



# McGill Engineering Services Pty Ltd

Engineering, Adjudication & Arbitration Services ABN 45 106 691 169

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## **NEWMONT POWER PTY LTD**

### **ELECTRICITY DISTRIBUTION LICENCE EDL 4**

### **ASSET MANGEMENT SYSTEM REVIEW**

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22 February 2012



# McGill Engineering Services Pty Ltd

Engineering, Adjudication & Arbitration Services ABN 45 106 691 169

Tim Gordon  
Senior Advisor  
Non-Managed joint ventures  
Newmont Power Pty Ltd  
1/388 Hay Street  
Subiaco WA 6008

Dear Mr Gordon

## **Asset Management System Review Electricity Licence**

The fieldwork on the asset management system review of Distribution Licence EDL 4, for the review period (1 July 2008 to 30 June 2011) is complete and I am pleased to submit the report to you.

In my opinion, the Licensee maintained, in all material aspects, effective control procedures and an effective asset management system in relation to the Distribution Licence EDL 4 for the review period on the relevant clauses referred to within the scope section of this report.

Yours sincerely

Kevan McGill  
Director

Date 22 February 2012

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## Executive Summary

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Newmont Power Pty Ltd (Newmont - NPPL) holds Distribution Licence EDL 4 issued by the Economic Regulation Authority under the Electricity Industry Act 2004 (WA). The Electricity Industry Act 2004 (WA) requires the holder of Distribution Licences to undertake a Review, and provide the Authority a report, by an independent expert on the effectiveness of their Asset Management System. This Review of the Licensee's Asset Management System was conducted in accordance with the guidelines issued by the Economic Regulation Authority (*Authority*) for the review period (1 July 2008 to 30 June 2011) to assess the Licensee's asset management systems.

Following development of an Asset Management System Review Plan and its approval by the *Authority*, NPPL appointed McGill Engineering Services to undertake the Review.

## OVERALL CONCLUSION

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In my opinion, the Licensee maintained, in all material aspects, an effective asset management system in relation to the Distribution Licence EDL 4 for the review period based on the relevant clauses referred to within the asset management review objectives (Page 7) of this report.

## LICENCE

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The Licensee is part of a major mining company with the electricity assets operating to meet mining needs.

There are three lines in the Distribution Licence. The lines originate in another Licensee's (Goldfields Power Pty Ltd) substation and includes the protection and metering. One line has been superseded by a Western Power line transferring power to a Western Power Substation. The line is disconnected.

The single customer for the other lines is 50% owned by the licensee's parent. These two lines supply very small loads that are not critical for the customer's mining operations. They supply water bores and there is at least two days supply of water and could be supplied by a diesel generator.

The customers are supplied under Power Procurement Agreements (PPA) which pre-dates the review. Metering and supply condition are covered by these PPAs.

## AMS REVIEW – METHODOLOGY AND SUMMARY

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The overall effectiveness rating for an asset management process is based on a combination of the process and policy adequacy rating and the performance rating. The rating systems are given below followed by a summary table of the Asset Management Effectiveness

RATING SYSTEM

The definition tables for process and policy adequacy rating and the performance rating are provided below.

**Asset management process and policy definition adequacy ratings**

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

**Asset management review effectiveness rating scale**

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

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**ASSET MANAGEMENT EFFECTIVENESS SUMMARY**

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A summary of the reviewer’s assessment of both the process and policy definition rating and the performance rating for each key process in the Licensee’s asset management system using the scales described below.

**Asset management effectiveness summary**

<b>ASSET MANAGEMENT SYSTEM</b>	<b>Asset management process and policy definition adequacy rating</b>	<b>Asset management performance rating</b>
1. Asset planning	A	NR <sup>1</sup>
2. Asset creation/ acquisition	A	NR
3. Asset disposal	A	NR
4. Environmental analysis	A	1
5. Asset operations	A	1
6. Asset maintenance	A	1
7. Asset Management Information System	A	1
8. Risk management	A	1
9. Contingency planning	A	1
10. Financial planning	A	1
11. Capital expenditure planning	A	1
12. Review of AMS	A	NR

A Not Rated (NR) score is given when there was insufficient evidence relevant within the review period to make a determination.

It is not implied that any assessment at “A” or “1” means that there is not scope for continuous improvement, rather that no recommendations for improvement have been recommended in this report.

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**RECOMMENDATIONS**

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There are no recommendations.

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**POST REVIEW IMPLEMENTATION PLAN**

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The Licensee will provide a post review implementation plan but there are no items to address.

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<sup>1</sup> NR – Not Rated

## Asset Management System Review

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### ASSET MANAGEMENT SYSTEM REVIEW OBJECTIVES

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Under the *Electricity Industry Act 2004* (the Act) section 14, the holder of a Distribution License must provide for an asset management system to manage the assets accordingly for delivery of a reliable service to its customers. The Act requires a review of the asset management system every two years (or other time approved by the *Authority*).

This report is an impartial review of the Licensee's asset management effectiveness under the Audit Guidelines: Electricity, Gas and Water Licences published by the ERA.

The review was conducted during July 2011 to September 2011 and examined the asset management processes used by the Licensee in delivering the services to its customers. These services include lifecycle processes for:

- Asset planning;
- Asset creation/acquisition;
- Asset disposal;
- Environmental analysis;
- Asset operations;
- Asset maintenance;
- Asset management information system (AMIS);
- Risk management;
- Contingency planning;
- Financial planning;
- Capital expenditure planning; and
- Review of the asset management system.

As well as the processes, the asset management supporting systems were tested as to their use and effectiveness. Data used by the Licensee was also examined with respect to its effectiveness for asset management and the delivery of outcomes.

The recommendations identified in the previous review were examined and the outcomes included in this report.

Tests were undertaken through interviews and investigation of the processes to assess whether they were being performed as documented.

The Licensee appointed McGill Engineering Services Pty Ltd to conduct the review of its Distribution Licence with approval from the *Authority*. A preliminary assessment was conducted with the Licensee's management to determine the inherent risk and the state of control for each compliance element of the Licence obligation. McGill Engineering Services Pty Ltd then prioritised the review coverage based on the risk profile of the Licensee with an emphasis on providing greater focus and depth of testing for areas of

higher risk to provide reasonable assurance that the Licensee had complied with the standards, outputs and outcomes under the Licence obligations.

## STATEMENT OF INDEPENDENCE

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To the best of my knowledge and belief, there is no basis for contraventions of any professional code of conduct in respect of the review.

I have not done or contemplate undertaking any other work with the Licensee.

There are no independence threats due to:

- self-interest – as the review company or a member of the review team have no financial or non-financial interests in the Licensee or a related entity;
- self-review – no circumstance has occurred where:
  - the review company or a member of the review team has undertaken other non-review work for the Licensee that is being evaluated in relation to the audit/review; or
  - when a member of the review team was previously an officer or director of the Licensee; or
  - where a member of the review team was previously an employee of the Licensee who was in a position to exert direct influence over material that will be subject to review during an audit/review.

There is no risk of a self-review threat as:

- no work has been
  - undertaken by the reviewer, or a member of the audit/review team, for the Licensee within the previous 24 months; or
  - the reviewer is currently undertaking for the Licensee; or
  - the reviewer has submitted an offer, or intends to submit an offer, to undertake for the Licensee within the next 6 months; and
- familiarity – there is no close family relationship with a Licensee, its directors, officers or employees,
- and is not nor is perceived to be too sympathetic to the Licensee's interests.

## REVIEW (AUDIT) PERIOD

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The review (audit) period is 1 July 2008 to 30 June 2011. The previous review period was 1 July 2006 to 30 June 2008.

## SCOPE LIMITATION

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The review was undertaken by examination of documents, interviews with key persons and observations and is not a detailed inspection of physical items.



## PREVIOUS ACTIONS

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The action to follow up from previous reviews is:

AMS item	Recommendation	Responsible	When
Asset Disposal	The licensee should consider deactivation of the redundant line if it is not transferred to Western Power.	Manager Joint Ventures and Energy	July 2009

This action has been completed and no further action is required.

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## CONTACTS

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The key contacts were:

- Licensee
  - Tim Gordon – Senior Advisor Non Managed Joint Ventures and
  - Consultant David Lyne.
  - Jamie Crombie contractor's Assistant Area Manager and
- McGill Engineering Services Pty Ltd
  - Kevan McGill, John McLoughlin

The review was conducted during July to September 2011. Kevan McGill and John McLoughlin took approximately 100 (85/15) hours on the review.

## LICENSED SYSTEMS

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### **Distribution**

The Newmont network systems essentially operate as radial systems or N-0 interconnecting Lines.

At present, all Newmont customers are mining operations with bilateral Power Purchase Agreements (PPA) and there are no Small Use Customers. For the purposes of this review, a Customer has been defined by definitions used in the Metering Code 2005 and the Electricity Industry Act as being a person (or entity) to whom electricity is sold for the purpose of consumption. This definition is in line with the structure of the PPAs entered into by Newmont.

## REVIEW EVIDENCE

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The following was considered in the review.

- Distribution Licence
- Past reviews
- Contact details
- Annual reports
- Annual returns to ERA
- Fee invoice/receipts
- Finance reports
- Sample Power Procurement Agreement
- Contractor's GPMate V6

## OVERALL CONCLUSION

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In my opinion, the Licensee maintained, in all material aspects, effective control procedures and an effective asset management system in relation to the Distribution Licence EDL 4 for the review period based on the relevant clauses referred to within the asset management review objectives (Page 7) of this report.

## FINDINGS

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The conclusions of each of the elements of the licence are summarised in the following tables.

ASSET MANAGEMENT SYSTEM REVIEW RESULTS AND  
RECOMMENDATIONS

Asset Planning	Process/Policy rating A	Effectiveness rating Not Rated
<p>1. <i>Asset planning</i></p> <p>Asset planning strategies are focused on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price).</p>		
<p><b>Observations</b></p>		
<p><i>Asset Planning Process/Plan and its currency</i> The Licensee has approximately 20 km of distribution lines at Kalgoorlie.</p> <p>The Licensee's owner - (Newmont) is a major mining company with the electricity assets incidental to its mining functions. No assets exist external to mining requirements. Asset planning is entirely driven by mining outcomes and the consequent energy requirements. The licensed assets are operated by a contractor (Trans Alta Pty Ltd). The only planning that the Licensee carries out is in the context of mining requirements. Given the expenditure and nature of mining very extensive planning systems exist in that context. The Licensee has adopted the procedures along with the documentation of the owner and while the owner has continuous planning for mining purposes, no asset planning for the licensed assets occurred in the review period, These processes are comprehensive with detailed peer checking appropriate to the scale of the issue. Large items require approval in Australia and even larger items require approval in Denver USA. It is unlikely that any of the planning for the licensed assets would require approval outside Australia. With no asset planning for the licensed assets occurring in the review period, there was no activity to rate the item</p> <p><i>Allocation of responsibilities / statutory obligations</i> The organisational arrangements allocate responsibilities. There is documentation requiring compliance with statutory obligations including induction processes for all visitors to site.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning. Response: All the customers have bilateral Power Purchase Agreements (PPA) which contracts the obligations of both parties. The planning that occurs reflects the needs of stakeholders. The planning process is comprehensive with steps requiring attention to stakeholder needs.</li> <li>• Service levels are defined Response: The service levels are given in the Power Purchase Agreements. The planning process is comprehensive with steps requiring attention to stakeholder needs such as service levels.</li> <li>• Non-asset options (e.g. demand management) are considered Response: The AMS is substantially about utilization of the current assets and no new proposals are likely outside mining development. Further asset options are</li> </ul>		

<p>unlikely and non asset options such as better utilization of the current assets will be most likely for capacity increases for mining needs</p> <ul style="list-style-type: none"> <li>• Lifecycle costs of owning and operating assets are assessed</li> </ul> <p>Response: Lifecycle costs of owning and operating assets are assessed as part of the mining functions. The planning process is comprehensive with steps requiring attention to life cycle costs. There has been no expansion within the review period.</p> <ul style="list-style-type: none"> <li>• Funding options are evaluated</li> </ul> <p>Response: Financial decisions will not be taken by the Licensee that are not consequential to a mining decision. The planning process is comprehensive with steps requiring attention to funding options,</p> <ul style="list-style-type: none"> <li>• Costs are justified and cost drivers identified</li> </ul> <p>Response: The assessment of costs and cost drivers for strategic issues will be done by the Licensee but in a mining context. Cost drivers for operating and maintenance are monitored and managed. The planning process is comprehensive with steps requiring attention to cost drivers,</p> <ul style="list-style-type: none"> <li>• Likelihood and consequences of asset failure are predicted</li> </ul> <p>Response: The evaluation of risks for operating and maintenance cover the aspects of asset failure and consequences. The planning process is comprehensive with steps requiring attention to predicted likelihood and consequences of asset failure.</p> <ul style="list-style-type: none"> <li>• Plans are regularly reviewed and updated</li> </ul> <p>Response: Planning as an element of mining planning is continuously reviewed..</p>					
<b>Asset management process and policy definition</b>					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
<p><b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Newmont Capital Effectiveness Handbook (sighted), Power procurement agreement sample, capital procurement documents.</p>					
<b>Asset management performance</b>					
Process	<input type="checkbox"/>	Availability	<input type="checkbox"/>	Use	<input type="checkbox"/>
<b>Issues</b>					
The only planning that the Licensee carries out is in the context of mining functions.					
<b>Recommendation</b>					
None -					

Asset Creation	Process/Policy rating A	Effectiveness rating Not Rated
<p><i>2 Asset creation and acquisition</i></p> <p>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.</p>		
<p><b>Observations</b></p>		
<p><i>Policies and procedures for asset creation / sample creation activities</i></p> <p>The Licensee will not carry out the strategic asset creation roles independent of mining creation roles. Procurement of major electricity plant is a very significant exercise taking considerable time. There are documented procedures for creation of fixed assets. Some minor work will be done to the assets and asset renewal (which are maintenance issues) but not creation of new major assets. As no asset creation for the licensed assets occurred in the review period the item was not rated. The Licensee has adopted the procedures along with the documentation of the owner (Newmont). These processes are comprehensive with detailed peer checking appropriate to the scale of the issue. Large items require approval in Australia and even larger items require approval in Denver USA. It is unlikely that any licensed asset creation would require approval outside Australia.</p> <p><i>Meeting statutory obligations</i></p> <p>There are documents and policies requiring employees and contractors to comply with statutory obligations.</p> <p>The asset creation processes are appropriate with extensive project approval processes and standard engineering specifications prepared.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions.</li> </ul> <p>Response: Asset creation is unlikely outside of mining development or expansion and that will not be assessed by the Licensee but by the parent company. In that circumstance there will be comprehensive assessment of creation options and justified as part of the mining project (by others) Non asset creating solutions would need to be considered against existing capacity and the ability of mine expansion to operate within the capacity. Significant demand management is not likely to be acceptable or satisfy the customer where expansion is required. The most likely options are to utilize existing capacity of the current assets or upgrading.</p> <ul style="list-style-type: none"> <li>• Evaluations include all life-cycle costs</li> </ul> <p>Response: The planning / asset creation process is comprehensive with steps requiring attention to life cycle costs. Asset creation is unlikely outside of mining development or expansion where the capital cost is considered as part of the life cycle cost of the mine development. The life of the asset is much more likely to be determined by the life of the mine rather than the life of the distribution asset.</p> <ul style="list-style-type: none"> <li>• Projects reflect sound engineering and business decisions</li> </ul> <p>Response: The Licensee has the resources in house and by contract to ensure sound engineering and business decisions. There will be no asset creation likely by</p>		

<p>the Licensee that is not part of a mining requirement. Extensive use would be made of external consultants for detailed engineering design in that circumstance.</p> <ul style="list-style-type: none"> <li>• Commissioning tests are documented and completed</li> </ul> <p>Response: The Licensee has the resources in house and by contract to ensure commissioning tests are documented and completed.</p> <p>As no expansion has taken place in the review period the use of these could not be tested for the licensed assets.</p> <ul style="list-style-type: none"> <li>• Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood</li> </ul> <p>Response: The responsibilities of the AMS are assigned to the Senior Advisor and understood. Legal, environmental and safety are key components of new project work within the organisation and are specifically required to be addressed in projects.</p>					
<b>Asset management process and policy definition</b>					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
<p><b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample, Newmont Capital Effectiveness Handbook (sighted),</p>					
<b>Asset management performance</b>					
Process	<input type="checkbox"/>	Availability	<input type="checkbox"/>	Use	<input type="checkbox"/>
<b>Issues</b>					
<p>The Licensee is not likely to carry out the strategic asset creation roles independent of mining requirements.</p>					
<b>Recommendation</b>					
None -					

Asset Disposal	Process/Policy rating A	Effectiveness rating Not Rated
<p><i>3. Asset disposal</i></p> <p>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.</p>		
<p><b>Observations</b></p>		
<p><i>Policies and procedures for asset disposal / sample disposal activities</i></p> <p>The Licensee will not carry out the strategic asset disposal roles independent of mining disposal roles. There was no disposal action in the review period. There are disposal processes in addition to those for justification of replacement of plant (which includes disposal of redundant plant). Removing the licensed plant is unlikely during the life of the customers' mines. Disposal of assets is addressed as part of mine closure plans. The Licensee has adopted the procedures along with the documentation of the owner (Newmont). These processes are comprehensive with detailed peer checking appropriate to the scale of the issue. Large items require approval in Australia and even larger items require approval in Denver USA. It is unlikely that any licensed asset disposal would require approval outside Australia.</p> <p><i>Meeting statutory obligations</i></p> <p>There are documented obligations of the Licensee and their employees to comply with statutory obligations.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• Under-utilised and under-performing assets are identified as part of a regular systematic review process</li> </ul> <p>Response: There is little likelihood of disposal of the system or portions thereof outside mining operation imperatives. The existing assets are configured for customer load demands and even if under-utilized an economic case for re-sizing would not routinely be made as utilisation may increase as a result of mining activity.</p> <ul style="list-style-type: none"> <li>• The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken</li> </ul> <p>Response: The most likely issue is plant failures and these are critically examined.</p> <p>The nature of the mining industry dictates that some plant will for periods be under utilised as a result of production demand. Underutilised plant during mining downturn is generally retained in-situ for future resumption of mining operations.</p> <ul style="list-style-type: none"> <li>• Disposal alternatives are evaluated</li> </ul> <p>Response: There is little likelihood of disposal of the system or portions thereof outside mining operation imperatives.</p> <ul style="list-style-type: none"> <li>• There is a replacement strategy for assets</li> </ul> <p>Response: Replacement will be determined by expansion need or a finding from condition based maintenance.</p>		

<b>Asset management process and policy definition</b>					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
<b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample, Newmont Capital Effectiveness Handbook (sighted),					
<b>Asset management performance</b>					
Process	<input type="checkbox"/>	Availability	<input type="checkbox"/>	Use	<input type="checkbox"/>
<b>Issues</b>					
The Licensee will not carry out the strategic asset disposal roles independent of mining requirements.					
<b>Recommendation</b>					
None					



Environmental analysis	Process/Policy rating A	Effectiveness rating 1				
<p><i>4. Environmental analysis</i></p> <p>Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.</p>						
<p><b>Observations</b></p>						
<p><i>Standards / monitoring / reporting / breaches</i></p> <p>The licensee's owner and the operation/maintenance contractor have environmental management policies. Reporting and monitoring tools are appropriate.</p> <p>The Licensee has no environmental licences.</p> <p>The principal external threats to the assets relate to storms or bush fires to distribution assets. Given the close relationship to the mines there are little threats of external competition to the assets. The Licensee has adopted the procedures along with the documentation of the owner (Newmont). These processes are comprehensive with detailed peer checking appropriate to the scale of the issue.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• Opportunities and threats in the system environment are assessed Response: Opportunities are unlikely outside mining initiatives. Given the remote location threats are unlikely but the Licensee would be able to respond to any proposals. The owners continually review political, environmental, sociological and technological threats/opportunities in a mining context</li> <li>• Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved Response: The AMS meets this criterion with service standards defined in the PPAs and statistics gathered. As supply is to the mining industry, capacity is only considered on a project by project basis. Forecasting for expansion is not relevant in the environment. Mining expansion is not predictable in the normal sense as it is heavily dependent on exploration and metal markets.</li> <li>• Compliance with statutory and regulatory requirements Response: The Licensee's policy documents require compliance with statutory and regulatory obligations. Procedures at site require environmental approval for new projects, clearing of ground and other activities that impact the environment but this is unlikely to be done by the Licensee but by the owners.</li> <li>• Achievement of customer service levels Response: The PPAs define the customer service levels.</li> </ul>						
<p><b>Asset management process and policy definition</b></p>						
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	
<p><b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample, Newmont Capital Effectiveness Handbook (sighted),</p>						

<b>Asset management performance</b>					
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
<b>Issues</b>					
The Licensee will not carry out the strategic environmental assessment roles independent of mining functions.					
The external issues other than capacity have a low visibility.					
<b>Recommendation</b>					
None					

Asset operations	Process/Policy rating A	Effectiveness rating 1
<p><i>5. Asset operations</i></p> <p>Operations functions relate to the day-to-day running of assets and directly affect service levels and costs.</p>		
<p><b>Observations</b></p>		
<p><i>Policies and procedures for asset operation / sample activities</i></p> <p>The system is very small and operates substantially from the Parkeston (Kalgoorlie) power station control room by contractors (Trans Alta). Network staff is contacted to treat alarms and carry out scheduled tasks, such as switching, on a planned or as required basis. Isolation and switching procedures requirements are documented. Switching and testing procedures are prepared in writing on prepared forms (copies sighted) as are inspection processes. The asset operation is appropriate for the duty.</p> <p>The demands of the mining process dictate continuous supply with some contractual penalties for interruptions to supply and agreed understanding of expected service levels due to the nature of radial feed or N-0 supply (single lines with no redundancy that will have no alternative in the event of a fault). These are defined in the Power Purchase Agreements which also cover access arrangements.</p> <p>The Licensee's contractor records outages. The service levels are defined and statistics are gathered but with a small number of customers statistical interpretation of results could be difficult. The feedback from statistics is more likely to affect maintenance regimes rather than operations.</p> <p>The asset register is part of the maintenance system and supported by spreadsheets.</p> <p><i>Training/ resources / exceptions</i></p> <p>The Licensee's contractor operates the network. The resourcing is considered appropriate for the size of the network and ongoing training is evident, as are the operating procedures and practices. Plant operation and related maintenance appears to take due allowance of any possible faults or operating requirements in the licensed plant.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• Operational policies and procedures are documented and linked to service levels required</li> </ul> <p>Response: The AMS meets this criterion with service standards defined. Due to the size and topology of the network there is no requirement for additional formal documentation.</p> <p>The distribution system is static and uses remote operation outside maintenance/fault switching. Switching process procedures are documented. Load network switching is remotely operated from the Parkeston control room. Operational policies are substantially maintenance/reliability matters.</p> <ul style="list-style-type: none"> <li>• Risk management is applied to prioritise operations tasks</li> </ul> <p>Response: Simple risk analysis is applied by developing a task hazard analysis for all tasks on the site.</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>		

<p>Response: Asset registers are contained with the appropriate information in the contractor's GPmate system. These are supported by spreadsheets.</p> <ul style="list-style-type: none"> <li>Operational costs are measured and monitored</li> </ul> <p>Response: Operational costs – staffing, contracts and materials are measured and monitored.</p> <ul style="list-style-type: none"> <li>Staff receive training commensurate with their responsibilities</li> </ul> <p>Response: The staff receives training commensurate with their responsibilities. Contractor's personnel undergo HV Operator training for switching operations at established training centres followed by on site approval and appointment under Mining Regulations.</p> <ul style="list-style-type: none"> <li>Performance measures such as unplanned outages</li> </ul> <p>Response: Outage log, including forced outages logged measured by contractor,</p>					
<b>Asset management process and policy definition</b>					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
<p><b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample.</p>					
<b>Asset management performance</b>					
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
<b>Issues</b>					
<p>The asset operation is appropriate for the duty. Personnel are adequate for normal duty.</p>					
<b>Recommendation</b>					
None.					

Asset Maintenance	Process/Policy rating A	Effectiveness rating 1
<p><i>6. Asset maintenance</i></p> <p>Maintenance functions relate to the upkeep of assets and directly affect service levels and costs.</p>		
<p><b>Observations</b></p>		
<p><i>Policies and procedures for asset maintenance / sample activities</i></p> <p>Maintenance is run by the contractor Trans Alta. Maintenance for the system is controlled by an IT system (GPmate V6) that coordinates tasks, incorporates condition, risk, breakdown and time based maintenance. Maintenance jobs are standardised which gives a quality and safety assurance and change management where by changing the standard job specification the work process is changed. Spare parts required for standard jobs and inventories are also contained in the system. There are spare parts stores on sites with the typical spares.</p> <p>The asset management plan contains performance measures (in the PPAs) and lists significant maintenance plans.</p> <p>The Licensee provides first line maintenance and engages contractors to service their major maintenance outages as required.</p> <p><i>Training / resources / exceptions</i></p> <p>Maintenance is scheduled well into the future and these actions are appropriate for the type of equipment. The resourcing is appropriate and ongoing training is evident as are the operating procedures and practices. Maintenance is undertaken by appropriately trained and qualified sub-contractors.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• Maintenance policies and procedures are documented and linked to service levels required</li> </ul> <p>Response: Policies and procedures are documented. Service levels are defined in the PPAs.</p> <ul style="list-style-type: none"> <li>• Regular inspections are undertaken of asset performance and condition</li> </ul> <p>Response: The GPmate maintenance planning system fulfils this criterion by regular scheduling of inspections to assess condition. Line washing for high risk areas is carried out as required; the network only supplies non-critical mining plant.</p> <ul style="list-style-type: none"> <li>• Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule</li> </ul> <p>Response: Corrective (condition based) and preventative maintenance plans are recorded in the GPmate system. These were reviewed on site with the contractor's maintenance planner. Completion rates are recorded as part of the overall maintenance analysis. The network is in good condition. Maintenance plans for emergencies were evident for a set of high risk issues.</p> <ul style="list-style-type: none"> <li>• Failures are analysed and operational/maintenance plans adjusted where necessary</li> </ul> <p>Response: Failures are infrequent. There was no evidence of significant failure warranting adjustment of the plans within the review period.</p>		

<ul style="list-style-type: none"> <li>• Risk management is applied to prioritise maintenance tasks</li> </ul> <p>Response: Maintenance tasks and frequencies have been developed over a period of time using local experience and industry standards applied at the mine. Plant failure risks and contingencies are documented.</p>					
<ul style="list-style-type: none"> <li>• Maintenance costs are measured and monitored</li> </ul> <p>Response: Maintenance costs are recorded, measured and monitored by the site.</p>					
<ul style="list-style-type: none"> <li>• System maintenance strategy, including the methodology used to maintain the system and frequency of maintenance activities.</li> </ul> <p>Response: The AMS meets this criterion with maintenance strategies defined.</p>					
<ul style="list-style-type: none"> <li>• Performance measures such as unplanned outages</li> </ul> <p>Response: Contractor monitors performance.</p>					
<b>Asset management process and policy definition</b>					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
<b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample.					
<b>Asset management performance</b>					
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
<b>Issues</b>					
The maintenance is appropriate for the duty required.					
<b>Recommendation</b>					
None.					

Asset Management Information System	Process/Policy rating A	Effectiveness rating 1
<p><i>7. Asset Management Information System (MIS)</i></p> <p>An asset management information system is a combination of processes, data and software that support the asset management functions</p>		
<p><b>Observations</b></p>		
<p><i>Policies and procedures</i></p> <p>The Licensee's contractor has a competent asset management information system with a number of elements. The maintenance management system based on the GPmate V6 software system (described in section 6 above). The system allows for fault, time based and condition based activities.</p> <p>The Licensee's IT systems are secure and backed up appropriately.</p> <p>The maintenance system links project management to scheduled tasks to standard work plans (assisting with safety and change management), asset register and parts inventory. Documentation and familiarity of the system appears appropriate.</p> <p>Access to write to the database is controlled (passwords) and changes are tracked. There is good documentation for data recovery procedures which include operating on the Perth office server and backing up the servers in Perth and the contractor also backing their systems up in Calgary, Canada to ensure data integrity.</p> <p>The reliability of the plant is evidence of good maintenances practices and that exceptions are being followed up.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• Adequate system documentation for users and IT operators Response: The GPmate system is well documented. The system is intuitive with online assistance and documentation is rarely required.</li> <li>• Input controls include appropriate verification and validation of data entered into the system Response: The system is easy to use with a maintenance focus rather than a database focus and includes appropriate verification and validation of data entered into the system.</li> <li>• Logical security access controls appear adequate, such as passwords Response: Logical control is adequate with hierarchical access by password. Personnel are automatically logged out of computer systems after periods of inactivity.</li> <li>• Physical security access controls appear adequate Response: Physical security is adequate with the system on access controlled mine sites. Access to site is by key pad or is on controlled entry mine sites and Perth office is by swipe card. Visitors are required to be escorted.</li> <li>• Data backup procedures appear adequate Response: Data backup is reported by the site IT personnel to be carried out daily and weekly on all servers with weekly back up being stored off site. Data is also backed up in Calgary, Canada.</li> <li>• Key computations related to Licensee performance reporting are materially accurate Response: There is minimal regular computation work other than meter data handled on</li> </ul>		

<p>spreadsheets. Validation checks are incorporated. Key computations related to Licensee performance reporting are materially accurate, to the extent possible to assess with visual inspection.</p> <ul style="list-style-type: none"> <li>• Management reports appear adequate for the Licensee to monitor licence obligations</li> </ul> <p>Response: No detailed management reports are generated by the GPmate system which would assist to monitor licence obligations. The key reports are for outage logging and appear adequate.</p>					
<b>Asset management process and policy definition</b>					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
<b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample.					
<b>Asset management performance</b>					
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
<b>Issues</b>					
None					
<b>Recommendation</b>					
None					



Risk management	Process/Policy rating A	Effectiveness rating 1				
<p><i>8. Risk management</i></p> <p>Risk management involves the identification of risks and their management within an acceptable level of risk.</p>						
<p><b>Observations</b></p>						
<p><i>Policies and procedures</i></p> <p>The Licensee will not carry out the strategic risk management roles independent of mining functions. External risks such as competition or political, environmental, sociological and technological threats are outside the range the Licensees functions.</p> <p>The Licensee has assessed and prioritised the threats to the network and decided to operate as "run to fail" as consequences are not major for customers and time to repair is less than time to be critical for client operations.</p> <p><i>Training</i></p> <p>There is evidence of training and awareness by staff of risk based approaches.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system Response: The risk assessment is based on condition monitoring and is "run to fail".</li> <li>• Risks are documented in a risk register and treatment plans are actioned and monitored. Response: A risk register is not required.</li> <li>• The probability and consequences of asset failure are regularly assessed Response: The risk assessment is based on condition monitoring and is "run to fail".</li> </ul>						
<p><b>Asset management process and policy definition</b></p>						
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	
<p><b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample.</p>						
<p><b>Asset management performance</b></p>						
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>	
<p><b>Issues</b></p>						
<p>None</p>						
<p><b>Recommendation</b></p>						
<p>None</p>						

Contingency planning	Process/Policy rating A	Effectiveness rating 1				
<p><i>9. Contingency planning</i></p> <p>Contingency plans document the steps to deal with the unexpected failure of an asset.</p>						
<p><b>Observations</b></p>						
<p><i>Development of contingency plans / currency</i> <i>Policies and procedures</i></p> <p>The Licensee will not carry out the strategic contingency planning roles external to mining functions. External risks such as competition or political, environmental, sociological and technological threats are outside the range the Licensees functions or resources.</p> <p>The Licensee has good documentation of its data recovery plans.</p> <p>The Licensee has detailed maintenance scheduled out for several years, with minor and major shutdowns allowed to deal with potential issues. Maintenance is partly conducted on condition based maintenance which monitors critical items for indicators of future failure (e.g. pole inspections).</p> <p>The maintenance regime is geared to keeping the plant operational without forced outages.</p> <p><i>Testing of contingency plans</i></p> <p>The Licensee tests safety systems routinely.</p> <p>The company conducts major incident training for the emergency services crews at site.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks</li> </ul> <p>Response: The AMS meets this criterion with contingency planning occurring and documented. Critical spares are identified and being sourced. Standard spares such as poles, cross arms and insulators are on site.</p>						
<p><b>Asset management process and policy definition</b></p>						
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	
<p><b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample.</p>						
<p><b>Asset management performance</b></p>						
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>	
<p><b>Issues</b></p>						
<p>None</p>						

<b>Recommendation</b>
None

Financial planning	Process/Policy rating A	Effectiveness rating 1
<p><i>10. Financial planning</i></p> <p>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.</p>		
<p><b>Observations</b></p>		
<p><i>Financial planning process / plans</i></p> <p>The Licensee will not carry out the strategic financial planning roles outside mining requirements.</p> <p>The Licensee carries out budgeting and monitoring processes. These are on 1 year and 5 year cycles and upgraded year by year.</p> <p>The licensee provides fuel to Trans Alta as part of the Power purchase agreement and pays for energy consumed.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• The financial plan states the financial objectives and strategies and actions to achieve the objectives Response: The financial plan meets the requirements.</li> <li>• The financial plan identifies the source of funds for capital expenditure and recurrent costs Response: The financial plan identifies source of funds for capital and recurrent expenditure.</li> <li>• The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets) Response: The financial plans provide profit and loss and balance sheets.</li> <li>• The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period Response: The financial plan provides predictions on income for the next five years and reasonable indicative predictions beyond this period.</li> <li>• The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services Response: The financial plan provides for the operations and maintenance, administration and minor capital expenditure requirements of the services.</li> <li>• Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary Response: When significant variation in expenditure or budget are noted this is investigated.</li> </ul>		

<b>Asset management process and policy definition</b>					
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>
<b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample Financial plans.					
<b>Asset management performance</b>					
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>
<b>Issues</b>					
None					
<b>Recommendation</b>					
None					

Capital expenditure planning	Process/Policy rating A	Effectiveness rating 1				
<p><i>11. Capital expenditure planning</i></p> <p>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.</p> <p>Since capital investments tend to be large and lumpy, projections would normally be expected to cover at least 10 years, preferably longer. Projections over the next five years would usually be based on firm estimates.</p>						
<p><b>Observations</b></p>						
<p><i>Capital expenditure process / plans</i></p> <p>The Licensee will not carry out strategic financial planning roles outside mining imperatives. The Licensee has budgeting and monitoring processes. These are on 1 year and 5 year cycles and upgraded year by year. The following comments are based on the activities for mining.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>• There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates Response: The AMP sets out “capital expenditure” but there is no expenditure planned</li> <li>• The plan provide reasons for capital expenditure and timing of expenditure Response: The AMP sets out “capital expenditure”</li> <li>• The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan Response: The plan responds to asset condition.</li> <li>• There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned Response: The AMP sets out a review process.</li> </ul>						
<p><b>Asset management process and policy definition</b></p>						
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	
<p><b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor’s Assistant Manager South. Documents: Include Power procurement agreement sample. Financial plans.</p>						
<p><b>Asset management performance</b></p>						
Process	<input checked="" type="checkbox"/>	Availability	<input checked="" type="checkbox"/>	Use	<input checked="" type="checkbox"/>	
<p><b>Issues</b></p>						

None.
<b>Recommendation</b>
None

Review of AMS	Process/Policy rating A	Effectiveness rating Not Rated				
<p>12. Review of AMS</p> <p>The asset management system is regularly reviewed and updated.</p>						
<p><b>Observations</b></p>						
<p>The Licensee will not carry out the strategic asset management planning roles outside mining imperatives. As a supplier of electricity the service delivery is heavily asset based and needs an AMS.</p> <p><i>Evaluation Criteria summary</i></p> <ul style="list-style-type: none"> <li>A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current</li> </ul> <p>Response: The AMP assigns responsibility for review of the AMS to the Senior consultant.</p> <ul style="list-style-type: none"> <li>Independent reviews (eg internal review) are performed of the asset management system</li> </ul> <p>Response: There are no reviews of the licensed assets outside the context of mining. There is an internal review process but no requests for review has occurred for the licensed assets in the review period. Mining assets are reviewed continually</p>						
<p><b>Asset management process and policy definition</b></p>						
Process	<input checked="" type="checkbox"/>	Policy	<input checked="" type="checkbox"/>	Documentation	<input checked="" type="checkbox"/>	
<p><b>Evidence:</b> interviewed Senior Advisor, Consultant and Contractor's Assistant Manager South. Documents: Include Power procurement agreement sample Financial plans.</p>						
<p><b>Asset management performance</b></p>						
Process	<input type="checkbox"/>	Availability	<input type="checkbox"/>	Use	<input type="checkbox"/>	
<p><b>Issues</b></p>						
<p>None</p>						
<p><b>Recommendation</b></p>						
<p>None.</p>						