EDL NGD (WA)

2008 Electricity Integrated Regional Licence

Asset Management System Review

9 February 2009

Deloitte.

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Mr Mike Espenschied
Team Leader Asset Management Planning
Energy Developments Limited
PO Box 4046
Eight Mile Plains QLD 4113

9 February 2009

Dear Mr Espenschied

2008 Asset Management System Review Report – Electricity Integrated Regional Licence EIRL1

We have completed the Asset Management System Review for EDL NGD (WA) for the period 12 August 2005 to 31 July 2008 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 review procedures.

If you have any questions or wish to discuss anything raised in the report, please contact Andrew Baldwin on 9365 7236 or myself on 9365 7024.

Yours sincerely

Richard Thomas
Partner

Member of
Deloitte Touche Tohmatsu

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1 Executive summary

1.1 Introduction and background

The Licence relates to EDL's operation of electricity generating works in the locations of Broome, Derby, Fitzroy Crossing, Halls Creek and Looma, plus underground cabling between the Broome Power Station and Broome Substation. These power facilities are collectively referred to as the West Kimberley Power Project (**WKPP**). Through a formal Power Purchase Agreement (**PPA**) relevant to the WKPP, EDL has contractual obligations to supply electricity to Horizon Power.

Section 14 of the Act requires EDL to provide the Authority with a report by an independent expert acceptable to the Authority as to the effectiveness of the respective asset management systems established for assets subject to the Licence (**the review**). In August 2007 the Authority extended the period to be covered by the review to 12 August 2005 to 31 July 2008.

1.2 Independent reviewer's report

With the Authority's approval, Deloitte Touche Tohmatsu (**Deloitte**) was appointed to undertake the review. Deloitte engaged Maunsell Australia Pty Ltd (**Maunsell**) to provide advice where technical expertise was required. The review was conducted in accordance with the specific requirements of the Licence and the Authority's *Audit Guidelines: Electricity, Gas and Water Licences* (**Audit Guidelines**).

This is the first such review conducted in accordance with EDL's Licence requirements.

EDL's responsibility for compliance with the conditions of the Licence

EDL 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.

Our responsibility

Our responsibility is to express a conclusion on the effectiveness of EDL's asset management systems to meet Licence requirements based on our procedures. We conducted our engagement in accordance with Australian Standard on Assurance Engagements ASAE 3500 *Performance Engagements (Revision of AUS 806 and AUS 808)* issued by the Australian Auditing and Assurance Standards Board and the Audit Guidelines, in order to state whether, based on the procedures performed, anything has come to our attention that causes us to believe that EDL's asset management system has not been operating effectively, in all material respects, in accordance with the Authority's Audit Guidelines document. Our engagement provides limited assurance as defined in ASAE 3500. Our procedures were set out in the Review Plan reviewed and agreed with by the Authority on 14 October 2008, and set out in Appendix A.

We cannot, in practice, examine every activity and procedure, nor can we be a substitute for management's responsibility to maintain adequate controls over all levels of operations and their responsibility to prevent and detect irregularities, including fraud. Accordingly, readers of our reports should not rely on the report to identify all potential instances of non-compliance which may occur.

Any projection of the evaluation of the level of effectiveness to future periods is subject to the risk that the systems may become inadequate because of changes in conditions, or that the degree of effectiveness with management procedures may deteriorate.

Limitations of use

This report is made solely to the management of EDL in accordance with our engagement letter dated 20 June 2008, for the purpose of their reporting requirements under section 14 of the Act. We disclaim any assumption of responsibility for any reliance on this report to any person other than the management of EDL, or for any purpose other than that for which it was prepared. We disclaim all liability to any other party for all costs, loss, damages, and liability that the other party might suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to the other party, or the reliance on our report by the other party.

Inherent limitations

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement conducted in accordance with ASAE 3500 and consequently does not allow us to obtain assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement. Accordingly, we will not express an opinion providing reasonable assurance.

Independence

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

1.3 Conclusion

Based on our work described in this report, nothing has come to our attention to indicate that EDL had not established and maintained an effective asset management system for assets subject to the Licences and in operation during the period 12 August 2005 to 31 July 2008.

Table 3 of this report provides effectiveness ratings for each of the 12 key processes in the asset management life-cycle. For those aspects of EDL's asset management system that were assessed as having opportunities for improvement, relevant observations, recommendations and post review implementation plans are summarised at section 1.6 of this report and also included at section 3 of this report.

DELOITTE TOUCHE TOHMATSU

Richard Thomas
Partner
Perth, February 2009

1.4 EDL's response to previous review recommendations

As this is the first review under this Licence, there are no previous review recommendations to which EDL can respond.

1.5 Findings

The following table summarises the assessments made by this review on the effectiveness of EDL's asset management system. On scale of 0 to 5, 5 is the highest rating possible (continuously improving effectiveness with no recommendations for improving effectiveness) with the rating scale moving down through lower levels of effectiveness. Refer to **Table 2** at the "Summary of findings" section of this report for a description of the effectiveness rating scale applied.

Table 1: Summary of findings, by review priority[1] and effectiveness rating

No. of AMS aspects	Effectiveness Rating						
	0	1	2	3	4	5	Total
Priority 2				4	4		**8**
Priority 4				17	18		**35**
Priority 5				7	5		**12**
Total				**28**	**27**		**55**

Specific assessments for each asset management system process are summarised at **Table 3** in the "Summary of findings" section of this report.

Detailed findings, including relevant observations, recommendations and post review implementation plans are located in the "Detailed findings, recommendations and post review implementation plans" section of this report.

[1] Review priority for each effectiveness criteria was determined as an outcome of the risk assessment approach outlined in the Review Plan set out in Appendix A

1.6 Recommendations and post review implementation plans

AMS Key Process and Effectiveness Criteria	Effectiveness Rating	Issue 1
Environmental Analysis 4(a) Opportunities and threats in the system environment are assessed	4. Quantitatively controlled	Identified hazards and risks in the WKPP Environmental Management Plan are not explicitly linked to EDL's corporate risk matrices.
Recommendation 1 The WKPP Environmental Management Plan be further enhanced to align policies and actions for identified hazards and risks with EDL's corporate risk matrices.		**Post Review Implementation Plan 1** In the next review of the WKPP Environmental Management Plan, consideration will be given to explicitly incorporating EDL's corporate risk management process and related matrices. **Responsible Person:** OH&S/Training Manager **Target Date:** 31 December 2009

AMS Key Process and Effectiveness Criteria	Effectiveness Rating	Issue 2
Environmental Analysis 4(b) Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved	3. Well-defined	The 08/09 financial year Budget Summary and Assumptions Report for Broome, Derby, Fitzroy Crossing and Halls Creek indicated Diesel Shelf Life issues required resolution. The WA Operations Manager confirmed that agreement on diesel operational holding levels has since been reached with Horizon Power, however that agreement has not yet been formalised through the PPA or WKPP LNG Supply Interruption Contingency Plan.
Recommendation 2 Ensure that Diesel Shelf Life issues at Broome, Derby, Fitzroy Crossing and Halls Creek are formally resolved.		**Post Review Implementation Plan 2** The resolution of Diesel Shelf Life issues with Horizon Power is addressed in an EDL memorandum outlining diesel operational holding levels for each site. This memorandum will be formally appended to the next revision of the WKPP LNG Supply Interruption Contingency Plan. **Responsible Person:** WKPP Power Facilities Manager **Target Date:** 31 July 2009

AMS Key Process and Effectiveness Criteria	Effectiveness Rating	Issue 3
Environmental Analysis 4(c) Compliance with statutory and regulatory requirements	3. Well-defined	An Environmental Compliance checklist prepared for Derby Power Station was not completed correctly by the site operator, indicating a lack of understanding of the checklist requirements.
Recommendation 3 Ensure staff are adequately trained to accurately complete environmental compliance checklists and demonstrate an effective remedial response to identified issues.		**Post Review Implementation Plan 3** Refresher training will be provided to WKPP staff on the environmental awareness module (available on EDL's intranet), which includes the completion of compliance checklists. **Responsible Person:** WKPP Power Facilities Manager **Target Date:** 30 April 2009

AMS Key Process and Effectiveness Criteria	Effectiveness Rating	Issue 4
Asset Operations 5(b) Risk management is applied to prioritise operations tasks	3. Well-defined	At the time of our review, the Plant Change Request Register and Non-Conformance Register included several outstanding items. There was no evidence of risk assessments undertaken to rate those items or to prioritise related operational works.
Recommendation 4 Determine risk levels for those items listed in the Non-Conformance register and close out within reasonable timeframes.		**Post Review Implementation Plan 4** Risk levels for the remaining items listed in the Non-Conformance register will be determined and timeframes assigned for their close out. **Responsible Person:** WKPP Power Facilities Manager **Target Date:** 30 April 2009

AMS Key Process and Effectiveness Criteria	Effectiveness Rating	Issue 5
Asset Operations 5(e) Staff receive training commensurate with their responsibilities	3. Well-defined	The WKPP site personnel training status document contained several expired training courses for various site personnel that required renewal.
Recommendation 5 Training provided to site personnel be kept more up-to-date and appropriate for personnel function and level.		**Post Review Implementation Plan 5** Company wide training requirements, including expiry timeframes were re-assessed in December 2008. WKPP is in the process of appointing a professional training service provider to manage WKPP personnel training requirements. **Responsible Person:** WKPP Operations Manager **Target Date:** 31 March 2009

AMS Key Process and Effectiveness Criteria	Effectiveness Rating	Issue 6
Contingency Planning 9(a) Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	3. Well-defined	While WKPP's system recovery plans and procedures, contingencies and workforce capabilities each contribute to the WKPP's business continuity objectives, they have not been collectively documented into a clear contingency planning strategy.
Recommendation 6 Incorporate existing contingency planning strategies and practices (in the event of unexpected and unrecoverable power station asset failure) into the WKPP Asset Management Plan. These strategies and practices should include a mechanism for ensuring contingency plans are reviewed and tested.		**Post Review Implementation Plan 6** The WKPP Asset Management Plan will be revised to incorporate the contingency planning strategies and practices already established and in operation. Provision will be made for the review and testing of contingency plans. **Responsible Person:** WKPP Operations Manager **Target Date:** 30 June 2009

1.7 Scope and objectives

The review is designed to gain limited assurance regarding EDL's compliance with the conditions of its Licence during the period 12 August 2005 to 31 July 2008.

In accordance with the Authority's Audit Guidelines, the asset management system review considered the effectiveness of EDL's existing control procedures within the following key processes in the asset management life-cycle:

- asset planning (including development & maintenance of an asset management plan)
- asset creation and acquisition
- asset disposal
- environmental analysis (all external factors that affect the system)
- asset operations
- asset maintenance
- asset management information system
- risk management
- contingency planning
- financial planning
- capital expenditure planning
- review of asset management system.

The Review Plan set out at Appendix A presents the risk assessments made for and review priority assigned to each asset management system process.

1.8 Approach

Our approach for this review involved the following activities, which were undertaken during the period August 2008 to February 2009:

- utilising the Audit Guidelines and Reporting Manual as a guide, development of a risk assessment, which involved discussions with key staff and document review to assess controls
- development of a Review Plan (see **Appendix A**) and associated work program for approval by the Authority
- interviews with relevant site level EDL staff to gain understanding of process controls about functions such as planning, asset operations, finance, internal audit and capital expenditure planning (see **Appendix B** for staff involved)
- visited the WKPP site at Broome and Derby. Maunsell conducted site and asset reviews with a focus on understanding the installation, its function and normal modes of operation, its age, and an assessment of the installation against the asset management system review criteria
- review of documents, processes and controls to assess the overall compliance and effectiveness of EDL's asset management system (see **Appendix B** for reference listing)
- reporting of findings to EDL for review and response.

2 Summary of findings

Table 2 sets out the rating scale defined by the Authority in the Audit Guidelines for the assessment of the level of effectiveness of EDL's asset management system. For the highest possible effectiveness rating to be achieved, EDL was required to demonstrate it has maintained mature processes and controls, supported by an existing review/continuous improvement process.

Table 2: Effectiveness rating scale

Effectiveness	Rating	Description
Continuously improving	5	Continuously improving organisation capability and process effectiveness
Quantitatively controlled	4	Measurable performance goals established and monitored
Well-defined	3	Standard processes documented, performed and coordinated
Planned and tracked	2	Performance is planned, supervised, verified and tracked
Performed informally	1	Base practices are performed
Not performed	0	Not performed (indicate if not applicable)

This report provides:

- a breakdown of each function of the asset management system into subcomponents as described in the Audit Guidelines. This approach is taken to enable a more thorough review of key processes where individual components within a greater process can be of greater risk to the business therefore requiring different review treatment
- a summary of the findings of the asset management system review (at **Table 3** below)
- detailed findings, including relevant observations, recommendations and post review implementation plans (at **section 3**).

Note that:

- the risk assessment that was presented in the Review Plan remains unchanged as no issues or concerns were identified that would indicate a need to modify the nature and levels of testing. The risk assessment has been included in this summary section to give context to the ratings that have been determined.

Table 3: Asset management system effectiveness summary

Refer to Detailed Findings at section 3 and Review Plan at Appendix A for descriptions of the specific effectiveness criteria for the 12 asset management system functions.

						Effectiveness Rating					
Ref	Consequence	Likelihood	Inherent Risk	Control Risk	Review Priority	0	1	2	3	4	5
1. Asset planning										✔	
1 (a)	Moderate	Probable	Medium	Medium	Priority 4					✔	
1 (b)	Moderate	Probable	Medium	Low	Priority 4					✔	
1 (c)	Minor	Probable	Low	Medium	Priority 5				✔		
1 (d)	Moderate	Probable	Medium	Medium	Priority 4					✔	
1 (e)	Minor	Probable	Low	Medium	Priority 5					✔	
1 (f)	Moderate	Probable	Medium	Medium	Priority 4				✔		
1 (g)	Major	Likely	High	Medium	Priority 2					✔	
1 (h)	Moderate	Probable	Medium	Medium	Priority 4					✔	
2. Asset creation and acquisition										✔	
2 (a)	Moderate	Unlikely	Medium	Medium	Priority 4					✔	
2 (b)	Moderate	Probable	Medium	Medium	Priority 4					✔	
2 (c)	Moderate	Probable	Medium	Medium	Priority 4					✔	
2 (d)	Moderate	Probable	Medium	Low	Priority 4					✔	
2 (e)	Moderate	Probable	Medium	Medium	Priority 4					✔	
3. Asset disposal									✔		
3 (a)	Moderate	Unlikely	Medium	Medium	Priority 4				✔		
3 (b)	Moderate	Unlikely	Medium	Medium	Priority 4				✔		
3 (c)	Minor	Probable	Low	High	Priority 5				✔		
3 (d)	Moderate	Probable	Medium	Low	Priority 4				✔		
4. Environmental analysis									✔		
4 (a)	Moderate	Likely	High	Low	Priority 2					✔	
4 (b)	Moderate	Likely	High	Low	Priority 2				✔		
4 (c)	Moderate	Likely	High	Low	Priority 2				✔		
4 (d)	Moderate	Probable	Medium	Low	Priority 4				✔		
5. Asset operations									✔		
5 (a)	Moderate	Likely	High	Low	Priority 2					✔	
5 (b)	Moderate	Probable	Medium	Medium	Priority 4				✔		
5 (c)	Minor	Probable	Medium	Low	Priority 4				✔		
5 (d)	Moderate	Probable	Medium	Low	Priority 4				✔		
5 (e)	Moderate	Probable	Medium	Low	Priority 4				✔		
6. Asset maintenance									✔		
6 (a)	Moderate	Likely	High	Low	Priority 2					✔	
6 (b)	Moderate	Probable	Medium	Low	Priority 4				✔		
6 (c)	Moderate	Likely	High	Medium	Priority 2				✔		

						Effectiveness Rating					
Ref	Consequence	Likelihood	Inherent Risk	Control Risk	Review Priority	0	1	2	3	4	5
6 (d)	Moderate	Probable	Medium	Low	Priority 4					✔	
6 (e)	Moderate	Probable	Medium	Medium	Priority 4				✔		
6 (f)	Minor	Probable	Low	Low	Priority 5				✔		
7. Asset management information system										✔	
7 (a)	Minor	Probable	Low	Medium	Priority 5					✔	
7 (b)	Minor	Likely	Medium	Medium	Priority 4				✔		
7 (c)	Minor	Likely	Medium	Low	Priority 4					✔	
7 (d)	Minor	Probable	Low	Medium	Priority 5					✔	
7 (e)	Minor	Likely	Medium	Low	Priority 4					✔	
7 (f)	Minor	Likely	Medium	Medium	Priority 4				✔		
7 (g)	Minor	Likely	Medium	Medium	Priority 4				✔		
8. Risk management										✔	
8 (a)	Moderate	Probable	Medium	Low	Priority 4					✔	
8 (b)	Moderate	Probable	Medium	Low	Priority 4					✔	
8 (c)	Moderate	Probable	Medium	Medium	Priority 4					✔	
9. Contingency planning									✔		
9 (a)	Major	Probable	High	Medium	Priority 2				✔		
10. Financial planning										✔	
10 (a)	Moderate	Probable	Medium	Low	Priority 4					✔	
10 (b)	Minor	Probable	Low	Medium	Priority 5				✔		
10 (c)	Minor	Unlikely	Low	Medium	Priority 5				✔		
10 (d)	Minor	Probable	Low	Medium	Priority 5					✔	
10 (e)	Moderate	Unlikely	Medium	Low	Priority 4					✔	
10 (f)	Moderate	Probable	Medium	Low	Priority 4					✔	
11. Capital expenditure planning									✔		
11 (a)	Moderate	Probable	Medium	Medium	Priority 4				✔		
11 (b)	Minor	Probable	Low	Medium	Priority 5				✔		
11 (c)	Moderate	Probable	Medium	Medium	Priority 4				✔		
11 (d)	Minor	Probable	Low	Medium	Priority 5				✔		
12. Review of asset management system									✔		
12 (a)	Minor	Probable	Medium	Medium	Priority 4				✔		
12 (b)	Minor	Probable	Low	High	Priority 5					✔	

3 Detailed findings, recommendations and post review implementation plans

The following tables contain:

- a **summary description of works subject to this asset management system review**: including the system summary and Business/SWIN impact for each of the three powerhouses
- an **overall summary of observations and recommendations**: for EDL's WKPP asset management system
- **findings**: the reviewer's understanding of the process and any issues that have been identified during the review
- **recommendations**: recommendations for improvement or enhancement of the process or control
- **post review implementation plans**: EDL's formal response to review recommendations, providing details of action to be implemented to address the specific issue raised by the review.

Summary of generation and distribution works subject to this asset management system review

West Kimberly operations

System summary

- a PPA has been established between EDL and the Regional Power Corporation (trading as Horizon Power) to supply electricity to the West Kimberly towns of Broome, Derby, Fitzroy Crossing, Halls Creek and Looma
- the terms and conditions of the PPA with Horizon Power require EDL to provide a stable and reliable electrical power supply
- the West Kimberly EDL facilities and assets covered by the Licence consist of the Broome Power Station, Broome underground cabling (distribution system), Derby Power Station, Fitzroy Power Station, Halls Creek Power Station and Looma Power Station
- the Maitland LNG Plant, Broome Fuel Storage Facility and Broome Pipeline are also part of the WKPP, however these facilities are not the subject of this Licence. Accordingly, the scope of this review was limited to the Power Station and Broome underground cabling facilities only. All Power Stations were assessed as a single operation due to the common supply, operations and maintenance systems used
- the generation capacity and Diesel and LNG storage capacity of the relevant power stations are:
  - Broome: generation capacity 32 – 47MW, Diesel storage 165kL, LNG storage 1950kL
  - Derby: generation capacity 10 – 13MW, Diesel storage 650kL, LNG storage 600kL
  - Fitzroy Crossing: generation capacity 3.4 – 4.8MW, Diesel storage 165kL, LNG storage 400kL
  - Halls Creek: generation capacity 3 – 3.9MW, Diesel storage 150kL, LNG storage 400kL
  - Looma: generation capacity 1 – 1.4MW, Diesel storage 80kL

Business impact

Failure to supply power by EDL may have direct and immediate impact to the relevant West Kimberly communities as EDL facilities are the primary supplier of electricity for these towns.

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.			
No	**Effectiveness Criteria**	**Effectiveness Rating**	**Findings**
1(a)	Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning	4. Quantitatively controlled	As EDL's facilities were commissioned during the period subject to review, asset planning activities applied during the period were focussed on construction, commissioning and the early phase of the units' life cycle. Through discussion with the Manager - Corporate Finance and consideration of asset planning processes and procedures applied to the WKPP, we observed that: • life cycle costs were considered in evaluations through the incorporation of overhaul requirements (as specified by the manufacturer) of engines and all other plant • NPV is also factored into evaluations • the content of the WKPP Asset Management Plan (**AMP**) is designed to meet the needs of Horizon Power and EDL including the provision of a clear forward plan for maintenance and enhancement strategies and expenditure profiles • business drivers are identified and used to determine the asset management needs of the plant controlled by EDL • WKPP asset management planning is to be completed by April each year for inclusion in EDL business planning processes.
1(b)	Service levels are defined	4. Quantitatively controlled	Clauses 15 and 16 and item 3 of the PPA detail the service levels required of EDL. EDL's WKPP AMP defines the measures of performance to be reported in two categories: 1) Western Power (now Horizon Power) Support Performance KPIs (as per the PPA) 2) Operations and Maintenance Deed - Performance Criteria.
1(c)	Non-asset options (e.g. demand management) are considered	3. Well defined	As WKPP assets were recently created, with a 20 year contract life, asset planning has focussed on establishing and maintaining operations in accordance with the PPA. The Team Leader Asset Management Planning confirmed that considerations of efficiency of expansions and the full utilisation of existing assets are taken into consideration in the WKPP's asset planning processes.

No	Effectiveness Criteria	Effectiveness Rating	Findings
1(d)	Lifecycle costs of owning and operating assets are assessed	4. Quantitatively controlled	The WKPP AMP addresses maintenance lifecycle needs over a ten year period. Section 4.0 of the AMP provides a general overview of the relevant power facilities, details the asset management strategies and highlights any known critical issues resulting in future anticipated costs relating to the assets during the period FY05/06 to FY15/16. Through discussion with the Manager - Corporate Finance we understand that lifecycle costs were considered in evaluations for the WKPP, specifically through the incorporation of overhaul requirements (as specified by the manufacturer) of engines and all other plant.
1(e)	Funding options are evaluated	4. Quantitatively controlled	Through discussions with the Manager - Corporate Finance we determined that EDL's Corporate Finance division applied the following standard funding evaluation processes to the WKPP: • an Information Memorandum (IM) was prepared with details of the key facts of the project • the IM and request for proposal was sent to several banks • a shortlist of banks was developed and the negotiation process is entered • a term sheet was developed containing information on terms of debt • a syndicate of 3 banks was chosen to fund the WKPP.
1(f)	Costs are justified and cost drivers identified	3. Well defined	Information relating to the identification of cost drivers is found in WKPP AMP, which details any known issues for all of EDL's Western Australia power facilities assets for the period FY06/07 to FY15/16. Discussions with the WA State Accountant also indicated that project costs were justified by the EDL corporate finance division, using Net Present Value and carrying value analyses.

No	Effectiveness Criteria	Effectiveness Rating	Findings

1(g)	Likelihood and consequences of asset failure are predicted	4. Quantitatively controlled	Through consideration of EDL's risk management practices as applied to WKPP assets and discussions with the Team Leader Asset Management Planning, we observed that EDL has applied the following mechanisms for identifying consequences and likelihood of WKPP asset failure:
			• EDL's approved Risk Calculator, which is based on guidelines provided in AS4360:2004, categorises risk by considering the failure consequences and likelihood of failure in a matrix, which allocates values to each risk:
			  • the consequences of failure consider the following aspects: (a) injury to people (b) impact on assets (c) impact on the environment (d) effect on company image (e) (generation) financial impact
			  • the likelihood of failure is categorised in the following range: (a) practically impossible (b) not likely to occur (c) could occur (d) known to occur (has happened) (e) common or occurs frequently
			• use of Operations Safety Cases, which are designed to identify a broad range of operational risks using appropriate hazard identification techniques and risk assessment methodologies. Individual risk and consequence assessments, formal safety assessments and verification of such assessments have been conducted on EDL's Western Australia power facilities. Estimation of the likelihood of asset failure is conducted and a failure frequency database constructed.
			We also sighted a number of safety case reports prepared for WKPP equipment.

1(h)	Plans are regularly reviewed and updated	4. Quantitatively controlled	The WKPP AMP is scheduled to be reviewed yearly and completed by April. It is the responsibility of the General Manager - Production and Assets to arrange for updating and timely reviews of the AMP each year. The WKPP Supplier Facilities Plan is also scheduled to be updated annually and otherwise as required by the PPA. The WKPP Supplier Facilities Plan identifies the plant, equipment, metering, supply monitoring and control systems operating or to be installed or established at the Fuel Facilities and Power Facilities. The plan also identifies the monitoring and control systems that are necessary if there are planned additions or changes to the plant, equipment, systems and processes that will occur during the 5-year period of currency of the Supplier Facilities Plan that will or may influence the performance of the Power Facilities in accordance with the terms of the Agreement.

2. Asset Creation/Acquisition			
Key process: Asset creation/acquisition means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay **Expected outcome:** A more economic, efficient and cost-effective asset acquisition framework which will reduce demand for new assets, lower service costs and improve service delivery.			
No	**Effectiveness Criteria**	**Effectiveness Rating**	**Findings**
2(a)	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions	4. Quantitatively controlled	Through discussion with the WA State Accountant and consideration of the project evaluation processes performed by EDL in establishing the project, we observed that: • EDL completed a carrying value analysis through modelling by the corporate finance division • a detailed project evaluation was conducted for the WKPP • independent engineers and industry experts were contracted to assist in assessing capital costs and costing analysis • alternative engines were considered with the WKPP engines going out to tender to Caterpillar, Jen Bacher, Deutz and Cummins. Evaluations were conducted of specifications and other relevant factors including performance • EDL will follow the above process in evaluating projects going forward.
2(b)	Evaluations include all life-cycle costs	4. Quantitatively controlled	Through discussion with the Manager - Corporate Finance, we understand that in accordance with the project evaluation process as described above, life cycle costs were considered in evaluations through the incorporation of overhaul requirements (as specified by the manufacturer) of engines and all other plant.
2(c)	Projects reflect sound engineering and business decisions	4. Quantitatively controlled	Through discussion with the Manager - Corporate Finance, we determined that in-house (EDL) expertise is leveraged wherever possible and if there is additional value to be gained, external experts are engaged. Project decisions are evaluated on the basis of advice from consultants, NPV, IRR and certain value hurdles set by the board.
2(d)	Commissioning tests are documented and completed	4. Quantitatively controlled	Through discussion with the Manager - Corporate Finance, we understand engineering procurement tests were conducted upon commissioning of the power stations and related facilities. For example: • 7 day tests were required by Horizon Power where EDL was required to run the WKPP plant for 7 days with no failures • 60 day tests were done at a later stage in the establishment of the WKPP • EPC (performance measures) tests were conducted on the performance of specific assets once installed.

No	Effectiveness Criteria	Effectiveness Rating	Findings
2(e)	Ongoing legal/ environmental/safety obligations of the asset owner are assigned and understood	4. Quantitatively controlled	The WKPP PPA outlines the obligations of EDL as an asset owner. Through examination of position descriptions and discussions with the following EDL employees, we determined that the legal/environmental/safety obligations outlines in the PPA have been communicated and understood by the relevant employees: • Asset & Regulatory Conformance Planner • Operations Manager - WKPP • Senior Environmental Scientist • Technical Specialist - Electrical.

3. Asset Disposal			
Key process: Effective asset disposal frameworks incorporate consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets. Alternatives are evaluated in cost-benefit terms. **Expected outcome:** Effective management of the disposal process will minimise holdings of surplus and under-performing assets and will lower service costs.			
No	**Effectiveness Criteria**	**Effectiveness Rating**	**Findings**
3(a)	Under-utilised and under-performing assets are identified as part of a regular systematic review process	3. Well defined	The WKPP AMP outlines: • procedures and work methods for condition monitoring, inspection and testing of WKPP assets • EDL's plant maintenance strategies for the individual WKPP assets including information on frequency of tests, compliance with Australian Standards and statutory requirements and details of tests and monitoring to be conducted. The Team Leader Asset Management Planning confirmed that during the period subject to review, no WKPP assets were identified to be under utilised or underperforming.
3(b)	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	3. Well defined	The WKPP PPA outlines EDL's obligations regarding the under-utilisation or poor performance of WKPP assets. Specifically, in accordance with clause 17 of the PPA, EDL is required upon the occurrence of any Supply Interruption or Out of Limit Event to provide Horizon Power with a Rectification Plan, which must be consistent with Good Industry Practice and must: • identify the cause • specify the steps to address the cause • identify the timing and duration of the steps • describe any changes to operating procedures, policies or practices necessary to address the cause of the Supply Interruption or Out of Limit Event or minimise the risk of such cause resulting in a similar Supply Interruption or Out of Limit Event. As evidence of the day to day operational practices in place, we sighted the June 2008 Root Cause analysis reports for each of Derby - Feeders 3 and 5, Derby - Station Black, Looma -Station Black and noted their compliance with the PPA quality and reliability of supply requirements. These events are reported in relation to design and/or process issues rather than to under performance of assets. The Team Leader Asset Management Planning confirmed that during the period subject to review, no WKPP assets were identified to be under utilised or underperforming.

No	Effectiveness Criteria	Effectiveness Rating	Findings
3(c)	Disposal alternatives are evaluated	3. Well defined	The WKPP Decommissioning Plan C (February 2007) outlines the requirements for decommissioning WKPP assets in accordance with the following strategies and practices: • having regard to all relevant local and national regulations • minimising disruption and impact to new operations • minimising disruption and impact to public infrastructure • maximising obtainable salvage value realised for equipment. The Team Leader Asset Management Planning confirmed that during the period subject to review, no significant asset disposal has taken place.
3(d)	There is a replacement strategy for assets	3. Well defined	The WKPP Spares Management Plan outlines the procedures and strategies to be followed to ensure that the required spares are available in the event of major failures as well as for preventative maintenance, to ensure minimum disruption to the WKPP Power Facilities.

4. Environmental Analysis			
Key process: Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system. **Expected outcome:** The asset management system regularly assesses external opportunities and threats and takes corrective action to maintain performance requirements.			
No	**Effectiveness Criteria**	**Effectiveness Rating**	**Findings**
4(a)	Opportunities and threats in the system environment are assessed	4. Quantitatively controlled	Through discussion with the Environmental Scientist and examination of the WKPP Operations Environmental Management Plan (**EMP**) and other supporting documentation, we observed the following: • the EDL Occupational Health & Safety Manual outlines the procedures for undertaking Hazard IDs, Risk Assessments, Job Safety Analyses and Safe Work Instructions, within the established EDL corporate risk management process • WKPP's environmental management processes provide for: ▪ impact assessments to be completed for each site (e.g. cultural heritage, buildings, land clearing permits) ▪ environmental approvals to be obtained from relevant authorities and maintained in manual form for each site ▪ significant environmental issues to be escalated to the Board and all other issues to be documented in the EDL Australia Report (monthly process) • a WKPP Hazard register is maintained, containing identified environmental risks (e.g. diesel spillages and loss of containment of LNG) • the WKPP EMP: ▪ states the WKPP environmental policy ▪ outlines the environmental management processes required to minimise the potential impacts for all key operational activities for the WKPP under all likely conditions ▪ is not intended to be a static document and is subject to continual modification ▪ is scheduled to be reviewed on an annual basis ▪ does not explicitly refer to the established EDL corporate risk management process.
	Recommendation 1 The WKPP EMP be further enhanced to align policies and actions for identified hazards and risks with EDL's corporate risk matrices.		**Post Review Implementation Plan 1** In the next review of the WKPP EMP, consideration will be given to explicitly incorporating EDL's corporate risk management process and related matrices. **Responsible Person:** OH&S/Training Manager **Target Date:** 31 December 2009

<table>
<tr><th>No</th><th>Effectiveness Criteria</th><th>Effectiveness Rating</th><th>Findings</th></tr>
<tr><td>4(b)</td><td>Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved</td><td>3. Well-defined</td><td>Through examination of the WKPP EMP and the relevant performance reports prepared and discussion with the Environmental Scientist, we observed that:
objectives have been established for the environmental outcomes resulting from the WKPP. These targets have been set to minimise (and where possible prevent) environmental nuisance and harm from the operation of the project. Where applicable, the goals of ecological sustainable development have been incorporated into these objectives
EDL’s performance standards such as availability of service, capacity, continuity and emergency response are measured
although a contingency plan for LNG supply failure exists, review of EDL’s Budget Summary and Assumptions Report for the Financial year Ending 30 June 2009 indicated that Diesel Shelf Life issues for Broome, Derby, Fitzroy Crossing and Halls Creek, which have a bearing on the effective implementation of the LNG supply failure contingency plan, required resolution. The WA Operations Manager confirmed that agreement on diesel operational holding levels has since been reached with Horizon Power and communicated to operational staff. That agreement has not yet been formalised through the PPA or WKPP LNG Supply Interruption Contingency Plan
environmental monitoring is performed and monthly emissions monitoring for units is identified in Pronto Asset Management System.</td></tr>
<tr><td></td><td colspan="2">Recommendation 2
Ensure that Diesel Shelf Life issues at Broome, Derby, Fitzroy Crossing and Halls Creek are formally resolved.</td><td>Post Review Implementation Plan 2
The resolution of Diesel Shelf Life issues with Horizon Power is addressed in an EDL memorandum outlining diesel operational holding levels for each site. This memorandum will be formally appended to the next revision of the WKPP LNG Supply Interruption Contingency Plan.
Responsible Person: WKPP Power Facilities Manager
Target Date: 31 July 2009</td></tr>
<tr><td>4(c)</td><td>Compliance with statutory and regulatory requirements</td><td>3. Well-defined</td><td>Through discussions with the Environmental Scientist and walkthrough testing of environmental compliance maintenance processes applied for the WKPP, we observed that:
licence conditions are completed for each site’s environmental compliance requirements and approved by the site operator, operations supervisor, operations manager and environmental group. Any issues deemed significant are escalated to the board for actioning
the Environmental Compliance checklist for Derby Power Station dated 26/09/08 showed some outstanding non-compliance issues. The checklist was noted to have been incorrectly completed by the site operator, indicating a lack of understanding of the checklist requirements.</td></tr>
</table>

No	Effectiveness Criteria	Effectiveness Rating	Findings
			• EDL engaged EML Air P/L to prepare an Emission Testing Report for the Broome and Derby Power Stations. The report showed the Gas Engines at both Power Stations to be compliant, however the diesel engine unit 8D at the Broome Power Station was rated as non-compliant on the basis that the sampling plane was too near the upstream disturbance and hence the testing precision was not accurate. No remediation was identified • the Environmental Scientist maintains a log of compliance issues identified throughout the year, including remedial action, planned and taken.
	Recommendation 3 Ensure staff are adequately trained to accurately complete environmental compliance checklists and demonstrate an effective remedial response to identified issues.		**Post Review Implementation Plan 3** Refresher training will be provided to WKPP staff on the environmental awareness module (available on EDL's intranet), which includes the completion of compliance checklists. **Responsible Person:** WKPP Power Facilities Manager **Target Date:** 30 April 2009
4(d)	Achievement of customer service levels	3. Well-defined	The WKPP PPA outlines EDL's obligations for achieving a range of service levels, as a supplier to Horizon Power (EDL's sole customer). Horizon Power and EDL have established processes for monitoring EDL's compliance with the requirements of the PPA.

5. Asset Operations

Key process: Operational functions relate to the day-to-day running of assets and directly affect service levels and costs.

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

No	Effectiveness Criteria	Effectiveness Rating	Findings
5(a)	Operational policies and procedures are documented and linked to service levels required	4. Quantitatively controlled	We observed that: • operational policies for the Broome, Halls Creek, Derby and Fitzroy Crossing power stations are documented, however operational work instructions and operating protocol documents are still being developed for each location. We note that completion of these remaining documents has been prioritised and for some, first drafts have been completed • operating protocol documents reference the required service levels with respect to reliability and availability.
5(b)	Risk management is applied to prioritise operations tasks	3. Well-defined	We observed that: • EDL uses its established risk management practices (as described at "8. Risk Management" below) to drive actions associated with critical operational tasks • each power station maintains a change request register and a non-conformance register. Review of the registers indicated that no formal risk assessment was undertaken for the tasks in the register in order to prioritise related operational works. The Team Leader Asset Management Planning confirmed that these items are considered to be punch list items, none of which pose a significant risk to operations • the non-conformance register showed numerous items still with an "open" status despite being 3 to 6 months old. Risk levels of the items in the register were not assessed.

Recommendation 4	Post Review Implementation Plan 4
Determine risk levels for those items listed in the Non-Conformance register and close out within reasonable timeframes.	Risk levels for the remaining items listed in the Non-Conformance register will be determined and timeframes assigned for their close out. **Responsible Person:** WKPP Power Facilities Manager **Target Date:** 30 April 2009

No	Effectiveness Criteria	Effectiveness Rating	Findings
5(c)	Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition and accounting data	3. Well-defined	We observed that the Pronto Asset Maintenance Management module is used as the Asset Register for WKPP assets. Items of equipment are listed in the Pronto system database, including details of asset type, location and relevant maintenance strategies.
5(d)	Operational costs are measured and monitored	3. Well-defined	We observed that operational costs have been itemised and identified within the WKPP budget and are reported and monitored on a monthly basis.
5(e)	Staff receive training commensurate with their responsibilities	3. Well-defined	We observed that a Site Personnel Training Status document is maintained to track training required and received by staff. A variety of training is available to staff depending on their operational functions. Training is also dependent on staff levels. Review of the Site Personnel Training Status document showed many expired training courses for various site personnel that required renewal.
	Recommendation 5 Training provided to site personnel be kept more up-to-date and appropriate for personnel function and level.		**Post Review Implementation Plan 5** Company wide training requirements, including expiry timeframes were re-assessed in December 2008. WKPP is in the process of appointing a professional training service provider to manage WKPP personnel training requirements. **Responsible Person:** WKPP Operations Manager **Target Date:** 31 March 2009

6. Asset Maintenance			
Key process: Maintenance functions relate to the upkeep of assets and directly affect service levels and costs. **Expected outcome:** Maintenance plans cover the scheduling and resourcing of the maintenance tasks so that work can be done on time and on cost.			
No	**Effectiveness Criteria**	**Effectiveness Rating**	**Findings**
6(a)	Maintenance policies and procedures are documented and linked to service levels required	4. Quantitatively controlled	We observed that EDL's WKPP asset maintenance: • policies and procedures are documented, with reference to the service levels defined in the WKPP PPA • strategies are selected to deliver functional equipment service levels and are consistent with good industry practice.
6(b)	Regular inspections are undertaken of asset performance and condition	3. Well-defined	We observed that Westrac was engaged to maintain WKPP power station equipment until 30 September 2008, after which EDL's Field Service & Operator Maintenance Crew was expected to take over the responsibility of equipment maintenance. We obtained evidence of routine servicing of generating units occurring at scheduled intervals and recorded in the maintenance system. In many cases, at the time of our review, equipment was not yet due for maintenance as the installed plant was relatively new.
6(c)	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	3. Well-defined	Through discussion with WKPP operational staff and examination of EDL's maintenance system, we observed that a detailed asset management plan is available for all power stations. Evidence of routine engine service was obtained and reviewed. In many cases, the first major inspections or tests had not been due as the power plants are still relatively new. We noted that the Broome Power Station is not defined for major maintenance / overhaul activities.
6(d)	Failures are analysed and operational/ maintenance plans adjusted where necessary	4. Quantitatively controlled	Through discussion with WKPP operational staff and walkthrough of WKPP operations and maintenance procedures, we observed that: • all maintenance work undertaken is recorded in the maintenance database • failure reports demonstrated that analysis for the failure was undertaken and action plans were put in place to prevent re-occurrence in the future • operational and maintenance plans were adjusted where necessary.

No	Effectiveness Criteria	Effectiveness Rating	Findings
6(e)	Risk management is applied to prioritise maintenance tasks	3. Well-defined	Through walkthrough of WKPP operations and maintenance procedures and discussion with the WA Operations Manager and WKPP Facilities Manager, we observed that: • the Pronto Asset Maintenance Management system records prioritisation of scheduled maintenance works (assigned as 1 to 7 or "C" for statutory compliance works) • provision is made for priorities to be allocated in instances where defect or breakdown work orders are raised • risk management techniques have been applied to maintenance priorities, based on the importance of the equipment and on the nature of the maintenance task to be performed.
6(f)	Maintenance costs are measured and monitored	3. Well-defined	We observed that: • costs for planned maintenance are itemised and identified within the WKPP budget • costs for unplanned maintenance works are also provided for, based on historical cost data per event and probability of occurrence • maintenance costs are reported and monitored on a monthly basis.

7. Asset Management Information System
Key process: An asset management information system is a combination of processes, data and software that support 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.

No	Effectiveness Criteria	Effectiveness Rating	Findings
7(a)	Adequate system documentation for users and IT operators	4. Quantitatively controlled	EDL's Information Systems policy outlines EDL's policies regarding hardware (identification and physical access), software (operating environment and licensing) and security. We also observed that: • Pronto-Xi Solutions overview includes references to the Maintenance Management module and associated Equipment Register • IS Helpdesk provides support for the operation of the Pronto system • IS Vendor support arrangements are also in place for Pronto • EDL's Communications Policy outlines EDL's policies regarding internet and email, telephone usage, facsimiles and relevant legislation.
7(b)	Input controls include appropriate verification and validation of data entered into the system	3. Well-defined	Through discussions with the IT Team Leader, we understand that documentation and data entered onto the EDL network (including WKPP asset operations and maintenance records) contains document number and version control information, with provision for appropriate sign-offs and approvals.
7(c)	Logical security access controls appear adequate, such as passwords	4. Quantitatively controlled	Through discussions with the IT Team Leader, we understand that access forms are required to gain initial access to the EDL network and Pronto system including authorisations from appropriate system owners. All users are uniquely identifiable through a username. There is a password policy in place, which appears to be in accordance with accepted industry practice.
7(d)	Physical security access controls appear adequate	4. Quantitatively controlled	Through discussions with the IT Team Leader and inspection of the EDL Brisbane server room, we observed that the server room is secured with a locked entry and the master software room is also secured with a lock.

No	Effectiveness Criteria	Effectiveness Rating	Findings
7(e)	Data backup procedures appear adequate	4. Quantitatively controlled	Through discussions with the IT Team Leader we understand that: • incremental back-up occurs daily on Monday to Thursday and full back-up is completed each Friday • two copies of back-ups are maintained with one located off-site in secure facility • data is maintained for 7 years, monthly back-ups are held for 12 months and yearly back-ups are help for 10 years.
7(f)	Key computations related to licensee performance reporting are materially accurate	3. Well-defined	EDL's WKPP Reporting Specification document details procedures to be followed in calculating and reporting on quality and reliability of supply performance as per requirements of the WKPP PPA. Those procedures rely on the collection of data from remote telemetry units and power quality meters and as recorded in EDL's SCADA Historian system. EDL's PSMWeb corporate reporting system is used to interrogate and analyse that data, before performance reports are prepared for management and the Authority.
7(g)	Management reports appear adequate for the licensee to monitor licence obligations	3. Well-defined	We observed that monthly operational performance reports are produced for each facility detailing the key performance criteria of out of limit summaries, electrical performance, engine performance, key maintenance activities, inventory usage and levels, safety and environmental issues as required in the WKPP PPA.

8. Risk Management

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

Expected outcome from asset planning strategies: An effective risk management framework is applied to manage risks related to the maintenance of service standards.

No	Effectiveness Criteria	Effectiveness Rating	Findings
8(a)	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system	4. Quantitatively controlled	We observed that EDL models its risk policies against guidelines provided in AS4360:2004, with the EDL risk management policy outlining the criterion for risk assessments and the steps of the risk management framework. As the purpose of EDL's Safety Management Plan is to establish and maintain an effective Safety Management System, EDL demonstrates a commitment to the continuous improvement of the Safety Management System so that it will achieve a consistently high standard of safety performance. As shown in the EDL documents 'Report for Broome Fuel Storage Facility Safety Case (July 2007)' and 'WKPP Broome Gas Pipeline Operational Safety Case' individual risk and consequence assessments, Formal Safety Assessments, and verification of such assessments have been conducted on EDL's Western Australia power facilities. The purpose of these assessments is to identify as broad a range of operational risks as possible using appropriate hazard identification techniques and risk assessment methodologies. Estimation of the likelihood of asset failure is conducted and a failure frequency database constructed. We also sighted the following documents regarding failure risk and consequence assessment: • WKPP LNG Fuel Storage Facility Operations Safety Report • Acceptance of LNG storage safety case.
8(b)	Risks are documented in a risk register and treatment plans are actioned and monitored	4. Quantitatively controlled	Through discussions with the Team Leader Asset Management Planning and examination of available documentation, we observed that: • a hazard report is maintained for each WKPP site, which lists and assesses risks based on the corporate risk rating matrix • treatment plans are developed based on Hazard reports and Safety Cases • critical control protocols are maintained and critical performance standards developed • implementation and priorities are dependant on risk ratings.

No	Effectiveness Criteria	Effectiveness Rating	Findings

8(c)	The probability and consequences of asset failure are regularly assessed	4. Quantitatively controlled	Through consideration of EDL's risk management practices as applied to WKPP assets and discussions with the Team Leader Asset Management Planning, we observed that EDL has applied the following mechanisms for identifying consequences and likelihood of WKPP asset failure:
			• EDL's approved Risk Calculator, which is based on guidelines provided in AS4360:2004, categorises risk by considering the failure consequences and likelihood of failure in a matrix, which allocates values to each risk:
			  • the consequences of failure consider the following aspects: (a) injury to people (b) impact on assets (c) impact on the environment (d) effect on company image (e) (generation) financial impact
			  • the likelihood of failure is categorised in the following range: (a) practically impossible (b) not likely to occur (c) could occur (d) known to occur (has happened) (e) common or occurs frequently
			• use of Operations Safety Cases, which are designed to identify a broad range of operational risks using appropriate hazard identification techniques and risk assessment methodologies. Individual risk and consequence assessments, formal safety assessments and verification of such assessments have been conducted on EDL's Western Australia power facilities. Estimation of the likelihood of asset failure is conducted and a failure frequency database constructed.
			We also sighted a number of safety case reports prepared for WKPP equipment.

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 significant disruptions to service standards.			
No	**Effectiveness Criteria**	**Effectiveness Rating**	**Findings**
9(a)	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	3. Well-defined	A formal contingency plan has been developed for LNG Supply Interruption. Through discussion with the Team Leader Asset Management Planning and the WA Operations Manager, we understand that: • staff are trained to understand and apply this plan • Horizon Power was and will remain closely involved in the review and implementation of this critical contingency plan. We also observed that: • in accordance with the WKPP PPA, EDL has established an emergency response protocol • engine and LNG storage redundancies are built into power station operations • the WKPP has identified additional contingencies for its operations, for example. N+2 generation capacity, spares vulnerability, maintenance contracts, service contracts (alternative supplier listings). Although existing contingencies, redundancies and operational practices each contribute to the WKPP's business continuity objectives, they have not yet been collectively documented to explicitly capture the WKPP contingency planning strategies and practices in the event of unexpected and unrecoverable failure of critical assets.
	Recommendation 6 Incorporate existing contingency planning strategies and practices (in the event of unexpected and unrecoverable power station asset failure) into the WKPP AMP. These strategies and practices should include a mechanism for ensuring contingency plans are reviewed and tested.		**Post Review Implementation Plan 6** The WKPP AMP will be revised to incorporate the contingency planning strategies and practices already established and in operation. Provision will be made for the review and testing of contingency plans. **Responsible Person:** WKPP Operations Manager **Target Date:** 30 June 2009

10. Financial Planning			
Key process: The financial planning component of the asset management plan brings together the financial elements of the service delivery to ensure its financial viability over the long term. **Expected outcome:** The financial planning component of the asset management plan brings together the financial elements of the service delivery to ensure its financial viability over the long term.			
No	**Effectiveness Criteria**	**Effectiveness Rating**	**Findings**
10(a)	The financial plan states the financial objectives and strategies and actions to achieve the objectives	4. Quantitatively controlled	Through discussions with the WA State Accountant and consideration of EDL's financial planning mechanisms as applied to WKPP operations, we observed that: • the WKPP annual budget and rolling three year forecast provide a clear link to the strategies and objectives of the project • the budget and rolling three year forecast is to be reviewed and updated before April each year • a review of the WKPP financial plan can also be triggered at the request of senior management.
10(b)	The financial plan identifies the source of funds for capital expenditure and recurrent costs	3. Well-defined	Through discussions with the WA State Accountant and consideration of EDL's financial planning mechanisms, we understand that the source of funds for capital expenditure is considered by EDL's Corporate Finance division once approval for expenditure is obtained. As described at 1(e) above, EDL applied a detailed process to secure initial funding for the WKPP.
10(c)	The financial plan provides projections of operating statements (profit and loss) and statements of financial position (balance sheets)	3. Well-defined	Through discussions with the WA State Accountant and consideration of EDL's financial planning mechanisms, we observed that a three year rolling forecast and budget for the WKPP is developed on an annual basis (reviewed and updated by April each year). Although specific balance sheets are not prepared at a project level, financial projections relevant to the WKPP consider the project's long term financial viability.
10(d)	The financial plan provides firm predictions on income for the next five years and reasonable indicative predictions beyond this period	4. Quantitatively controlled	Through discussions with the WA State Accountant and consideration of EDL's financial planning mechanisms, we understand that those mechanisms provide three year predictions and 20 year projections of demand. Those predictions and projections are provided by Horizon Power on an annual basis (by April) and are used to calculate indicative predictions of income.

No	Effectiveness Criteria	Effectiveness Rating	Findings
10(e)	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	4. Quantitatively controlled	Through discussions with the WA State Accountant and consideration of the WKPP's financial planning and monitoring mechanisms, we observed that those mechanisms accommodate the operating and capital expenditure requirements of the project.
10(f)	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary	4. Quantitatively controlled	Through discussions with the WA State Accountant and consideration of EDL's financial reporting mechanisms, we observed that the mechanisms applied to the WKPP provide for: • overhead cost variance analysis to be conducted on a monthly basis • operational overspend to be analysed and consumption of fuel to be analysed against generation output • monthly management meetings to discuss issues arising, potential issues that may arise in coming months, potential cost increases, and the justification of such and potential cost savings / cost saving strategies.

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 on each 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: A capital expenditure plan that provides reliable forward estimates of capital expenditure and asset disposal income, supported by documentation of the reasons for the decisions and evaluation of alternatives and options.

No	Effectiveness Criteria	Effectiveness Rating	Findings
11(a)	There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates	3. Well-defined	Through discussions with the WA State Accountant and consideration of EDL's financial and capital expenditure planning mechanisms, we observed that current procedures provide for an expansion capital expenditure plan to be included within WKPP's annual financial plans, including details of specific actions planned. We note that during the review period, the project's power stations were not subject to expansion plans. The WA State Accountant advised that WKPP's capital budgets are to be further improved in future, once facilities have settled into normal operations.
11(b)	The plan provides reasons for capital expenditure and timing of expenditure	3. Well-defined	Through discussions with the WA State Accountant and consideration of EDL's financial planning mechanisms, we observed that: • capital expenditure plans are based on the budgeting process and forecasts of maximum contract demand (MCD) • expansions are then implemented if forecast MCD reaches pre-defined trigger points • justification of capital expenditure is obtained through net present value analysis.
11(c)	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	3. Well-defined	As described at 1(d) above, the WKPP AMP addresses asset management strategies and maintenance lifecycle needs. Through discussions with the WA State Accountant, we understand that the carrying value model prepared through EDL's Corporate Finance division includes asset life and condition data.
11(d)	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned	3. Well-defined	Through discussions with the WA State Accountant and consideration of WKPP's financial planning mechanisms, we understand that the review and update of capital expenditure plans is considered in the WKPP operations three year forecast and budget, both of which are updated on an annual basis.

12. Review of asset management system
Key process: The asset management system is regularly reviewed and updated.
Expected outcome: Review of the asset management system to ensure the effectiveness of the integration of its components and their currency.

No	Effectiveness Criteria	Effectiveness Rating	Findings
12(a)	A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current	3. Well-defined	The WKPP AMP is scheduled to be reviewed on an annual basis, for completion in April. The General Manager - Production and Assets is responsible for arranging timely reviews of the AMP each year. As the WKPP power station facilities commenced its key commercial operations (through the re-commencement of the 60 Day Reliable Operations Test at Broome Power Station) in April 2008, the WKPP AMP and asset management system have yet to be formally reviewed and revised, with the first such review scheduled for completion by April 2009.
12(b)	Independent reviews (e.g. internal audit) are performed of the asset management system	4. Quantitatively controlled	The EDL internal audit plan for 2008/09 (approved by the EDL Board) provides for a major focus (>25% of the total budget days for internal audit) on WKPP Power Generation activities, including an emphasis on contractual and regulatory compliance. We understand that an initial site visit was undertaken by internal audit in October 2008, with a corresponding report currently being completed. Further site visits are scheduled in 2009. The Group Audit Manager advised that WKPP operations are also expected to be accommodated in future risk based internal audit plans.

Appendix A – Review plan

EDL NGD (WA)

2008 Performance Audit and Asset Management System Review –

Electricity Integrated Regional Licence EIRL1

Audit and Review Plan

14 October 2008

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Contents

Introduction

Overview

The Economic Regulation Authority (**the Authority**) has under the provisions of the Electricity Industry Act 2004 (**Electricity Act**), issued to EDL NGD Pty Ltd (**EDL**) an Integrated Regional Licence (**the Licence**).

Sections 13 and 14 of the Electricity Act require EDL to provide to the Authority a performance audit (**audit**) and asset management system review (**review**) conducted by an independent expert acceptable to the Authority. Deloitte Touche Tohmatsu (**Deloitte**) is the nominated auditor approved by the Authority for the audit and review. Deloitte has engaged Maunsell Australia Pty Ltd (**Maunsell**) to provide advice where technical expertise is required.

The audit and review will be conducted in accordance with the *Audit Guidelines: Electricity, Gas, Water Licences* (**Audit Guidelines**). In accordance with the Audit Guidelines this document represents the Audit & Review Plan (**the Plan**) that is to be agreed upon by Deloitte and EDL and presented to the Authority for approval.

Objectives

The objectives of the performance audit and asset management system review are derived from the Act. The following sections of the Act define the requirements of the licensee:

- section 13(1) of the Act requires EDL to provide the Authority with a performance audit conducted by an independent expert acceptable to the Authority. The performance audit is defined as an examination of the measures taken by EDL to meet the criteria specified in its Licence
- section 14(1)(c) of the Act requires EDL to provide the Authority with a report by an independent expert acceptable to the Authority as to the effectiveness of the respective asset management systems established for assets subject to its licence.

The audit is designed to provide reasonable assurance regarding the assessment of appropriateness, effectiveness and efficiency associated with EDL's compliance with its Licence. The audit will specifically consider the following:

a) process compliance: the effectiveness of systems and procedures in place throughout the audit period, including assessing the adequacy of internal controls

b) outcome compliance: the actual performance against standards prescribed in the licence throughout the audit period

c) output compliance: the existence of the output from systems and procedures throughout the audit period (that is, proper records exist to provide assurance that procedures are being consistently followed and controls are being maintained).

d) integrity of performance: the completeness and accuracy of the performance reporting to the Authority

e) compliance with any individual licence conditions: the requirements imposed on EDL by the Authority or specific issues for follow-up that are advised by the Authority.

The review is designed to provide limited assurance, based upon the work performed, regarding the extent to which EDL's asset management systems address the control effectiveness criteria for each of the 12 key processes in the asset management life-cycle that are subject to review, as set out in the scope section below.

Scope

Performance Audit

Section 13(2) of the Electricity Act states that "A performance audit is an audit of the effectiveness of measures taken by the licensee to meet the performance criteria specified in the Licence".

Performance criteria is further defined in the Licence to mean:

- the terms and conditions of the Licence
- any other relevant matter in connection with the applicable legislation that the Authority determines should form part of the performance audit.

Applicable legislation encompasses the following:

1. the *Electricity Industry Act 2004 (WA)*
2. the *Electricity Industry (Ombudsman) Regulations 2005*
3. the following Codes:
    a. *Electricity Industry Metering Code 2005*
    b. *Reliability and Quality of Supply Code 2005.*

The Authority's *Electricity Compliance Reporting Manual* (**Reporting Manual**) provides further guidance on those aspects of the Licence and EDL's performance criteria, which the Authority expects to be reported and included in the scope of the performance audit. The compliance requirements identified in the Reporting Manual have been evaluated for applicability to EDL and used as the basis for determining the performance criteria to be considered for the audit. Table 1 below provides an outline of the compliance requirements that do and do not apply to EDL based on the licence type and operating circumstances.

Table 1: Compliance Obligations

Legislative Element	Notes	Applicable to EDL
General The Licence defines a customer as "a person to whom electricity is sold for the purpose of consumption. For the avoidance of doubt, a customer is not a person who resells electricity, but is the person who is the end user or consumer of the electricity". Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act.		
Type 1 reporting obligations for all licence types	All type 1 obligations fall under the Code of Conduct, which is designed to address standards of conduct in the supply and marketing of electricity to customers, and therefore do not apply to EDL.	No
Electricity Industry Customer Transfer Code	The Customer Transfer Code is designed to address requirements for transferring customers between retailers and therefore does not apply to EDL.	No
Electricity Industry (Obligation to Connect) Regulations	As EDL's only connection point is to Horizon Power, there are no relevant supply points. The Regulations apply to premises which are not applicable to EDL.	No
Electricity Industry (Licence Conditions) Regulations	As EDL has no eligible customers, as defined by the Electricity Industry (Licence Conditions) Regulations, no related Licence conditions contained in the Reporting Manual are applicable to EDL.	No
Electricity Industry Act	• Specific Act clauses are relevant and included • Conditions relevant to retail businesses and customers are excluded	Yes
Electricity Licences	• Specific Licence clauses are relevant and included • Conditions regarding customer charter are excluded • References to individual licence conditions are excluded (none specified by the Authority)	Yes

Legislative Element	Notes	Applicable to EDL
Code of Conduct	The Code of Conduct, which is designed to address standards of conduct in the supply and marketing of electricity to customers, does not apply to EDL	No
Electricity Industry Metering Code	• Contains majority of licence conditions relevant to EDL • EDL is a network operator and a code participant • Any conditions with references to the South West Interconnected System are excluded • Any references to Customer Load Management and customer are excluded • References to "User" in generation/retail obligations are excluded as Horizon Power is the user, not EDL as a generator	Yes
Electricity Industry (Network Quality and Reliability of Supply) Code	• Any conditions with references to small use customer are excluded. • Horizon Power is a customer of EDL for the purposes this code • EDL has a "relevant distribution system"	Yes

Asset Management System Review

Section 14(1)(c) of the Act requires EDL to provide the Authority with a report reviewing the effectiveness of the respective asset management systems established for assets subject to its licence. In particular, there are 12 requirements that are to be reported against:

1. asset planning
2. asset creation and acquisition
3. asset disposal
4. environmental analysis (all external factors that affect the system)
5. asset operations
6. asset maintenance
7. asset management information system
8. risk management
9. contingency planning
10. financial planning
11. capital expenditure planning
12. review of Asset Management System

The Authority's Audit Guidelines provide further guidance on those aspects of the asset management system and EDL's performance criteria, which the Authority expects to be reported and included in the scope of the review.

The period of the audit and review is from 12 August 2005 to 31 July 2008 (**audit period**) and the final audit and review report is due to be provided to the Authority by 31 October 2008.

Approach

The audit and review will be conducted in three distinct phases, these being a risk assessment, system analysis and testing & review. From the results, a report will be produced to outline findings, overall compliance assessments and recommendations for improvement. Each step of the audit and review is discussed in detail below.

Risk assessment

The audit and review will focus on identifying or assessing those activities and management control systems to be examined and the matters subject to audit. Therefore, the purpose of conducting the risk assessment as a preliminary phase enables the auditor to focus on pertinent/high risk areas of EDL's licence obligations. The level of risk and materiality of the process will determine the level of audit required e.g. the greater the materiality and the higher the risk, the more effort will be applied.

The table presented below outlines the first step in assessing the risk using the ratings indicated within the Authority's audit guidelines. The inherent risk rating is a 3-point matrix ˈwhich provides an assessment of the consequence and likelihood of relevant risk events (**Table 2)**.

Table 2: Inherent risk rating

Inherent Risk Rating			
Likelihood	Consequence		
	Minor	Moderate	Major
Likely	Medium	High	High
Probable	Low	Medium	High
Unlikely	Low	Medium	High

Each licence obligation is allocated a classification rating by the Authority, which results in a standard consequence risk rating (**Table 3**).

Table 3: Risk Types and Classification

Source: Electricity Compliance Reporting Manual March 2008

Rating	Classification of Non-Compliance	Criteria for classification
1	Major	Classified on the basis that: ▪ the consequences of non-compliance would cause major damage, loss or disruption to customers; or ▪ the consequences of non-compliance would endanger or threaten to endanger the safety or health of a person.
2	Moderate	Classified on the basis that: ▪ the consequences of non-compliance impact the efficiency and effectiveness of the licensee's operations or service provision but do not cause major damage, loss or disruption to customers; or ▪ the regulatory obligation is not otherwise classified as a Type 1 or a Type NR non-compliance.
NR	Minor	Classified on the basis that: ▪ the consequences of non-compliance are relatively minor – i.e. non-compliance will have minimal impact on the licensee's operations or service provision and do not cause damage, loss or disruption to customers; or ▪ compliance with the obligation is immeasurable; or ▪ the non-compliance is required to be reported to the Regulator under another instrument, guideline or code 6; or ▪ the non-compliance is identified by a party other than the licensee ; or ▪ the licensee only needs to use its reasonable endeavours or best endeavours to achieve compliance or where the obligation does not otherwise impose a firm obligation on the licensee. Reclassification of Type NR as a Type 2 may occur in circumstances of: ▪ systemic non-compliance; or ▪ a failure to resolve non-compliance promptly.

Once the level of inherent risk has been determined, the adequacy of existing controls is to be determined. Controls will be assessed and prioritised as high, medium or low in order of their suitability to mitigate the risks identified previously. This will give a level of control risk.

Once assessed, this enables the audit priority to be determined (**Table 4**). Essentially, the higher the level of risk the more substantive the audit testing becomes.

Table 4: Assessment of Audit Priority

Inherent Risk	Control Risk		
	High (weak controls)	Medium	Low (strong controls)
High	Audit Priority 1	Audit Priority 2	
Medium	Audit Priority 3	Audit Priority 4	
Low	Audit Priority 5		

The risk assessments for the performance assessment and asset management system review are attached at **Appendix A** and **Appendix B** respectively.

The risk assessments have been discussed with stakeholders to gain their input as to the appropriateness of the comments, such as any factual inaccuracies, and for comment on the ratings. At this stage, the risk assessments 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. Accordingly both risk assessments are preliminary drafts, not final reports, and no reliance should be placed upon their findings. They do provide however an invaluable tool for focussing the audit and review effort.

The following table outlines the audit requirement for each level of audit priority. The testing can range from extensive substantive testing around the controls and activities of particular processes to confirming the existence of controls through discussions with relevant staff.

Table 5: Audit Priority Table

Priority Rating and Resulting Audit Procedures	
Rating	**Audit requirement**
Audit Priority 1	▪ Controls testing and extensive substantive testing of activities and/or transactions ▪ Follow-up and if necessary, re-test matters previously reported.
Audit Priority 2	▪ Controls testing and moderate substantive testing of activities and/or transactions ▪ Follow-up and if necessary, re-test matters previously reported.
Audit Priority 3	▪ Limited controls testing (moderate sample size). Only substantively test transactions if further control weakness found ▪ Follow-up of matters previously reported.
Audit Priority 4	▪ Confirmation of existing controls via observation and walk through testing ▪ Follow-up of matters previously reported.
Audit Priority 5	▪ Confirmation of existing controls via observation, discussions with key staff and/or reliance on key references (“desktop review”).

System analysis

The systems analysis required will be determined utilising the aforementioned audit priority scale. Once the priority level has been defined the testing component will take place by way of interviewing key operational and administrative staff who will outline information that displays compliance with the licence. Where required, an observation of processes, procedures and operations and review of key documents will occur to assist in the determination of EDL's compliance with Licence obligations.

Testing and review

Using the results of the risk assessment and systems analysis, detailed testing and analysis will be performed to compare those standards maintained by EDL with the relevant sections and schedules of the Licence. In assessing the extent of compliance, we will consider the following:

- the control environment: EDL's management philosophy and operating style, organisational structure, assignment of authority and responsibilities, the use of internal audit, the use of information technology and the skills and experience of the key staff members.
- information systems: the appropriateness of EDL's information systems to record the information needed to comply with the licence, the accuracy of data, the security of data and documentation describing the information system.
- control procedures: the presence of systems and procedures to ensure compliance with the licence, effectiveness of EDL's internal control structure to detect and correct non-compliance.

In circumstances where the population of relevant transactions to be tested are large, sampling techniques will be utilised to provide adequate assurance that test results are representative of EDL's operations.

To aid the testing, Deloitte have engaged the expertise of Maunsell for assistance with the asset management system review. Maunsell will be particularly involved in the environmental analysis, asset maintenance and asset operation requirements of the asset management system.

Separate work programs for the audit and review, designed to direct and record the specific aspects of our testing and analyses for each licence obligation, have been developed and should be read in conjunction with this Plan.

Reporting

In accordance with the Audit Guidelines, all aspects of compliance with the Licence will be assessed according to the two rating scales based on the work performed. The first table below is for the licence obligations, (table 6) and the second for asset management effectiveness (table 7).

Table 6: Operational/performance compliance rating scale

Compliance Status	Rating	Description of Compliance
Compliant	5	Compliant with no further action required to maintain compliance
Compliant	4	Compliant apart from minor or immaterial recommendations to improve the strength of internal controls to maintain compliance
Compliant	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
Non-compliant	2	Does not meet minimum requirements
Significantly non-compliant	1	Significant weaknesses and/or serious action required

Table 7: Asset management review effectiveness rating scale

Effectiveness	Rating	Description
Continuously improving	5	Continuously improving organisation capability and process effectiveness
Quantitatively controlled	4	Measurable performance goals established and monitored
Well-defined	3	Standard processes documented, performed and coordinated
Planned and tracked	2	Performance is planned, supervised, verified and tracked
Performed informally	1	Base practices are performed
Not performed	0	Not performed (indicate if not applicable)

The performance audit report will also be structured to address all key components expected by the Audit Guidelines, including tabulation of risk ratings and the overall compliance rating for each licence condition and key asset management system function.

General Information

All aspects of the audit and review will undergo quality assurance and review procedures as outlined in our previous communications. Before delivery of a final report, full quality procedures will be applied, including second partner review. We will endeavour to complete these procedures as readily as possible.

Key Contacts

The key EDL contacts for the audit and review are:

- Mike Espenshied Team Leader - Asset Management Planning
- Marc Beckx West Kimberly Power Project Operations Manager
- Karl Newman West Kimberly Power Project - Finance
- Tim Yoong Manager – Technical
- Tony Manning West Kimberly Power Project Facilities Manager

Staffing

Deloitte staff that will be involved with this assignment are:

- Richard Thomas Partner (Perth)
- Matt Thomson Partner, Energy Advisory Group (Quality Assurance Review)
- Andrew Baldwin Account Director (Perth)
- Caleb Spreckley Analyst (Brisbane)

Maunsell staff involved with this assignment are:

- Tanuja Sanders Project Manager – Mechanical Engineering (Perth)
- Stephen Brown Business Unit Leader – Electrical (Perth) (advisory role)
- Keith Gilby Distribution Services Manager (advisory role)

Timing

The initial risk assessment phase was completed on 12 September 2008. The draft audit plan and detailed work plan were submitted to the Authority on 24 September 2008.

The remainder of the fieldwork phase was scheduled to be performed in September and October 2008.

Appendices

Appendix	
A	Performance audit risk assessment
B	Asset management system review risk assessment

Appendix A - Performance audit risk assessment

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
12 Electricity Industry Act – Licence Conditions and Obligations								
81	Electricity Industry Act section 13(1)	A licensee must, not less than once every 24 months, provide the Authority with a performance audit conducted by an independent expert acceptable to the Authority.	NR	Minor	Unlikely	Low	Low	Audit Priority 5
82	Electricity Industry Act section 14(1)(a)	A licensee must provide for an asset management system.	NR	Minor	Unlikely	Low	Low	Audit Priority 5
83	Electricity Industry Act section 14(1)(b)	A licensee must notify details of the asset management system and any substantial changes to it to the Authority.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
84	Electricity Industry Act section 14(1)(c)	A licensee must provide the Authority with a report by an independent expert as to the effectiveness of its asset management system every 24 months, or such longer period as determined by the Authority.	NR	Minor	Unlikely	Low	Low	Audit Priority 5
85	Electricity Industry Act section 17(1)	A licensee must pay to the Authority the prescribed licence fee within one month after the day of grant or renewal of the licence and within one month after each anniversary of that day during the term of the licence.	NR	Minor	Unlikely	Low	Medium	Audit Priority 5
86	Electricity Industry Act section 31(3)	A licensee must take reasonable steps to minimise the extent or duration of any interruption, suspension or restriction of the supply of electricity due to an accident, emergency, potential danger or other unavoidable cause.	NR	Minor	Unlikely	Low	Low	Audit Priority 5

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
87	Electricity Industry Act section 41(6)	A licensee must pay the costs of taking an interest in land or an easement over land.	2	Moderate	Unlikely	Medium	High	Audit Priority 3
88	Electricity Industry Act section 54(1)	A retail or integrated regional licensee must not supply electricity to a small use customer otherwise than under a standard form contract or a non-standard form contract.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
89	Electricity Industry Act section 54(2)	A licensee must comply with any direction by the Authority to amend the standard form contract and do so within the period specified.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
90	Electricity Industry Act section 62(1)(b)	Electricity Networks Corporation and Regional Power Corporation must comply with a direction given by the Coordinator in relation to a draft extension and expansion policy.	NR	Not applicable - applies to former Western Power Corporation entities only				
91	Electricity Industry Act section 64(2)	Electricity Networks Corporation and Regional Power Corporation must comply with a direction given by the Coordinator in relation to an amendment to an extension and expansion policy.	NR	Not applicable - applies to former Western Power Corporation entities only				
92	Electricity Industry Act section 65(d)	Electricity Networks Corporation and Regional Power Corporation must implement arrangements set out in an approved extension and expansion policy.	NR	Not applicable - applies to former Western Power Corporation entities only				
93	Electricity Industry Act section 76	If a designation under section 71(1) of the Electricity Industry Act is in force a licensee must perform the functions of a retailer of last resort and must carry out the supplier of last resort plan if it comes into operation under section 70 of the Electricity Industry Act.	2	Not applicable - applies to retailers only				

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
94	Electricity Industry Act section 101	A retail, distribution or integrated regional licensee must not supply electricity to small use customers unless the licensee is a member of an approved scheme and is bound by and compliant with any decision or direction of the electricity ombudsman under the approved scheme.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
95	Electricity Industry Act section 115(1)	A licensee that is a network service provider or an associate of a network service provider, in relation to network infrastructure covered by the Code, must not engage in conduct for the purpose of hindering or prohibiting access by any person to services in accordance with the Code, the making of access agreements or any particular agreement in respect of those facilities, or the access to which a person is entitled under an access agreement or a determination made by way of arbitration.	2	Moderate	Unlikely	Medium	Low	Audit Priority 4
96	Electricity Industry Act section 115(2)	A licensee that has, or is an associate of a person that has, access to services under an access agreement must not engage in conduct for the purpose of hindering or prohibiting access.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
13 Electricity Licences – Licence Conditions and Obligations								
97	Integrated Regional Licence condition 6.2	A licensee must ensure that an electricity marketing agent of the licensee complies with the applicable codes.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
98	Integrated Regional Licence condition 13.2	The licensee must report a breach of the applicable code conditions by an electricity marketing agent to the Authority within the prescribed timeframe.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
99	Integrated Regional Licence condition 13.3	A licensee must, if directed by the Authority, review the standard form contract and submit to the Authority the results of that review within the time specified by the Authority.	NR	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
100	Integrated Regional Licence condition 14.1	A licensee must comply with any direction given by the Authority in relation to the scope, process and methodology of the standard form contract review.	NR	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
101	Integrated Regional Licence condition 15.2	A licensee may only amend the standard form contract with the Authority's approval.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
102	Integrated Regional Licence condition 15.2	A licensee must, unless otherwise notified in writing by the Authority, review the customer service charter within the timeframe specified, and submit to the Authority the results of that review within 5 days after it is completed.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
103	Integrated Regional Licence condition 20.2	A licensee must amend the asset management system before an expansion or reduction in generating works, distribution systems and transmission systems and notify the Authority in the manner prescribed, if the expansion or reduction is not provided for in the asset management system.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
104	Integrated Regional Licence condition 20.3	A licensee must not expand the generating works, distribution systems or transmission systems outside the licence area.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
105	Integrated Regional Licence condition 21.1	A licensee and any related body corporate must maintain accounting records that comply with the Australian Accounting Standards Board Standards or equivalent International Accounting Standards.	2	Moderate	Unlikely	Medium	Low	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
106	Integrated Regional Licence condition 22.4	A licensee must comply with any individual performance standards prescribed by the Authority.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
107	Integrated Regional Licence condition 23.2	A licensee must comply, and require its auditor to comply, with the Authority's standard audit guidelines dealing with the performance audit.	2	Moderate	Unlikely	Medium	Low	Audit Priority 4
108	Integrated Regional Licence condition 24.4	A licensee must comply, and must require the licensee's expert to comply, with the relevant aspects of the Authority's standard guidelines dealing with the asset management system.	2	Moderate	Unlikely	Medium	Low	Audit Priority 4
109	Integrated Regional Licence condition 25.1	A licensee must report to the Authority, in the manner prescribed, if a licensee is under external administration or there is a significant change in the circumstances upon which the licence was granted which may affect a licensee's ability to meet its obligations.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
110	Integrated Regional Licence condition 26.1	A licensee must provide the Authority, in the manner prescribed, any information the Authority requires in connection with its functions under the Electricity Industry Act.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
111	Integrated Regional Licence condition 27.2	A licensee must publish any information it is directed by the Authority to publish, within the timeframes specified.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
112	Integrated Regional Licence condition 28.1	Unless otherwise specified, all notices must be in writing.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
15 Electricity Industry Metering Code - Licence Conditions and Obligations								
300	Electricity Industry Metering Code clause 2.2(1)(a)	A network operator must treat all Code participants that are its associates on an arms-length basis.	NR	Minor	Unlikely	Low	Medium	Audit Priority 5

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
301	Electricity Industry Metering Code clause 2.2(1)(b)	A network operator must ensure that no Code participant that is its associate receives a benefit in respect of the Code unless the benefit is attributable to an arm's length application of the Code or is also made available to all other Code participants on the same terms and conditions.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
302	Electricity Industry Metering Code clause 3.1	A network operator must ensure that its meters meet the requirements specified in the applicable metrology procedure and also comply with any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the National Measurement Act.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
303	Electricity Industry Metering Code clause 3.2(1)	An accumulation meter must at least conform to the requirements specified in the applicable metrology procedure and display, or permit access to a display of, the accumulated electricity production or consumption at the metering point in the manner prescribed.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
304	Electricity Industry Metering Code clause 3.3(1)	An interval meter must at least have an interface to allow the interval energy data to be downloaded in the manner prescribed using an interface compatible with the requirements specified in the applicable metrology procedure.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
305	Electricity Industry Metering Code clause 3.3(3)	If a metering installation is required to include a communications link, the link must (where necessary), include a modem and isolation device approved under the relevant telecommunications regulations, to allow the interval energy data to be downloaded in the manner prescribed.	2	Moderate	Probable	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
306	Electricity Industry Metering Code clause 3.5(1) and (2)	A network operator must ensure that there is a metering installation at every connection point on its network which is not a Type 7 connection point. Unless it is a Type 7 metering installation, the metering installation must meet the functionality requirements prescribed.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
307	Electricity Industry Metering Code clause 3.5(3)	A network operator must, for each metering installation on its network, on and from the time of its connection to the network, provide, install, operate and maintain the metering installation in the manner prescribed (unless otherwise agreed).	2	Moderate	Probable	Medium	Medium	Audit Priority 4
308	Electricity Industry Metering Code clause 3.5(4)	A network operator must ensure that, except for a Type 7 metering installation, the metering point for a revenue metering installation is located as close as practicable to the connection point in accordance with good electricity industry practice.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
309	Electricity Industry Metering Code clause 3.5(6)	A network operator may only impose a charge for providing, installing, operating or maintaining a metering installation in accordance with the applicable service level agreement between it and the user.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
310	Electricity Industry Metering Code clause 3.5(9)	If a network operator becomes aware that a metering installation does not comply with the Code, the network operator must advise affected parties of the non-compliance and arrange for the non-compliance to be corrected as soon as practicable.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
311	Electricity Industry Metering Code clause 3.7	All devices that may be connected to a telecommunications network must be compatible with the telecommunications network and comply with all applicable State and Commonwealth enactments.	2	Moderate	Probable	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
312	Electricity Industry Metering Code clause 3.8	A network operator must, for each metering installation on its network, ensure that the metering installation is secured by means of devices or methods which, to the standard of good electricity industry practice, hinder unauthorized access and enable unauthorized access to be detected.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
313	Electricity Industry Metering Code clause 3.9(3)	Each metering installation must meet at least the requirements for that type of metering installation specified in Table 3 in Appendix 1 of the Code.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
314	Electricity Industry Metering Code clause 3.9(7)	For a metering installation used to supply a customer with requirements above 1000 volts that require a VT and whose annual consumption is below 750MWh, the metering installation must meet the relevant accuracy requirements of Type 3 metering installation for active energy only.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
315	Electricity Industry Metering Code clause 3.9(9)	If compensation is carried out within the meter then the resultant metering system error must be as close as practicable to zero.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
316	Electricity Industry Metering Code clause 3.10	A network operator must ensure that any programmable settings within any of its metering installations, data loggers or peripheral devices, that may affect the resolution of displayed or stored data, meet the relevant requirements specified in the applicable metrology procedure and comply with any applicable specifications or guidelines specified by the National Measurement Institute under the National Measurement Act.	2	Moderate	Probable	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
317	Electricity Industry Metering Code clause 3.11(1)	A network operator must ensure that a metering installation on its network permits collection of data within the timeframes and to the level of availability specified.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
318	Electricity Industry Metering Code clause 3.11(2)	A network operator must make repairs to the metering installation in accordance with the applicable service level agreement if an outage or malfunction occurs to a metering installation.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
319	Electricity Industry Metering Code clause 3.11(3)	A Code participant who becomes aware of an outage or malfunction of a metering installation must advise the network operator as soon as practicable.	2	Not applicable – for the purposes of this clause, EDL is the network operator (re the distribution network), with responsibility for metering. Therefore, this clause relates to other parties' obligations to advise of outages or malfunctions.				
320	Electricity Industry Metering Code clause 3.12(1)	A network operator must ensure that each metering installation complies with, at least, the prescribed design requirements.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
321	Electricity Industry Metering Code clause 3.12(2)	A network operator must ensure that instrument transformers in its metering installations comply with the relevant requirements of any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the National Measurement Act and any requirements specified in the applicable metrology procedure.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
322	Electricity Industry Metering Code clause 3.12(3)	A network operator must provide isolation facilities, to the standard of good electricity industry practice, to facilitate testing and calibration of the metering installation.	2	Moderate	Probable	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
323	Electricity Industry Metering Code clause 3.12(4)	A network operator must maintain drawings and supporting information, to the standard of good electricity industry practice, detailing the metering installation for maintenance and auditing purposes.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
324	Electricity Industry Metering Code clause 3.13(1)	A network operator must procure the user or the user's customer to install (or arrange for the installation of) a full check metering installation or partial check metering installation in accordance with the prescribed requirements.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
325	Electricity Industry Metering Code clause 3.13(3)(c)	A partial check metering installation must be physically arranged in a manner determined by the network operator, acting in accordance with good electricity industry practice.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
326	Electricity Industry Metering Code clause 3.13(4)	A check metering installation for a metering point must not exceed twice the error level permitted under clause 3.9 for the revenue metering installation for the metering point, and must be connected in such a way that it measures the same load conditions as the revenue metering installation for the metering point, and must be otherwise consistent with the prescribed requirements.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
327	Electricity Industry Metering Code clause 3.14(3)	If, under clause 3.14(2) of the Code, a metering installation uses metering class CTs and VTs that do not comply with the prescribed requirements, then the network operator must either (or both) install meters of a higher class accuracy or apply accuracy calibration factors within the meter in order to achieve the overall accuracy requirements prescribed.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
328	Electricity Industry Metering Code clause 3.16(1)	A network operator must ensure that a Type 1 metering installation to Type 5 metering installation on the network has the facilities and functionality prescribed.	2	Not applicable - clause refers to the wholesale market, which is defined by the Code as relating only to the SWIS				
329	Electricity Industry Metering Code clause 3.16(2)	A network operator must ensure that a Type 1 metering installation to Type 4 metering installation on the network includes a communications link.	2	Not applicable - clause refers to the wholesale market, which is defined by the Code as relating only to the SWIS				
330	Electricity Industry Metering Code clause 3.16(3)	If a device is used as a data logger, the energy data for a metering point on the network must be collated in trading intervals within the metering installation unless it has been agreed between the network operator and the Code participant that energy data may be recorded in sub-multiples of a trading interval.	2	Not applicable - clause refers to the wholesale market, which is defined by the Code as relating only to the SWIS				
331	Electricity Industry Metering Code clause 3.16(5)	A network operator or a user may require the other to negotiate and enter into a written service level agreement in respect of the matters in the metrology procedure dealt with under clause 3.16(4) of the Code.	2	Not applicable - clause refers to the wholesale market, which is defined by the Code as relating only to the SWIS				
332	Electricity Industry Metering Code clause 3.16(6)	A network operator may only impose a charge for the matters dealt with in the metrology procedure in accordance with the applicable service level agreement between it and the user.	2	Not applicable - clause refers to the wholesale market, which is defined by the Code as relating only to the SWIS				

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
333	Electricity Industry Metering Code clause 3.18(1)	If the Electricity Retail Corporation supplies electricity to a contestable customer at a connection point under a non-regulated contract, and in circumstances where immediately before entering into the contract, the electricity retail corporation supplied electricity to the contestable customer under a regulated contract, then the metering installation for the connection point must comply with the prescribed wholesale market metering installation requirements.	2	Not applicable - clause is relevant to the Electricity Retail Corporation (Synergy Energy) only				
334	Electricity Industry Metering Code clause 3.20(1)	A network operator must, if reasonably requested by a Code participant, provide enhanced technology features in a metering installation.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
335	Electricity Industry Metering Code clause 3.20(3)	A network operator may only impose a charge for the provision of metering installations with enhanced technology features in accordance with the applicable service level agreement between it and the user.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
336	Electricity Industry Metering Code clause 3.21(1)	Meters containing an internal real time clock must maintain time accuracy as prescribed. Time drift must be measured over a period of 1 month.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
337	Electricity Industry Metering Code clause 3.21(2)	If a metering installation includes measurement elements and an internal data logger at the same site, it must include facilities on site for storing the interval energy data for the periods prescribed.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
338	Electricity Industry Metering Code clause 3.22	A network operator providing one or more metering installations with enhanced technology features must be licensed to use and access the metering software applicable to all devices being installed and be able to program the devices and set parameters.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
339	Electricity Industry Metering Code clause 3.23(a)	Where signals are provided from the meter for the user or the user's customer use, a network operator must ensure that signals are isolated by relays or electronic buffers to prevent accidental or malicious damage to the meter.	2	Not applicable - clause relates to customer load management. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
340	Electricity Industry Metering Code clause 3.23(b)	Where signals are provided from the meter for the user or the user's customer use, a network operator must provide the user or the user's customer with sufficient details of the signal specification to enable compliance with clause 3.23(c) of the Code.	2	Not applicable - clause relates to customer load management. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
341	Electricity Industry Metering Code clause 3.25	A network operator that operates and maintains a pre-payment meter on its network must operate and maintain the pre-payment meter in accordance with good electricity industry practice and, as far as reasonably practicable, minimise any departure from what the requirements of the Code would have been in respect of the pre-payment meter if clause 3.24 were deleted.	2	Not applicable - pre-payment meters are applicable to customers only. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
343	Electricity Industry Metering Code clause 3.29	A network operator must publish a list of registered metering installation providers, including the prescribed details, and at least annually, update the list.	2	Moderate	Unlikely	Medium	Low	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
344	Electricity Industry Metering Code clause 4.1(1)	A network operator must establish, maintain and administer a metering database containing standing data and energy data for each metering point on its network.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
345	Electricity Industry Metering Code clause 4.1(2)	A network operator must ensure that its metering database and associated links, circuits, information storage and processing systems are secured by means of devices or methods which, to the standard of good electricity industry practice, hinder unauthorized access and enable unauthorized access to be detected.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
346	Electricity Industry Metering Code clause 4.1(3)	A network operator must prepare, and if applicable, must implement a disaster recovery plan to ensure that it is able, within 2 business days after the day of any disaster, to rebuild the metering database and provide energy data to Code participants.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
347	Electricity Industry Metering Code clause 4.2(1)	A network operator must ensure that its registry complies with the Code and the prescribed clause of the market rules.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
348	Electricity Industry Metering Code clause 4.3(1)	The standing data for a metering point must comprise at least the items specified.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
349	Electricity Industry Metering Code clause 4.4(1)	A network operator and affected Code participants must liaise together to determine the most appropriate way to resolve a discrepancy between energy data held in a metering installation and data held in the metering database.	NR	Minor	Probable	Low	Medium	Audit Priority 5
350	Electricity Industry Metering Code clause 4.5(1)	A Code participant must not knowingly permit the registry to be materially inaccurate.	NR	Minor	Unlikely	Low	Medium	Audit Priority 5

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
352	Electricity Industry Metering Code clause 4.6(1)	If a network operator is notified of a change to or inaccuracy in an item of standing data by a Code participant which is the designated source for the item of standing data, then the network operator must update the registry.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
353	Electricity Industry Metering Code clause 4.6(2)	If a network operator is notified of a change to or inaccuracy in an item of standing data by a Code participant which is not the designated source for the item of standing data, or otherwise becomes aware of a change to or inaccuracy in an item of standing data, then the network operator must undertake investigations to the standard of good electricity industry practice to determine whether the registry should be updated, and update the registry as required.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
354	Electricity Industry Metering Code clause 4.7	A network operator must notify any affected user for a metering point of the updated standing data within the timeframes prescribed, where that user would otherwise be entitled to the updated standing data.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
355	Electricity Industry Metering Code clause 4.8(3)	A network operator must allow a user who supplies, purchases or generates electricity to have local and (where a suitable communications link is installed) remote access to the energy data for metering points at its associated connection points, using a 'read only' password provided by the network operator.	2	Moderate	Probable	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
356	Electricity Industry Metering Code clause 4.8(4)	A network operator must have security devices and methods in place that ensure that energy data held in its metering installation and data held in its metering database is secured from unauthorized local or remote access, in the manner prescribed, sufficient to the standard of good electricity industry practice.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
357	Electricity Industry Metering Code clause 4.8(5)	A network operator must ensure that electronic passwords and other electronic security controls are secured from unauthorized access and are only issued to authorized personnel.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
358	Electricity Industry Metering Code clause 4.9	A network operator must retain energy data in its metering database for each metering point on its network for at least the periods, and with the level of accessibility, prescribed.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
359	Electricity Industry Metering Code clause 5.1 (1)	A network operator must use all reasonable endeavours to accommodate another Code participant's requirement to obtain a metering service and requirements in connection with the negotiation of a service level agreement.	NR	Minor	Unlikely	Low	Medium	Audit Priority 5
360	Electricity Industry Metering Code clause 5.1(2)	A network operator must expeditiously and diligently process all requests for a service level agreement and negotiate its terms in good faith. A network operator must, to the extent reasonably practicable in accordance with good electricity industry practice, permit a Code participant to acquire a metering service containing only those elements of the metering service which the Code participant wishes to acquire.	NR	Minor	Unlikely	Low	Low	Audit Priority 5

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
361	Electricity Industry Metering Code clause 5.3	A network operator must, for each metering point on its network, obtain energy data from the metering installation and transfer the energy data into its metering database within the timeframes prescribed.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
362	Electricity Industry Metering Code clause 5.4(1)	A network operator must, for each accumulation meter on its network, use reasonable endeavours to undertake a meter reading that provides an actual value at least once in any 12 month period.	NR	Minor	Unlikely	Low	Medium	Audit Priority 5
364	Electricity Industry Metering Code clause 5.5(2)	A network operator may only impose a charge for the provision of data under this Code in accordance with the applicable service level agreement between it and the user and must not impose a charge for the provision of data if another enactment prohibits it from doing so.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
366	Electricity Industry Metering Code clause 5.6(1)	A network operator must provide validated, and where necessary, substituted or estimated energy data for a metering point to the user for the metering point and the IMO within the timeframes prescribed.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
367	Electricity Industry Metering Code clause 5.7	A network operator must provide replacement energy data to the user for the metering point and the IMO within the timeframes prescribed.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
368	Electricity Industry Metering Code clause 5.8	A network operator must provide a user with whatever information the network operator has that is necessary to enable the user to comply with its obligations under the Code of Conduct, within the time necessary for the user to comply with the obligations.	2	Moderate	Probable	Medium	Low	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
369	Electricity Industry Metering Code clause 5.9	A network operator must provide standing data, provided to or obtained by it under this Code, to users where required to do so under any enactment.	2	Moderate	Probable	Medium	Low	Audit Priority 4
370	Electricity Industry Metering Code clause 5.10	A network operator must provide a subset of the standing data to a retailer in accordance with the provisions of Annex 4 of the Customer Transfer Code.	2	Not applicable - clause relates to customer transfers. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
371	Electricity Industry Metering Code clause 5.11	If a transfer occurs at a connection point, a network operator must provide an incoming retailer with a copy of the standing data for each metering point associated with the connection point within the timeframes prescribed.	2	Not applicable - clause relates to customer transfers. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
372	Electricity Industry Metering Code clause 5.12(1)	If a network operator is given a request in accordance with the communication rules and the energy data request relates only to a time or times for which the user was the current user at the metering point, a network operator must provide a user with a complete set of energy data for a metering point within the timeframes prescribed.	2	Moderate	Unlikely	Medium	Low	Audit Priority 4
373	Electricity Industry Metering Code clause 5.13	A network operator must provide a current user with a complete current set of standing data for a metering point and advise whether there is a communications link for the metering point, within the timeframes prescribed, if it is given a request in accordance with the communication rules.	2	Moderate	Unlikely	Medium	Low	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
374	Electricity Industry Metering Code clause 5.14(3)	A network operator must acknowledge receipt of a bulk standing data request from a user and provide the requested standing data within the timeframes prescribed in accordance with the communication rules.	2	Moderate	Unlikely	Medium	Low	Audit Priority 4
375	Electricity Industry Metering Code clause 5.15	A network operator that provides energy data to a user or the IMO must also provide the date of the meter reading.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
379	Electricity Industry Metering Code clause 5.19(1)	A user must, when requested by the network operator acting in accordance with good electricity industry practice, use reasonable endeavours to collect information from customers, if any, that assists the network operator in meeting its obligations described in the Code and elsewhere.	NR	Not applicable - clause relates to the provision of customer information. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
380	Electricity Industry Metering Code clause 5.19(2)	A user must, to the extent that it is able, collect and maintain a record of the address, site and customer attributes, prescribed in relation to the site of each connection point, with which the user is associated.	NR	Not applicable - clause relates to the provision of customer information. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
381	Electricity Industry Metering Code clause 5.19(3)	A user must, after becoming aware of any change in a site's prescribed attributes, notify the network operator of the change within the timeframes prescribed.	2	Not applicable - clause relates to the provision of customer information. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
382	Electricity Industry Metering Code clause 5.19(4)	A user that becomes aware that there is a sensitive load at a customer's site must immediately notify the network operator's Network Operations Control Centre of the fact.	2	Not applicable - clause relates to the provision of customer information. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
383	Electricity Industry Metering Code clause 5.19(5)	A network operator must give notice to a user, or (if there is a different current user) the current user, acknowledging receipt of any customer, site or address attributes from the user within the timeframes prescribed.	2	Not applicable - clause relates to the provision of customer information. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
384	Electricity Industry Metering Code clause 5.19(6)	A user must use reasonable endeavours to ensure that it does notify the network operator of a change in an attribute that results from the provision of standing data by the network operator to the user.	NR	Not applicable - clause relates to the provision of customer information. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
385	Electricity Industry Metering Code clause 5.20(1)	A network operator must, within 6 months from the date this Code applies to the network operator, develop, in accordance with the communication rules, an energy data verification request form.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
386	Electricity Industry Metering Code clause 5.20(2)	An Energy Data Verification Request Form must require a Code participant to provide the information prescribed.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
387	Electricity Industry Metering Code clause 5.20(4)	If a Code participant requests verification of energy data, a network operator must, in accordance with the metrology procedure, use reasonable endeavours to verify energy data and inform the requesting Code participant of the result of the verification and provide the verified energy data within the timeframes prescribed.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
388	Electricity Industry Metering Code clause 5.21(2)	A network operator must comply with any reasonable request by a Code participant to undertake either a test or an audit of the accuracy of the metering installation or the energy or standing data of the metering installation.	2	Moderate	Probable	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
389	Electricity Industry Metering Code clause 5.21(4)	A test or audit is to be conducted in accordance with the metrology procedure and the applicable service level agreement.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
392	Electricity Industry Metering Code clause 5.21(8)	A network operator may only impose a charge for the testing of the metering installations, or auditing of information from the meters associated with the metering installations, or both, in accordance with the applicable service level agreement between it and the user.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
393	Electricity Industry Metering Code clause 5.21(9)	Any written service level agreement in respect of the testing of the metering installations, or the auditing of information from the meters associated with the metering installations, must include a provision that no charge is to be imposed if the test or audit reveals a non-compliance with this Code which results in energy data errors in the network operator's favour.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
394	Electricity Industry Metering Code clause 5.21(11)	A network operator must advise the affected parties as soon as practicable of errors detected under a test or audit, the possible duration of the errors, and must restore the accuracy of the metering installation in accordance with the applicable service level agreement.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
395	Electricity Industry Metering Code clause 5.21(12)	The original stored error correction data in a meter must not be altered except during accuracy testing and calibration of a metering installation.	2	Moderate	Probable	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
396	Electricity Industry Metering Code clause 5.22(1)	A network operator must validate energy data in accordance with this Code applying, as a minimum, the prescribed rules and procedures and must, where necessary, substitute and estimate energy data under this Code applying, as a minimum, the prescribed rules and procedures.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
397	Electricity Industry Metering Code clause 5.22(2)	The network operator must use check metering data, where available, to validate energy data provided that the check metering data has been appropriately adjusted for differences in metering installation accuracy.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
398	Electricity Industry Metering Code clause 5.22(3)	A network operator must prepare substitute values using the prescribed method if a check meter is not available or energy data cannot be recovered from the metering installation within the time required.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
399	Electricity Industry Metering Code clause 5.22(4)	A network operator that detects a loss of energy data or incorrect energy data from a metering installation must notify each affected Code participant of the loss or error within 24 hours after detection.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
400	Electricity Industry Metering Code clause 5.22(5)	Substitution or estimation of energy data is to be required when energy data is missing, unavailable or corrupted, including in the circumstances described.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
401	Electricity Industry Metering Code clause 5.22(6)	A network operator must review all validation failures before undertaking any substitution.	2	Moderate	Probable	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
402	Electricity Industry Metering Code clause 5.23(1)	A network operator that determines that there is no possibility of determining an actual value for a metering point must designate an estimated or substituted value for the metering point to be a deemed actual value for the metering point.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
403	Electricity Industry Metering Code clause 5.23(3)	A network operator that has designated a deemed actual value for a metering point must repair or replace the meter or one or more of components of metering equipment (as appropriate) at the metering point.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
404	Electricity Industry Metering Code clause 5.24(1)	A network operator that uses an actual value (first value) for energy data for a metering point, and a better quality actual or deemed actual value is available (second value), must replace the first value with the second value if doing so would be consistent with good electricity industry practice.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
405	Electricity Industry Metering Code clause 5.24(2)	A network operator that uses a deemed actual value (first value) for energy data for a metering point, and a better quality deemed actual value is available (second value), must replace the first value with the second value if doing so would be consistent with good electricity industry practice.	2	Moderate	Probable	Medium	Medium	Audit Priority 4

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
406	Electricity Industry Metering Code clause 5.24(3)	A network operator that uses an estimated or substituted value (first value) for energy data for a metering point, and a better quality actual, deemed, estimated or substituted value is available (second value), must replace the first value with the second value if doing so would be consistent with good electricity industry practice or the user and its customer jointly request it to do so.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
407	Electricity Industry Metering Code clause 5.24(4)	A network operator (acting in accordance with good electricity industry practice) must consider any reasonable request from a Code participant for an estimated or substituted value to be replaced.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
408	Electricity Industry Metering Code clause 5.25	A network operator must ensure the accuracy of estimated energy data in accordance with the methods in its metrology procedure and ensure that any transformation or processing of data preserves its accuracy in accordance with the metrology procedure.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
410	Electricity Industry Metering Code clause 5.29	If a network operator makes an election for the electricity networks corporation to be its metering data agent in relation to a network, then, except to the extent that the metering data agency agreement provides otherwise, the parties must undertake the activities prescribed.	2	Not applicable - clause relates to establishing an agency arrangement with the electricity networks corporation (Western Power), which is not licenced to operate in the area subject to EDL's licence				

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
411	Electricity Industry Metering Code clause 5.30(1)	If a network operator makes an election for the electricity networks corporation to be its metering data agent in relation to a network, then the electing network operator and the electricity networks corporation must enter into a metering data agency agreement in relation to the network, which must deal with at least the matters prescribed.	2	Not applicable - clause relates to establishing an agency arrangement with the electricity networks corporation (Western Power), which is not licenced to operate in the area subject to EDL's licence				
412	Electricity Industry Metering Code clause 5.31(1)	If a network operator makes an election for the electricity networks corporation to be its metering data agent in relation to a network, the electricity networks corporation must assess the compliance of each metering installation in the network with this Code and notify the electing network operator of each non-compliant metering installation.	2	Not applicable - clause relates to establishing an agency arrangement with the electricity networks corporation (Western Power), which is not licenced to operate in the area subject to EDL's licence				
413	Electricity Industry Metering Code clause 5.31(2)	An electing network operator may, by notice to the electricity networks corporation, require the electricity networks corporation to upgrade a non-compliant metering installation, in which case the electricity networks corporation must undertake the upgrade in accordance with the metering data agency agreement and good electricity industry practice.	2	Not applicable - clause relates to establishing an agency arrangement with the electricity networks corporation (Western Power), which is not licenced to operate in the area subject to EDL's licence				
414	Electricity Industry Metering Code clause 5.34(2)	Except to the extent that the metering data agency agreement provides otherwise, the costs which may be recovered by the electricity networks corporation for acting as the network operator's metering data agent must not exceed the amounts prescribed.	2	Not applicable - clause relates to establishing an agency arrangement with the electricity networks corporation (Western Power), which is not licenced to operate in the area subject to EDL's licence				

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
415	Electricity Industry Metering Code clause 6.1(1)	A network operator must, in relation to its network, comply with the agreements, rules, procedures, criteria and processes prescribed.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
417	Electricity Industry Metering Code clause 6.20(4)	A network operator must amend any document in accordance with the Authority's final findings.	NR	Minor	Unlikely	Low	Medium	Audit Priority 5
418	Electricity Industry Metering Code clause 7.2(1)	Code participants must use reasonable endeavours to ensure that they can send and receive a notice by post, facsimile and electronic communication and must notify the network operator of a telephone number for voice communication in connection with the Code.	NR	Not applicable – for the purposes of this clause, EDL is both the Code participant and Network operator				
419	Electricity Industry Metering Code clause 7.2(2)	A network operator must notify each Code participant of its initial contact details and of any change to its contact details at least 3 business days before the change takes effect.	2	Moderate	Unlikely	Medium	Medium	Audit Priority 4
424	Electricity Industry Metering Code clause 8.1(1)	Representatives of disputing parties must meet within 5 business days after a notice given by a disputing party to the other disputing parties and attempt to resolve the dispute under or in connection with the Electricity Industry Metering Code by negotiations in good faith.	NR	Minor	Unlikely	Low	Low	Audit Priority 5
425	Electricity Industry Metering Code clause 8.1(2)	If a dispute is not resolved within 10 business days after the dispute is referred to representative negotiations, the disputing parties must refer the dispute to a senior management officer of each disputing party who must meet and attempt to resolve the dispute by negotiations in good faith.	NR	Minor	Unlikely	Low	Low	Audit Priority 5

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
426	Electricity Industry Metering Code clause 8.1(3)	If the dispute is not resolved within 10 business days after the dispute is referred to senior management negotiations, the disputing parties must refer the dispute to the senior executive officer of each disputing party who must meet and attempt to resolve the dispute by negotiations in good faith.	NR	Minor	Unlikely	Low	Low	Audit Priority 5
427	Electricity Industry Metering Code clause 8.1(4)	If the dispute is resolved by representative negotiations, senior management negotiations or CEO negotiations, the disputing parties must prepare a written and signed record of the resolution and adhere to the resolution.	2	Moderate	Unlikely	Medium	Low	Audit Priority 4
428	Electricity Industry Metering Code clause 8.3(2)	The disputing parties must at all times conduct themselves in a manner which is directed towards achieving the objective of dispute resolution with as little formality and technicality and with as much expedition as the requirements of Part 8 of the Code and a proper hearing and determination of the dispute, permit.	NR	Minor	Unlikely	Low	Low	Audit Priority 5
16 Electricity Industry (Network Quality and Reliability of Supply) Code – Licence Conditions and Obligations								
429	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 5(1)	A distributor or transmitter must, as far as reasonably practicable, ensure that electricity supply to a customer's electrical installations complies with prescribed standards.	NR	Minor	Probable	Low	Low	Audit Priority 5

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
430	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 8	A distributor or transmitter must, so far as reasonably practicable, disconnect the supply of electricity to installations or property in specified circumstances, unless it is in the interest of the customer to maintain the supply.	NR	Minor	Probable	Low	Low	Audit Priority 5
431	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 9	A distributor or transmitter must, as far as reasonably practicable, ensure that that the supply of electricity is maintained and the occurrence and duration of interruptions is kept to a minimum.	NR	Minor	Probable	Low	Low	Audit Priority 5
432	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 10(1)	A distributor or transmitter must, so far as reasonably practicable, reduce the effect of any interruption on a customer.	NR	Minor	Probable	Low	Low	Audit Priority 5
433	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 10(2)	A distributor or transmitter must consider whether, in specified circumstances, it should supply electricity by alternative means to a customer who will be affected by a proposed interruption.	NR	Minor	Probable	Low	Low	Audit Priority 5
434	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 12(3)	A distributor must take prescribed action in the event of a significant interruption to a small use customer.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
435	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 13(2)	A distributor or transmitter must, so far as reasonably practicable, ensure that customers in specified areas do not have average total lengths of interruptions of supply greater than specified durations.	NR	Minor	Probable	Low	Medium	Audit Priority 5

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
436	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 13(3)	The average total length of interruptions of supply is to be calculated using the specified method.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
437	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 14(8)	A distributor or transmitter must, on request, provide to an affected customer a free copy of an instrument issued by the Minister and of any notice given under section 14(7) of the Electricity Industry (Network Quality and Reliability of Supply) Code 2005.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
438	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 15(2)	A distributor or transmitter that agrees with a customer to exclude or modify certain provisions must set out the advantages and disadvantages to the customer of doing so in their agreement.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
439	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 18	A distributor operating a relevant distribution system must, in specified circumstances, make a payment to a customer within a specific timeframe for a failure to give required notice of planned interruption.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
440	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 19	A distributor operating a relevant distribution system must, in specified circumstances, make a payment to a customer within a specific timeframe if a supply interruption exceeds 12 hours.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
441	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 21(1)	A distributor operating a relevant distribution system must provide eligible customers with information about applying for payments for failure to meet the requirements in sections 18 and 19 of the Electricity Industry (Network Quality and Reliability of Supply) Code 2005.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
442	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 21(2)	A distributor operating a relevant distribution system must provide written notice to customers about payments for failure to meet the requirements in sections 18 and 19 of the Electricity Industry (Network Quality and Reliability of Supply) Code 2005.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
443	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 21(3)	A distributor operating a relevant distribution system must provide written notice to eligible customers about payments for failure to meet the requirements in sections 18 and 19 of the Electricity Industry (Network Quality and Reliability of Supply) Code 2005 not less than once in each financial year.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
444	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 23(1)	A distributor or transmitter must take all such steps as are reasonably necessary to monitor the operation of its network to ensure compliance with specified requirements.	NR	Minor	Probable	Low	Medium	Audit Priority 5
445	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 23(2)	A distributor or transmitter must keep records of information regarding its compliance with specific requirements for the period specified.	2	Moderate	Probable	Medium	Medium	Audit Priority 4
446	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 24(3)	A distributor or transmitter must complete a quality investigation requested by a customer in accordance with specified requirements.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
447	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 24(4)	A distributor or transmitter must report the results of an investigation to the customer concerned.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				

Licence Condition				Risk Assessment				
No	Obligations under Condition	Description	Type	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
448	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 25(2)	A distributor or transmitter must make available, at no cost, a copy of a document setting out its complaint handling processes to a small customer who makes a complaint to the distributor or transmitter or who asks to be given such information.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
449	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 25(3)	A document setting out a distributor's or transmitter's complaint handling process must contain the specified information.	2	Not applicable - under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
450	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 26	A distributor or transmitter must arrange for an independent audit and report on its systems for monitoring, and its compliance with specific requirements. This is to be carried out in respect of the operation of such systems during each year ending on 30 June.	2	Not applicable – per Part 2 of the Code, this requirement relates to standards for the interruption of supply to individual customers. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
451	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 27(1)	A distributor or transmitter must prepare and publish a report about its performance in accordance with specified requirements.	2	Not applicable – per Part 2 of the Code, this requirement relates to standards for the interruption of supply to individual customers. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				
452	Electricity Industry (Network Quality and Reliability of Supply) Code 2005 clause 27(3)	A distributor or transmitter must give a copy of its report about its performance to the Minister and the Authority within the specified period.	2	Not applicable – per Part 2 of the Code, this requirement relates to standards for the interruption of supply to individual customers. Under paragraph 2.1 (b) of the Licence, EDL is not licenced to supply electricity to customers, as defined by the Electricity Act				

Appendix B - Asset management system review risk assessment

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).
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.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
1 (a)	Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning	Moderate	Probable	Medium	Medium	Audit Priority 4
1 (b)	Service levels are defined	Moderate	Probable	Medium	Low	Audit Priority 4
1 (c)	Non-asset options (e.g. demand management) are considered	Minor	Probable	Low	Medium	Audit Priority 5
1 (d)	Lifecycle costs of owning and operating assets are assessed	Moderate	Probable	Medium	Medium	Audit Priority 4
1 (e)	Funding options are evaluated	Minor	Probable	Low	Medium	Audit Priority 5
1 (f)	Costs are justified and cost drivers identified	Moderate	Probable	Medium	Medium	Audit Priority 4
1 (g)	Likelihood and consequences of asset failure are predicted	Major	Likely	High	Medium	Audit Priority 2
1 (h)	Plans are regularly reviewed and updated	Moderate	Probable	Medium	Medium	Audit Priority 4

2	Asset Creation and Acquisition
Key Process:	Asset creation/acquisition means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay
Outcome:	A more economic, efficient and cost-effective asset acquisition framework which will reduce demand for new assets, lower service costs and improve service delivery.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
2 (a)	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions	Moderate	Unlikely	Medium	Medium	Audit Priority 4
2 (b)	Evaluations include all life-cycle costs	Moderate	Probable	Medium	Medium	Audit Priority 4
2 (c)	Projects reflect sound engineering and business decisions	Moderate	Probable	Medium	Medium	Audit Priority 4
2 (d)	Commissioning tests are documented and completed	Moderate	Probable	Medium	Low	Audit Priority 4
2 (e)	Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood	Moderate	Probable	Medium	Medium	Audit Priority 4

3	Asset Disposal
Key Process:	Effective asset disposal frameworks incorporate consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets. Alternatives are evaluated in cost-benefit terms.
Outcome:	Effective management of the disposal process will minimise holdings of surplus and under-performing assets and will lower service costs.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
3 (a)	Under-utilised and under-performing assets are identified as part of a regular systematic review process	Moderate	Unlikely	Medium	Medium	Audit Priority 4
3 (b)	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	Moderate	Unlikely	Medium	Medium	Audit Priority 4
3 (c)	Disposal alternatives are evaluated	Minor	Probable	Low	High	Audit Priority 5
3 (d)	There is a replacement strategy for assets	Moderate	Probable	Medium	Low	Audit Priority 4

4	Environmental analysis
Key Process:	Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.
Outcome:	The asset management system regularly assesses external opportunities and threats and takes corrective action to maintain performance requirements.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
4 (a)	Opportunities and threats in the system environment are assessed	Moderate	Likely	High	Low	Audit Priority 2
4 (b)	Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved	Moderate	Likely	High	Low	Audit Priority 2
4 (c)	Compliance with statutory and regulatory requirements	Moderate	Likely	High	Low	Audit Priority 2
4 (d)	Achievement of customer service levels	Moderate	Probable	Medium	Low	Audit Priority 4

5	Asset operations
Key Process:	Operations functions relate to the day-to-day running of assets and directly affect service levels and costs.
Outcome:	Operations plans adequately document the processes and knowledge of staff in the operation of assets so that service levels can be consistently achieved.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
5 (a)	Operational policies and procedures are documented and linked to service levels required	Moderate	Likely	High	Low	Audit Priority 2
5 (b)	Risk management is applied to prioritise operations tasks	Moderate	Probable	Medium	Medium	Audit Priority 4
5 (c)	Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition and accounting data	Moderate	Probable	Medium	Low	Audit Priority 4
5 (d)	Operational costs are measured and monitored	Moderate	Probable	Medium	Low	Audit Priority 4
5 (e)	Staff receive training commensurate with their responsibilities	Moderate	Probable	Medium	Low	Audit Priority 4

6	Asset maintenance
Key Process:	Maintenance functions relate to the upkeep of assets and directly affect service levels and costs.
Outcome:	Maintenance plans cover the scheduling and resourcing of the maintenance tasks so that work can be done on time and on cost.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
6 (a)	Maintenance policies and procedures are documented and linked to service levels required	Moderate	Likely	High	Low	Audit Priority 2
6 (b)	Regular inspections are undertaken of asset performance and condition	Moderate	Probable	Medium	Low	Audit Priority 4
6 (c)	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	Moderate	Likely	High	Medium	Audit Priority 2
6 (d)	Failures are analysed and operational/maintenance plans adjusted where necessary	Moderate	Probable	Medium	Low	Audit Priority 4
6 (e)	Risk management is applied to prioritise maintenance tasks	Moderate	Probable	Medium	Medium	Audit Priority 4
6 (f)	Maintenance costs are measured and monitored	Minor	Probable	Low	Low	Audit Priority 5

7	Asset management information system
Key Process:	An asset management information system is a combination of processes, data and software that support 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	Control Risk	Audit Priority
7 (a)	Adequate system documentation for users and IT operators	Minor	Probable	Low	Medium	Audit Priority 5
7 (b)	Input controls include appropriate verification and validation of data entered into the system	Minor	Likely	Medium	Medium	Audit Priority 4
7 (c)	Logical security access controls appear adequate, such as passwords	Minor	Likely	Medium	Low	Audit Priority 4
7 (d)	Physical security access controls appear adequate	Minor	Probable	Low	Medium	Audit Priority 5
7 (e)	Data backup procedures appear adequate	Minor	Likely	Medium	Low	Audit Priority 4
7 (f)	Key computations related to licensee performance reporting are materially accurate	Minor	Likely	Medium	Medium	Audit Priority 4
7 (g)	Management reports appear adequate for the licensee to monitor licence obligations	Minor	Likely	Medium	Medium	Audit Priority 4

8	Risk management
Key Process:	Risk management involves the identification of risks and their management within an acceptable level of risk.
Outcome:	An effective risk management framework is applied to manage risks related to the maintenance of service standards

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
8 (a)	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system	Moderate	Probable	Medium	Low	Audit Priority 4
8 (b)	Risks are documented in a risk register and treatment plans are actioned and monitored	Moderate	Probable	Medium	Low	Audit Priority 4
8 (c)	The probability and consequences of asset failure are regularly assessed	Moderate	Probable	Medium	Medium	Audit Priority 4

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 significant disruptions to service standards.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
9 (a)	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	Major	Probable	High	Medium	Audit Priority 2

10	Financial planning
Key Process:	The financial planning component of the asset management plan brings together the financial elements of the service delivery to ensure its financial viability over the long term.
Outcome:	A financial plan that is reliable and provides for the long-term financial viability of the services.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
10 (a)	The financial plan states the financial objectives and strategies and actions to achieve the objectives	Moderate	Probable	Medium	Low	Audit Priority 4
10 (b)	The financial plan identifies the source of funds for capital expenditure and recurrent costs	Minor	Probable	Low	Medium	Audit Priority 5
10 (c)	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	Minor	Unlikely	Low	Medium	Audit Priority 5
10 (d)	The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period	Minor	Probable	Low	Medium	Audit Priority 5
10 (e)	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	Moderate	Unlikely	Medium	Low	Audit Priority 4
10 (f)	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary	Moderate	Probable	Medium	Low	Audit 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 on each 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:	A capital expenditure plan that provides reliable forward estimates of capital expenditure and asset disposal income, supported by documentation of the reasons for the decisions and evaluation of alternatives and options.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
11 (a)	There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates	Moderate	Probable	Medium	Medium	Audit Priority 4
11 (b)	The plan provide reasons for capital expenditure and timing of expenditure	Minor	Probable	Low	Medium	Audit Priority 5
11 (c)	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	Moderate	Probable	Medium	Medium	Audit Priority 4
11 (d)	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned	Minor	Probable	Low	Medium	Audit Priority 5

12	Review of AMS
Key Process:	The asset management system is regularly reviewed and updated.
Outcome:	Review of the Asset Management System to ensure the effectiveness of the integration of its components and their currency.

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent Risk	Control Risk	Audit Priority
12 (a)	A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current	Moderate	Probable	Medium	Medium	Audit Priority 4
12 (b)	Independent reviews (eg internal audit) are performed of the asset management system	Minor	Probable	Low	High	Audit Priority 5

Appendix B – References

Key EDL staff participating in the review

Name	Position
Mike Espenschied	Team Leader - Asset Management Planning
Marc Beckx	WKPP Operations Manager
Karl Newman	WA State Accountant
Tim Yoong	Manager – Technical
Tony Manning	West Kimberly Power Project Facilities Manager
Rebecca Pearson	Legal Council
Alan Picco	Electrical Engineer
Daniel Gillespie	IT Team Leader
Steve Dinsdale	Manager - Corporate Finance
Jennifer Miller	Environmental Scientist
Clem Foster	Group Audit Manager
Allan Millichamp	WA Safety Case Responsible Person
Ben Sheehan	Land and Permitting Manager

Deloitte staff participating in the review

Name	Position	Hours
Richard Thomas	Partner	5.5
Andrew Baldwin	Account Director	34.5
James Reynolds	Account Director (Brisbane)	8
Caleb Spreckley	Analyst	58
Jin Sua	Support Analyst	36
Quality Assurance Review performed by Deloitte Risk Services and Assurance & Advisory Services partners		3

Maunsell staff participating in the review

Tanuja Sanders	Project Manager - Mechanical	70
Stephen Brown	Business Unit Leader - Electrical	4

Key documents and other information sources examined

Asset Disposal
- WKKP Decommissioning Plan C (February 2007)

Change Management
- WKPP Change Management Presentation (May 2008)
- WKPP Operations Change Management (May 2008)

Contingency Planning
- WKPP LNG Supply Interruption Contingency Plan
- Memorandum - Diesel Operational Holding Levels (June 2008)

ERA Reporting
- EDL Datasheets for ERA (June 2007)
- EDL Datasheets for ERA, ERA comments (June 2007)
- WKPP Reporting Notification matrix
- WKPP Compliance Report (September 2007)
- Email to ERA regarding AMP

Exemption
- Office of Energy amended draft of public report – Licence Exemptions

Internal Audit
- Audit Plan 2008/09

Safety Case
- Report for Broome Fuel Storage Facility Safety Case (July 2007)
- WKPP Broome Gas Pipeline Operational Safety Case
- WKPP LNG Fuel Storage Facility Operations Safety Report
- Acceptance of LNG storage safety case

Spares Management
- WKPP Spares Management Plan – revision 1 (November 2007)
- Appendix A: Detailed Westrac CAT list
- Appendix B: EDL Cummins Spares WA
- Appendix C: WKPP Total PF spares list (January 2008)

Training
- Maitland and Broome training programme 2008-2009 – final draft (2008)

Work Instructions
- LNG Fuel Storage Start-up
- Rebuild Aftercooler Pumps – Caterpillar 3520C Gas Engine
- Spinning Reserve Configuration

Asset Plans
- WKPP Supplier Facilities Plan (January 2008)
- WKPP Asset Management Plan (March 2006)

Reports to Horizon Power

- Broome Power Station Supply Interruption (March 2008)
- Derby Power Station Supply Interruption (June 2008)
- WKPP West Kimberley Root Cause Analysis and Second Step Report – Derby - Feeders 3 and 5 (June 2008)
- WKPP West Kimberley Root Cause Analysis and Second Step Report - Derby - Station Black (June 2008)
- WKPP West Kimberley Root Cause Analysis and Second Step Report - Looma - Station Black (June 2008)

IT Documents

- Communications policy
- Information systems policy
- Network access form

Organisation Charts

- EDL organisation charts – 2008 edit

Performance Reporting

- Looma - monthly operational performance report (July 2007)
- Monthly performance report sample
- WKPP Reporting specification

Power Purchase Agreement

- WKPP Power Purchase Agreement (clauses)
- WKPP PPA Schedules 1-8
- WKPP PPA Schedules 9-11

Procedures

- WKPP Standing order stores process (May 2008)
- WKPP Work management and planning process (January 2008)

Reliability

- WKPP Letter to HP on Expansion Requirements (August 2008)

Environmental Risk Management

- WKPP Operations Environmental Management Plan
- Occupational Health & Safety Manual - Section 5: Hazard ID, Risk Assessment JSA (April 2007)
-
- Herring Storer Acoustics Report (July 2008)
- Broome Fuel Storage Facility Safety Case Quantitative Risk Assessment
- Emissions Testing Report, EML Air P/L (October 2008)
- Environmental Compliance Checklists

Metering Drawings

- Various metering drawings (x 19)

Meter Data Sheet

- ION 7550 and 7650 - Datasheet

Position Descriptions

- Asset and Regulatory Conformance Planner (October 2006)
- WKPP Operations Manager (April 2004)
- Senior Environmental Scientist (September 2007)
- Technical Specialist – Electrical (June 2006)
- Technical Specialist – Mechanical (June 2006)
- WA Safety Case Responsible Person (February 2008)

Asset Operations and Maintenance

- Project HAZOP Register and Closeout Master H8
- Plant Change Request Register
- System Improvement Report/Non Conformance Report Register
- Pronto – “PM Tasks’ Screen Dumps
- Project HAZOP Register and Closeout Master H4
- Pronto-Xi Solutions Overview