DELIVERY STRATEGY ATTACHMENT

MidWest Energy Project – Southern Stage

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Record of Revisions

Revision number	Date	DMS version	Revised by	Description
1	28/06/11	1	I Anderson	Signed and Issued

Documents Referenced In This Document

DMS#	Title of Document
DMS and other document reference in this document are indicated in blue underlined text.	

Stakeholders (people to be consulted when document is updated)

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Branch Manager – Transmission Program Management
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Branch Manager – Secondary Systems Engineering
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Notification List (people to be consulted when document is updated)

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1 EXECUTIVE SUMMARY

The purpose of this report is to provide revised details on the delivery mechanisms Western Power (WPC) is proposing to use for the delivery of the Mid-West Energy Project (MWEP). The change in delivery strategy is primarily due to project timing requirements for KML's interim supply arrangements, the details of which are discussed in the NFIT submission and MWEP Board submission paper.

This is an addendum to the project delivery strategy document DM 7897666 and notes the portions of the works that will be directly contracted to, or acquired from, Karara Mining Limited (KML). Other than these works, the delivery strategy is unchanged. It should be noted that the project delivery document DM7897666 relates to those works covered by the originally proposed Western Power delivered MWEP project, namely the double circuit 330kV line from Neerabup Terminal to the future Eneabba Terminal and associated works, and Three Springs Terminal.

For the complete 330kV network that will form the covered network from Neerabup Terminal to Three spring terminal, KML are constructing the following works, as assets that it is proposed WPC will acquire from KML:

- Eneabba Substation to the future Eneabba Terminal double circuit 330kV transmission line (ENB-ENT line section).
- Future Eneabba Terminal to Three Springs Terminal double circuit 330kV transmission line (ENT-TST line section).

In addition, to meet project timelines, it is proposed that WPC will contract KML to provide the following construction services:

- Three Springs Terminal electrical construction works.

With the revised delivery strategy of WPC acquiring the two line sections at the NFIT estimated value, and contracting to KML the TST Electrical works, the following is the breakdown of the project costs per delivery method for the MWEP delivery:

A. MWEP Scope of works by Western Power (excluding KML's ENT-TST Line)

NBT-ENT line plus TST, original proposal

Open competitive tender	87%
Internal	13%

NBT-ENT line plus TST, KML Works

Open competitive tender	
Internal	
Acquired from or contracted to KML	[redacted]

If the cost of the proposed ENT-TST line is included in the total project cost (100% acquired from KML), the following is the revised breakdown.

B. Complete MWEP 330kV Network Project Total

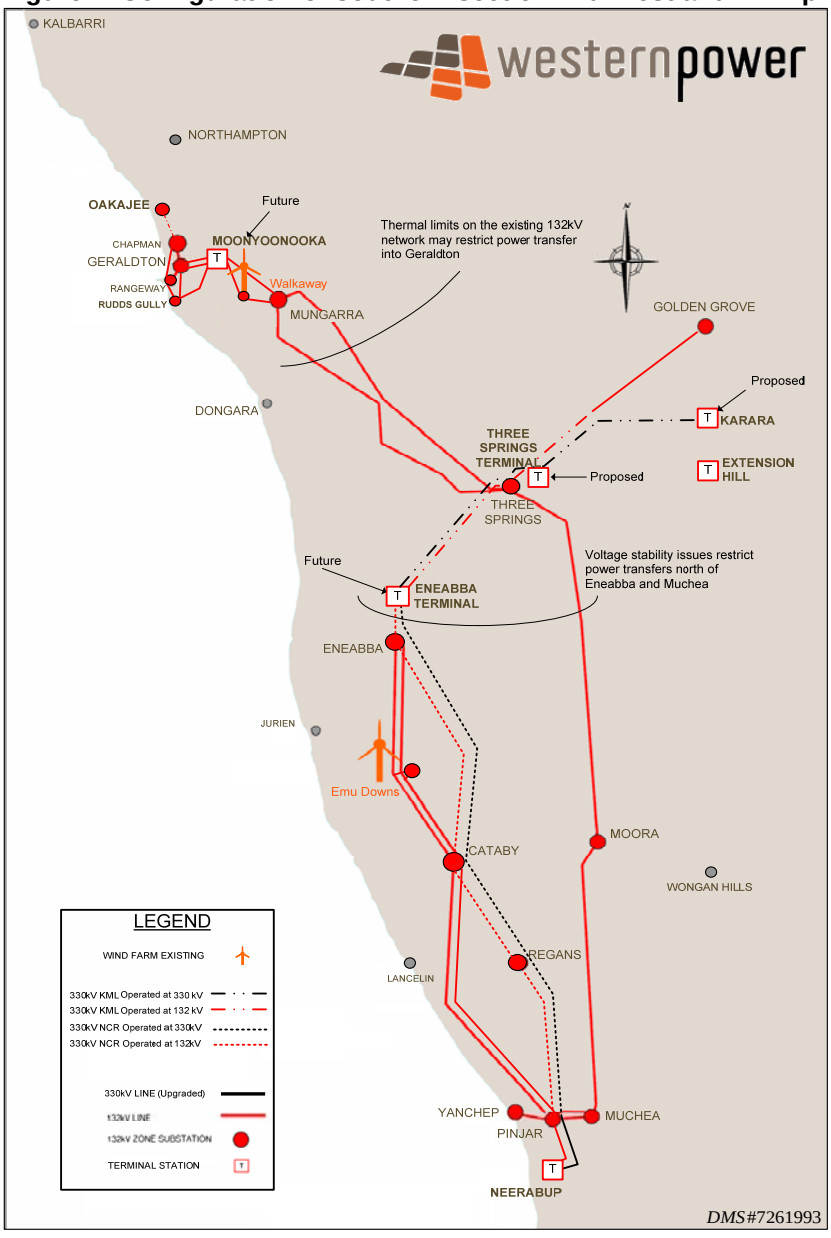
Open competitive tender	
Internal	
Acquired from or contracted to KML	[redacted]

2 SCOPE OF WORKS

The scope of works defined in the project delivery strategy document DM 7897666 includes the double circuit transmission line from Neerabup Terminal to the future Eneabba Terminal site, and the construction of Three Springs Terminal, described through this document as “NBT-ENT line section and TST works”.

In addition to these works, KML is constructing a double circuit 330kV transmission line from the future Eneabba Terminal to Three Springs Terminal. This is described as “ENT-TST line section”. The ENT-TST line section was commenced by KML to meet their timeline of an interim 132kV supply from Eneabba to the KML mine-site. WPC access to this 330kV double circuit line is required to allow operation of the full MWEP 330kV network.

Figure 1 Configuration of southern section Mid West and KML projects



3 REVISED DELIVERY STRATEGY

Western Power has previously determined that the appropriate delivery mechanism for this project for an efficient outcome is to employ a mix of contracting (through competitive tendering), standing supply contracts (preferred suppliers) and internal resources.

The procurement strategy as detailed in DM 7897666 remains most unchanged, with the bulk of the procurement carried out by Western Power (WP) resources and contract resources procured by open tender.

The procurement items that have changed due to the change in circumstances since the initial project delivery strategy for the NBT-ENT line section and TST works are detailed as follows:

3.1 ENB-ENT LINE SECTION

The 11.6km of line between Eneabba and the future Eneabba terminal was initially included in the scope of the main MWEP project, however due to project timing; this section is being constructed by KML, to their line design.

Western Power proposes to acquire this section of line at the end of the project, at the estimated cost that Western Power expected the section to have cost to construct.

3.2 TST ELECTRICAL WORKS

Three Springs Terminal compromises of 2 separately identifiable components, the base terminal, which includes all works required for connections of two line circuits and the 330/132kV step-down transformer; and the 330kV line reactor.

The main terminal is required to connect the incoming line from NBT, the outgoing line to KML, and the transformer to provide 132kV supplies to Three Springs zone substation and Geraldton area. This terminal build is required early to meet KML's project timetable, with the ENB-TST line energised at 132kV.

The line reactor is required to provide voltage stabilisation for the connection of the long NBT-TST 330kV line, and is not required until energisation at 330kV.

The Three Springs Terminal delivery strategy as detailed in DM 7897666 was for construction of the complete terminal works including line reactor.

To meet KML's project timeline, it has been proposed that Western Power contract KML directly to undertake the electrical construction works for the main terminal directly, utilising their group of mine-site constructors. The costs that would be allocated to those works are the costs that Western power has estimated to perform these works under competitive tender.

The following summarises the revised project procurement methodologies for the proposed arrangement for TST.

- Substation design works carried out by WP internal staff, with discrete packages outsourced if resource constraints exist.
- Project Management carried out by WP staff.

- Three Springs Terminal earthworks and civil works will be constructed using competitive tender and lump sum contracts.
- Three Springs Terminal main electrical works, structural steel supply, and final site finishing works will be constructed by KML on WPC's behalf.
- Three Springs Terminal 330kV line reactor electrical works will be constructed using competitive tender and lump sum contracts.
- All switching and system commissioning works are to be carried out by WP staff
- This provides efficient delivery, with KML contract costs limited to the estimated costs of competitive tendering.

3.3 OUTCOMES

The revised delivery strategy results in [redacted] of the base cost of the NBT-TST line section and TST works project being delivered through a competitive market process with the balance being provided through specialist Western Power resources and acquisition from KML. The breakdown of the work packages and associated delivery mechanisms is detailed in Appendix A.

Table 1 Revised Delivery Strategy Breakdown

Work Package Items	Delivery Mechanism
Planning & Project Management	Internal. [redacted] of total cost. Planning and project management are done using internal resources due to the need for specific knowledge of network requirements, planning criteria and efficient execution management of works.
Design	Internal. [redacted] of total cost. Optimisation is done using engineering staff using WP specific systems and methodology.
Three Springs Related Western Power Supply	[redacted] of total cost. Primarily materials sourced via preferred supplier contracts, but including contract works by competitive tender for line reactor works.
Augmentation to existing Substations	[redacted] of total cost. Mix of specialist skills available internally plus contract works and materials sourced via competitive tender.
Environment/Access Related	[redacted] of total. Predominantly contract works from competitive tender and payments for land based on independent valuation.
330kV and 132kV Lines	[redacted] of total. Almost all is contract works sourced via competitive tendering.
ENB-ENT Line and TST Electrical Construction	[redacted] of total. This is work this is either contracted to KML, or works that are acquired from KML.

The contract component ([redacted] total) represents design, procurement and construction works provided through competitive tender.

The preferred supplier component [redacted] total) represents provision of materials such as primary plant sourced through preferred vendor contracts (established via competitive tender).

The Internal component ([redacted] total) represents Western Power internal labour and plant. This also includes ELMB works which included easement payments based on

independent valuations, and environmental offset purchases based on agreements with the statutory authorities Environmental Protection Agency and Department of Environmental Conservation.

The KML supplied component ([redacted]) represents electrical construction works for Three Springs Terminal contracted to KML and line asset acquisition costs.