), enabling draft and final reports to be submitted to the ERA by the due dates of 1 October 2025 and 31 October 2025 respectively.

AAG time and staff commitment to the completion of the review is outlined in the proposal accepted by Ord Hydro and subsequently presented to the ERA. In summary, the estimated time allocated to each activity is as follows:

- Planning (including risk assessment): 14 hours
- Fieldwork (including system analysis/walkthrough and testing/review): 58 hours
- Reporting: 28 hours

Appendix 1 - Risk assessment key

1-1 Criteria for classification of consequence of ineffective performance

Source: Modified from Electricity Compliance Reporting Manual January 2023

Classification	Criteria for classification
Major	Classified on the bases that: • The consequences of ineffective performance would cause major damage, loss or disruption to customers; or • The consequences of ineffective performance would endanger or threaten to endanger the safety or health of a person.
Moderate	Classified on the basis that the consequences of ineffective performance affect the efficiency and effectiveness of the licensee's operations or service provision, but do not cause major damage, loss or disruption to customers.
Minor	Classified on the basis that: • The consequences of ineffective performance are relatively minor – i.e. ineffective performance will have minimal effect on the licensee's operations or service provision and do not cause damage, loss or disruption to customers; • Assessment of performance against the obligation is immeasurable; • The matter of ineffective performance is identified by a party other than the licensee; or • The licensee only needs to use its reasonable or best endeavours to demonstrate effective performance, or where the obligation does not otherwise impose a firm obligation on the licensee.

1-2 Likelihood ratings

Source: Audit and Review Guidelines: Electricity and Gas Licences March 2019

	Level	Criteria
A	Likely	Ineffective process or performance is expected to occur at least once or twice a year
B	Probable	Ineffective process or performance is expected to occur every three years
C	Unlikely	Ineffective process or performance is expected to occur at least once every 10 years or longer

1-3 Preliminary adequacy ratings for existing controls

Source: Audit and Review Guidelines: Electricity and Gas Licences March 2019

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

Appendix 2 - Risk assessment

1. Asset Planning	
Key process	Asset planning strategies focus on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price)
Outcome	Asset planning is integrated into operational or business plans, providing a framework for existing and new assets to be effectively utilised and their service optimised

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
1.1	Asset management plan covers the processes in this table	Moderate	Probable	Medium	Moderate	Priority 4
1.2	Planning process and objectives reflect the needs of all stakeholders and are integrated with business planning	Moderate	Unlikely	Medium	Moderate	Priority 4
1.3	Service levels are defined in the asset management plan	Moderate	Unlikely	Medium	Moderate	Priority 4
1.4	Non-asset options (e.g. demand management) are considered	Moderate	Unlikely	Medium	Moderate	Priority 4
1.5	Lifecycle costs of owning and operating assets are assessed	Minor	Unlikely	Low	Moderate	Priority 5
1.6	Funding options are evaluated	Minor	Unlikely	Low	Moderate	Priority 5
1.7	Costs are justified and cost drivers identified	Minor	Probable	Low	Moderate	Priority 5
1.8	Likelihood and consequences of asset failure are predicted	Moderate	Probable	Medium	Moderate	Priority 4
1.9	Asset management plan is regularly reviewed and updated	Moderate	Probable	Medium	Moderate	Priority 4

2. Asset creation and acquisition	
Key process	Asset creation/acquisition is the provision or improvement of assets
Outcome	The asset acquisition framework is economic, efficient and cost-effective; it reduces demand for new assets, lowers service costs and improves service delivery

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options	Moderate	Probable	Medium	Moderate	Priority 4
2.2	Evaluations include all life-cycle costs	Moderate	Probable	Medium	Moderate	Priority 4
2.3	Projects reflect sound engineering and business decisions	Moderate	Probable	Medium	Moderate	Priority 4
2.4	Commissioning tests are documented and completed	Moderate	Probable	Medium	Moderate	Priority 4
2.5	Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood	Moderate	Probable	Medium	Moderate	Priority 4

3. Asset disposal	
Key process	Asset disposal is the consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets
Outcome	The asset management framework minimises holdings of surplus and underperforming assets and lowers service costs. The cost-benefits of disposal options are evaluated

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
3.1	Under-utilised and under-performing assets are identified as part of a regular systematic review process	Moderate	Probable	Medium	Moderate	Priority 4
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	Moderate	Probable	Medium	Moderate	Priority 4
3.3	Disposal alternatives are evaluated	Minor	Unlikely	Low	Moderate	Priority 5
3.4	There is a replacement strategy for assets	Moderate	Probable	Medium	Moderate	Priority 4

4. Environmental Analysis						
Key process	Environmental analysis examines the asset management system environment and assesses all external factors affecting the asset management system					
Outcome	The asset management system regularly assesses external opportunities and threats and identifies corrective action to maintain performance requirements					
Ref	**Effectiveness criteria**	**Consequence**	**Likelihood**	**Inherent risk rating**	**Controls assessment**	**Review priority**
4.1	Opportunities and threats in the asset management system environment are assessed	Moderate	Probable	Medium	Strong	Priority 4
4.2	Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	Moderate	Probable	Medium	Moderate	Priority 4
4.3	Compliance with statutory and regulatory requirements	Moderate	Probable	Medium	Weak	Priority 3
4.4	Service standard (customer service levels etc) are measured and achieved.	Moderate	Unlikely	Medium	Strong	Priority 4

5. Asset operations						
Key process	Asset operations is the day-today running of assets (where the asset is used for its intended purpose)					
Outcome	The asset operation plans adequately document the processes and knowledge of staff in the operation of assets so service levels can be consistently achieved					
Ref	**Effectiveness criteria**	**Consequence**	**Likelihood**	**Inherent risk rating**	**Controls assessment**	**Review priority**
5.1	Operational policies and procedures are documented and linked to service levels required	Moderate	Probable	Medium	Moderate	Priority 4
5.2	Risk management is applied to prioritise operations tasks	Moderate	Probable	Medium	Moderate	Priority 4
5.3	Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition	Moderate	Probable	Medium	Weak	Priority 3
5.4	Accounting data is documented for assets	Moderate	Probable	Medium	Moderate	Priority 4
5.5	Operational costs are measured and monitored	Moderate	Probable	Medium	Moderate	Priority 4
5.6	Staff resources are adequate and staff receive training commensurate with their responsibilities	Moderate	Probable	Medium	Moderate	Priority 4

6. Asset maintenance						
Key process	Asset maintenance is the upkeep of assets					
Outcome	The asset maintenance plans cover the scheduling and resourcing of the maintenance tasks so work can be done on time and on cost					
Ref	**Effectiveness criteria**	**Consequence**	**Likelihood**	**Inherent risk rating**	**Controls assessment**	**Review priority**
6.1	Maintenance policies and procedures are documented and linked to service levels required	Moderate	Probable	Medium	Moderate	Priority 4
6.2	Regular inspections are undertaken of asset performance and condition	Major	Probable	High	Moderate	Priority 2
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	Major	Probable	High	Moderate	Priority 2
6.4	Failures are analysed and operational/maintenance plans adjusted where necessary	Moderate	Probable	Medium	Moderate	Priority 4
6.5	Risk management is applied to prioritise maintenance tasks	Major	Probable	High	Moderate	Priority 2
6.6	Maintenance costs are measured and monitored	Moderate	Probable	Medium	Moderate	Priority 4

7. Asset management information systems						
Key process	An asset management information system is a combination of processes, data and software supporting the asset management functions					
Outcome	The asset management information system provides authorised, complete and accurate information for the day-to-day running of the asset management system. The focus of the review is the accuracy of performance information used by the licensee to monitor and report on service standards					
Ref	**Effectiveness criteria**	**Consequence**	**Likelihood**	**Inherent risk rating**	**Controls assessment**	**Review priority**
7.1	Adequate system documentation for users and IT operators	Minor	Unlikely	Low	Strong	Priority 5
7.2	Input controls include suitable verification and validation of data entered into the system	Moderate	Probable	Medium	Moderate	Priority 4
7.3	Security access controls appear adequate, such as passwords	Moderate	Unlikely	Medium	Moderate	Priority 4
7.4	Physical security access controls appear adequate	Minor	Unlikely	Low	Strong	Priority 5
7.5	Data backup procedures appear adequate and backups are tested	Moderate	Probable	Medium	Moderate	Priority 4
7.6	Computations for licensee performance reporting are accurate	Minor	Probable	Low	Moderate	Priority 5
7.7	Management reports appear adequate for the licensee to monitor licence obligations	Minor	Probable	Low	Moderate	Priority 5
7.8	Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	Moderate	Unlikely	Medium	Moderate	Priority 4

8. Risk management						
Key process	Risk management involves the identification of risks and their management within an acceptable level of risk					
Outcome	The risk management framework effectively manages the risk that the licensee does not maintain effective service standards					
Ref	**Effectiveness criteria**	**Consequence**	**Likelihood**	**Inherent risk rating**	**Controls assessment**	**Review priority**
8.1	Risk management policies and procedures exist and are applied to minimise internal and external risks	Major	Probable	High	Moderate	Priority 2
8.2	Risks are documented in a risk register and treatment plans are implemented and monitored	Moderate	Probable	Medium	Moderate	Priority 4
8.3	Probability and consequences of asset failure are regularly assessed	Major	Probable	High	Moderate	Priority 2

9. Contingency planning						
Key process	Contingency plans document the steps to deal with the unexpected failure of an asset.					
Outcome	Contingency plans have been developed and tested to minimise any major disruptions to service standards.					
Ref	**Effectiveness criteria**	**Consequence**	**Likelihood**	**Inherent risk rating**	**Controls assessment**	**Review priority**
9.1	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	Major	Likely	High	Weak	Priority 1

10. Financial planning						
Key process	Financial brings together the financial elements of the service delivery to ensure its financial viability over the long term					
Outcome	The financial plan is reliable and provides for the long-term financial viability of the services					
Ref	**Effectiveness criteria**	**Consequence**	**Likelihood**	**Inherent risk rating**	**Controls assessment**	**Review priority**
10.1	The financial plan states the financial objectives and identifies strategies and actions to achieve those	Moderate	Probable	Medium	Moderate	Priority 4
10.2	The financial plan identifies the source of funds for capital expenditure and recurrent costs	Minor	Probable	Low	Moderate	Priority 5
10.3	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	Minor	Probable	Low	Moderate	Priority 5
10.4	The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	Minor	Probable	Low	Moderate	Priority 5
10.5	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	Moderate	Probable	Medium	Moderate	Priority 4
10.6	Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	Moderate	Probable	Medium	Moderate	Priority 4

11. Capital expenditure planning	
Key process	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
Outcome	The capital expenditure plan provides reliable forward estimates of capital expenditure and asset disposal income. Reasons for the decisions and for the evaluation of alternatives and options are documented

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
11.1	There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	Moderate	Probable	Medium	Moderate	Priority 4
11.2	The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	Minor	Probable	Low	Moderate	Priority 5
11.3	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	Moderate	Probable	Medium	Moderate	Priority 4
11.4	There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented	Minor	Probable	Low	Moderate	Priority 5

12. Review of asset management system	
Key process	The asset management system is regularly reviewed and updated
Outcome	The asset management system is regularly reviewed and updated

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
12.1	A review process is in place to ensure the asset management plan and the asset management system described in it remain current	Minor	Probable	Low	Moderate	Priority 5
12.2	Independent reviews (e.g. internal audit) are performed of the asset management system	Minor	Probable	Low	Moderate	Priority 5

Appendix 3 - Previous review recommendations

The 2022 review made the following three recommendations:

Reference 10/2022

Obligation 4.3 (rated as B3)

Compliance with statutory and regulatory requirements

- Investigate any statutory or regulatory breaches and assess corrective action taken
- Review the adequacy of reporting and monitoring tools

This finding was recorded as part of a broader finding recorded (02/2022) in the Licence Performance Audit section of the report (performance audit was conducted at the same time as the AMS review):

- 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.
- The 2018 and 2019 Annual Compliance Reports and the 2020 and 2021 Standing Charges data were submitted outside the required timeframes. The Licensee updated the Breach Register in October 2022, however, for the duration of the audit period there were inconsistencies between the licensee's breach register and the annual compliance reports (Refer Appendix for details). Additionally, it was determined during the audit that the compliance reports were consistent with the details in the AMPs and LCM compliance data. It was noted that the Licensee had established a process for review of its non-compliances (i.e. Obligations Register, however, it was not specific enough to facilitate compliance and as such was not effective.

Recommendation 10/2022	Action Plan 02/2022
Refer recommendation 02/2022 (from performance audit section): A more robust process for tracking and responding to non-compliance is required. Reviewing the documentation It has been difficult to determine whether the Ord was in non-compliance or not during the period due to incorrect information being recorded (such as stating exemptions to the requirements were provided), and actions claimed to have been taken have not been documented and communicated with the ERA to close the non-compliances. The Licensee should review the policies and procedures for compliance with EIRL4 and detail contained in the obligations register to ensure it assists in meeting compliance with Ord Hydro's legislative obligations, for example specifically those specified within the 2021-2022 Obligation Register. Additionally, training requirements should be reviewed to ensure understanding and awareness of the legislative requirements relating to EIRL4. Revise the CRIS/Obligations to ensure: • the Obligations are referenced accurately against the current Electricity Compliance	A comprehensive review of Ord Hydro's obligations is currently being undertaken. During this review, Ord Hydro will: a) Review its obligations relating to the Ord Hydro asset for completeness and accuracy, including the matters mentioned in the auditors' recommendation b) Update the obligations accordingly in CRIS/Obligations Register c) Establish a risk-based internal audit/review schedule for its annual compliance reporting process **Responsible person**: Manager Compliance and Risk Management **Target date**: 01/07/2023

Reporting Manual (i.e. there is a process established for updating obligations) • include Reportable Field (i.e. obligation type (NR, 1 or 2) as only type 1 and 2 are reportable) • include field for reportable agency/governing body • include compliance criteria field in CRIS to allow internal audit process to be established and create a time dependent audit schedule (i.e. prior to the submission of the Annual Compliance Report 31 August annually to ensure information reported is correct).	

Reference 11/2022

Obligation 5.3 (rated as B3)

- Assets are documented in an asset register including asset type, location, material, plans of components and an assessment of assets' physical/ structural condition
- Confirm the policies and procedures have been followed during the review period by examining the asset register, observing operational procedures, analysing costs, etc.

There were some deficiencies noted with regards to the Licensee's asset register. Whilst it was recognised the asset register mostly met the requirements the inclusion of all assets and the mechanism to ensure the assets were compliant with statutory requirements was not demonstrated. The familiarity with the asset tree was largely dependent on tacit knowledge of the experience plant managers and operators

Recommendation 11/2022	Action Plan 11/2022
In order to improve the quality of data in the asset register, accurately document plant and equipment, the statutory requirements (where applicable) and improve the line of sight for drawings relating assets through to condition through to maintenance (WOs) and to reduce room for error and risks in incorrect reference of equipment, Ord Hydro should review the AMS systems and documentation in relation to the assets. In addition, a physical audit of assets should be undertaken against OEM drawings and asset registers and an internal audit against statutory and contractual obligations.	Ord Hydro will undertake a review of the AMS systems and documentation and conduct a physical audit of assets against OEM drawings and asset registers. Ord Hydro will also review its statutory and contractual obligations as per 02/2022 and determine an appropriate risk-based approach to auditing against these obligations. **Responsible person**: Production Manager and Manager Compliance and Risk Management **Target date**: 01/09/2023

Reference 12/2022

Obligation 9.1 (rated as B3)

- Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.
- During the review period, Ord Hydro has not tested its contingency plans or maintained evidence of the training required for all relevant staff in relation to the purpose and content of the plans.

Recommendation 12/2022	Action Plan 12/2022
Schedule and carry-out testing and training of each contingency plan. Update the Powerline Access Contingency Plan to reflect emergency repair processes, for example LCM risk #RAORD181010. Ensure all personnel listed in the Contingency Plans are trained as per requirements and records reflected in the Training register. Reference to Contingency Plans should be made within the AMPs and LCMs.	Ord Hydro considers there may be unacceptable operational risk to carry out live-testing. Ord Hydro will schedule and carry out desktop testing of its contingency plans. Ord Hydro will also review contingency plans to address personnel and training requirements as described in the auditor's recommendation. The Powerline Access Contingency Plan will be updated to reflect emergency repair processes. **Responsible person**: Production Manager **Target date**: 01/09/2023

Appendix B - References

Ord Hydro representatives participating in the review

- Manager Compliance and Risk Management
- Production Manager
- Ord Hydro Manager
- Ord Hydro Manager
- Executive Manager Asset Management
- Site Supervisor

AAG staff participating in the review		**Hours**
• Tanuja Sanders	Senior Engineer	57
• Andrew Baldwin	Executive Director	11.5
• Preston Bayley	Executive Director	48.5

Key documents and other information sources examined

- ERA Audit and Review Guidelines: Electricity and Gas Licenses March 2019
- Ord Hydro Asset Management Plans 2022 – 2025
- Strategic Asset Management Plan
- 12 Monthly Operations Report December 2022, December 2023 and December 2024
- The Ord Monthly Site reports (November 2022, June 2024 and April 2025)
- Ord Environment Management Plan
- Ord Hydro Emergency Response Plan
- The Ord Health and Safety Management Plan
- Environmental Impacts and Aspects Risk Register
- Risk Registers – The Ord
- Ord Asset Tree
- HV Safety Equipment Testing Checklist
- Quarterly Vehicle Inspection Checklist (July 2025)
- Standby Generator Checklist (December 2024)
- Quarterly Housekeeping Inspection Checklist January 2025
- Ord Maintenance and Support D&D Mechanical Services agreement
- Ord Maintenance and Support Lake Argyle Cruise Pty Ltd agreement
- Ord Maintenance and Support M&K McMahon Electrical Pty Ltd agreement
- Change Management Procedure
- Computerised Maintenance Management System Workflow Procedure
- Defect Reporting Procedure
- Energy Safety Procedures
- Hot Works Procedure
- Maintenance Management Procedure
- Computerised Maintenance Management Fixed User Procedure
- Generation Decision Making Procedure

- Turn Over Package Commissioning Procedure
- Ord Hydro Safety meetings (April 2024, January 2023 and April 2025)
- Training Profiles for 3 employees
- KNX Store Inventory spreadsheet
- Ord Hydro Store Inventory spreadsheet
- Osy Store Inventory spreadsheet
- B1-B2 Turbine Inspection Report September 2024
- Turbine Inspection A2 Report August 2023
- Unit A1-A2 Runner Condition Report February 2025
- 2022-2025 Maintenance Plan
- Contingency Plan – Ord Hydro Powerline Access
- Contingency Plan – Power Transformer
- Contingency Plan Substations and Switchyards
- Ord Hydro Emergency Exercise – Suppression Gas Release 2024
- Ord Hydro Emergency Exercise 2022
- Ord Hydro Emergency Exercise Control System Failure (Safety, Environment, Assets) June 2025
- Ord Switchyard Emergency Exercise 2023
- Business Continuity Plan Procedure
- Income Statements December 2021, 2022 and 2023
- Ord River Electrical Turbine Refurbishment Inspection and Test Plan 2025
- Ord River Unit A Turbine Refurbishment Commissioning Plan 2025
- Ord Hydro Unit A Turbine Overhaul Overview
- Asset Management Plan Update Procedure
- Life Cycle Cost Model
- Operational Technology System Standard
- Cyber Security Policy
- Refurbishment Project Management Procedure ANNEX 2 - Feasibility Study Report template
- Refurbishment Project Management Procedure ANNEX 3 - Project Completion Report template
- Refurbishment Project Management Procedure ANNEX 4 - Project Plan template
- Ord Hydro Unit A Turbine Overhaul Overview
- Project Management Plan – Ord Hydro Generator A
- Project Management Plan – Ord Hydro Unit A Turbine Overhaul
- Project Completion Report – Generator Refurbishment Unit A of Ord Hydro Power Station
- Refurbishment Project Management Procedure
- Pacific Hydro PPA Schedule 3 specifications (service standard)
- Asset Management Planning Schedule
- Security Operations Policy
- Network Security Policy
- Access Control Policy
- Unscheduled maintenance database 1
- Finance report, Ord budget analysis (PowerBI screen shot)
- Ord Transmission Decommissioning Methodology