

## 2020 POST REVIEW ACTION PLAN - ETL06

Process(es) Reference		Review Recommendation/ Recommendation reference	Action proposed to be taken by the licensee	Responsible person(s)	Target completion date (Day/Month/Year)
1.1 1.2 1.3 1.5 1.9 4.4	5.1 6.1 11.2 11.3 11.4 12.1	<b>R1/2020</b> – Formalise and implement an AMS for the transmission line.	<p>Karara will develop and implement an AMS for the Transmission Line.</p> <p>As part of this proposed action Karara will;</p> <ul style="list-style-type: none"> <li>• create a Project Timeline for the development and implementation of the AMS</li> <li>• review current systems for suitability</li> <li>• develop asset management systems where lacking for the transmission line assets; and</li> <li>• develop an AMP.</li> </ul>	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 Dec 2021</b>
1.1 1.2 1.3 1.5 1.7 1.8 1.9 4.4	5.1 6.1 11.1 11.2 11.3 11.4 12.1	<b>R2/2020</b> - Develop and implement an AMP for the Transmission Line compliant to regulatory and contractual requirements.	Karara will develop an Asset Management Plan (AMP) to define the implementation activities of the AMS. The Audit Guidelines will be used as a minimum for compliance and consideration will be given to intents of the ISO 55000 series.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 Dec 2021</b>
1.1 1.2 1.5 5.3	5.4 11.2 11.3	<b>R3/2020</b> - Review the Asset Register to include asset type, location, material, plans of components, and an assessment of assets' physical/structural condition	Karara will develop an Asset Register for the Transmission Line assets. Karara will align the asset reference with the Asset Register maintained by the Finance Department to allow asset type, location, material, plans of components, and an assessment of assets' physical/structural condition and accounting data to be recorded.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 June 2021</b>
1.1 1.2	5.2 6.5	<b>R4/2020</b> - Undertake and record a risk assessment of the transmission line.	Karara will conduct a risk management training.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>15 July 2021</b>

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1.7 1.8 4.1	8.1 8.2 8.3		Karara will undertake a risk assessment for the Transmission Line ensuring the risk framework is compliant with ISO 31000. A risk register will document the outcome.		
1.1 1.2 1.7 1.8 4.1 5.1 5.2	6.1 6.5 8.1 8.2 8.3	<b>R5/2020</b> - Develop a risk based treatment plan to address issues identified to ensure ongoing compliance and/or accept residual risk. Operational controls should be evident in the AMS and detailed in the AMP i.e. acoustic and vegetation surveys.	In line with the risk assessment outcome, Karara will develop risk based treatment plan commensurate with risk rating. (i.e. high risks actioned as a priority)	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 Sep 2021</b>
1.1 1.2 1.3 2.5 4.3	4.4 5.1 6.1 6.2 7.7	<b>R6/2020</b> – Develop and maintain a Compliance Register for the Electricity Transmission Licence and contractual requirements and allocate appropriate responsibilities for compliance.	Karara will review and document all compliance obligations and develop a Compliance Register incorporating Transmission Licence, legal obligations and contractual requirements. Responsibilities for compliance will be assigned to job descriptions.	<b>Jian Zhong /Pieter Bezuidenhout/ Jian Wang</b>	<b>1 Aug 2021</b>
1.1 1.2 1.3 1.9	4.3 5.6 7.1	<b>R7/2020</b> – Ensure employees are adequately trained to understand the requirements of Electricity Transmission Licence and associated contractual documentation. Consideration could be given incorporating a review of their job descriptions and performance to ensure compliance was achieved.	Karara will ensure Employees are aware of Compliance Obligations (i.e. requirements of Compliance Register defined in R6/2020) and are trained adequately in procedures. A training needs analysis will be developed. Job descriptions and performance reviews will be used to define responsibilities and monitor compliance performance. A mechanism to ensure training is kept up to date will also be established.	<b>Jian Zhong/Pieter Bezuidenhout Sarah Terrell</b>	<b>1 July 2021</b>
1.1 1.2 1.7 1.9 3.1 4.2	4.3 5.1 5.2 7.1 8.1 11.4	<b>R8/2020</b> – Review and implement a Document Management System incorporating existing policies, procedures and supporting documentation for currency and applicability.	Karara will review and implement documents to associated with the AMS and defined in the AMP. The outcome of the risk assessment will be utilised to ensure priority for review and development of key documentation is prioritised and commensurate with risk. Document Control requirements will be applied.	<b>Nelson Amoah Robert Rathmann</b>	<b>31 Jan 2022</b>

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1.1 1.2 1.5 2.5 3.1 3.2 4.4 6.2	6.3 6.4 6.6 7.2 7.7 10.5 12.1 12.2	<b>R9/2020</b> - Utilise SAP for planning of inspection and maintenance work, such as acoustic surveys, vegetation surveys, corona, etc and compliance requirements. Ensure records are verifiable with supporting evidence and maintenance costs are detailed. Critical entries should be subject to third party review.	Karara will review and update SAP to ensure the Transmission Line is accurately detailed and ensure all monitoring, inspections and improvements are reflected in the records. Requirements for third party review will be addressed. Customisation of the SAP module to modify to Karara's requirements will be assessed.	<b>Howard Kneale</b>	<b>1 Sep 2021</b>
1.1 1.2 1.7	1.8 9.1	<b>R10/2020</b> - Review and document contingency plans and consider risks	Karara will review and document contingency plans and consider risks.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 Aug 2021</b>
1.1 1.7 1.8	3.2 6.2	<b>R11/2020</b> - Consider carrying out a second acoustic emissions test to establish the extent of any deterioration and address any significant defects. The limitation to operations is understood as such instead of organising an outage for inspection/repair of known defects this approach could allow clearer definition of scope for a planned line outage should it be deemed necessary	Karara will undertake an acoustic survey, review report and incorporate in risk treatment plans as required.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 May 2021</b>
1.1 1.3 1.9 2.5 4.1	4.3 5.2 8.1 8.2 8.3 12.2	<b>R12/2020</b> - Establish internal audit processes to monitor risks and ensure compliance with Electricity Transmission Licence requirements and other contractual documentation.	Karara will develop an internal audit schedule to assess compliance with the AMS. Consideration of key dates will be undertaken i.e. submission of annual compliance report.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 Sept 2021</b>
1.1 4.2 6.4	7.6 7.7	<b>R13/2020</b> – Implement INX or other appropriate system to record non-standard performances and report to management to ensure compliance and performance of the transmission line.	Karara will determine appropriate systems for non-compliance reporting and transmission line performance and implement controls and corrective action processes i.e. utilise SAP or INX	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>15 Aug 2021</b>
1.1	4.2	<b>R14/2020</b> - Review upgrading SCADA system or a simpler dedicated Transmission line data acquisition system.	Karara believes that the current SCADA system monitoring 330KV transmission line is fit for purpose because the Open or Close status of the Circuit Breaker operating the line at Three Spring Terminal		

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			(TST) and the Voltage at TST can be monitored via the current SCADA at Karara. There is no need of upgrading SCADA.		
1.1 1.2	5.5	<b>R15/2020</b> – Identify, record and document operational and maintenance costing and detail how they are monitored by Licensee.	Karara Finance Department will review Transmission Line assets and ensure operational costs are measured and monitored and separated from mine operational costs.	<b>Marc Sertis</b>	<b>1 June 2021</b>
1.1	5.5	<b>R16/2020</b> - Monitor line losses and MVar performance.	Karara does not believe the need of monitoring line losses and Mvar performance for the following reasons:  <ul style="list-style-type: none"> <li>(1) Monitoring the 330KV line losses for Karara is technically meaningless and does not financially benefit Karara anything.</li> <li>(2) MVar performance at Three Spring Terminal (TST) is required by Western Power therefore Statcom has been put in place at Karara substation to monitor and regulate Power Factor and Voltage at TST, the transmission Point of Interconnection. Statcom is a stand-alone system that is designed, manufactured and monitored by AMSC. As the transmission line is capacitive with its constant impedance, monitoring the 330KV transmission line MVar performance is technically meaningless.</li> </ul>		
3.1 3.3	3.4	<b>R17/2020</b> – Incorporate asset disposal plan in the AMP, ensure process established for disposal/replacement alternatives and review organisational procedures for asset disposal. Include costs for disposal or refurbishment in the life cycle spreadsheet	Karara will ensure asset disposal is captured in the development of the AMP and review processes established for the identification of underperforming assets.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 Dec 2021</b>
10.1	10.2	<b>R18/2020</b> – Monitor the Company and Consolidated Entity's financial performance to ensure that it is a going concern.	Karara will incorporate the Transmission Line in a financial plan which provides for the long-term financial viability of the transmission line.	<b>Marc Sertis</b>	<b>15 Nov 2021</b>

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1.1 1.8	9.1	<b>R19/2020</b> – Review Karara Mining 330kV Powerline Contingency Desktop Audit 20/4/17 and implement recommendations or critically review and document findings and management action	Karara will critically review Karara Mining 330kV Powerline Contingency Desktop Audit and implement recommendations and document findings and management action.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 Aug 2021</b>

## 2020 POST AUDIT ACTION PLAN - ETL06

Obligation(s) Reference	Review Recommendation/ Recommendation reference	Action proposed to be taken by the licensee	Responsible person(s)	Target completion date
101 104 121 102 105 122 103 106 123 124	<b>A1/2020</b> – Implement R1-9 of the Review Recommendations	Karara will implement R1-9 of the Post Review Action Plan.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>31 Jan 2022</b>
103 123	<b>A2/2020</b> – Notify the details of the Asset Management System to the ERA and establish a compliance process/change management process to ensure future compliance is achieved.	Karara will notify the details of the Asset Management System to the ERA.  Karara will ensure the compliance obligation is captured in the Compliance Register.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>5 Dec 2021</b>  <b>15 Sept 2021</b>
106	<b>A3/2020</b> – Implement INX or other appropriate system to record non-standard performances and report to management to ensure compliance and performance of the transmission line.	Karara will determine appropriate systems for non-compliance reporting and transmission line performance and implement controls and corrective action processes i.e. utilise SAP or INX	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>15 Aug 2021</b>
106	<b>A4/2020</b> -Consider carrying out a second acoustic emissions test to establish the extent of any deterioration and address any significant defects. The limitation to operations was understood as such instead of organising an outage for inspection/repair of known defects this approach could allow clearer definition of scope for a planned line outage should it be deemed necessary	Karara will undertake an acoustic survey, review report and incorporate in risk treatment plans as required.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 May 2021</b>
106	<b>A5/2020</b> – Review Karara Mining 330kV Powerline Contingency Desktop Audit 20/4/17 and implement recommendations or critically review and document findings and management action	Karara will critically review Karara Mining 330kV Powerline Contingency Desktop Audit and implement recommendations and document findings and management action.	<b>Jian Zhong/Pieter Bezuidenhout</b>	<b>1 Aug 2021</b>

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107	<b>A6/2020</b> – Review legislative and contractual documentation and establish a compliance process and corrective action plan to ensure all obligations are understood and compliance is achieved.	Karara will review and document all compliance obligations and develop a Compliance Register incorporating Transmission Licence, legal obligations and contractual requirements. Responsibilities for compliance will be assigned to job descriptions. Karara will, following the outcome of the risk assessment, ensure appropriate risk treatment plans are established to ensure compliance.	<b>Christopher Gerrard</b> <b>Sarah Terrell</b>	<b>1 Sep 2021</b>

**Nelson Amoah- General Manager Projects & Asset Compliance**

**Sarah Terrell- General Manager People & Organisation**

**Christopher Gerrard- Legal & Company Secretary**

**Jian Wang- Manager Maintenance & Engineering**

**Marc Sertis- Financial Controller**

**Howard Kneale- Superintendent Maintenance Planning**

**Pieter Bezuidenhout- Superintendent Electrical Maintenance**

**Jian Zhong- Superintendent Electrical Maintenance**

**Robert Rathmann- Principal Document Controller**