Regulatory Test for Western Power's Mid-West Energy Project (Southern Section)

Prepared for the Economic Regulation Authority

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1. Introduction

In November 2010 Western Power submitted a major augmentation proposal for the Mid West Energy Project (Southern Section Stage 1) to the Economic Regulation Authority ("the Authority"). The proposal is to develop a 330kV double circuit line from Neerabup to the Karara mine site via Eneabba. The major augmentation proposal is submitted under section 9.15 of the Electricity Networks Access Code 2004 for assessment against the Regulatory Test.

Marsden Jacob Associates (MJA) has been commissioned by the Authority to provide an economic assessment of the proposal against the requirements of the Regulatory Test.

1.1 The electricity networks access regime and the Regulatory Test

Part 8 of the Electricity Industry Act 2004 gives effect to the State's obligations under the Competition Principles Agreement to provide third party access to the services of electricity networks infrastructure in Western Australia. The principal instrument through which this obligation is satisfied is the Electricity Networks Access Code 2004 (Access Code), which has been established in accordance with the requirements of section 104 of the 2004 Act.

Chapter 9 of the Access Code requires that an electricity network service provider demonstrate the economic benefit of a major augmentation of a regulated - covered - network before committing to the augmentation. This requirement to demonstrate the economic benefit of a major augmentation is referred to as the "Regulatory Test".

More specifically, the Regulatory Test is an assessment of whether a proposed major augmentation maximises the "net benefit after considering alternative options". In the context of the test, "net benefit after considering alternative options" would typically mean the net benefit, measured in present value terms, to those who generate, transport and consume electricity in the covered network, and in any interconnected system, having regard to all reasonable alternative options, including the likelihood of each alternative option proceeding. In presenting the analysis of network augmentation options, Western Power has argued that the benefits of each viable option are similar and therefore that only the cost of each option requires assessment.

2. Analysis of demand estimates

In estimating the level of demand for the Mid-West Energy Project, Western Power has assumed three growth scenarios:

- a Low Growth scenario, which includes "low" natural growth and block growth. The Low Growth scenario does not include Karara Stage 1. As Western Power has indicated that the augmentation will not proceed if the Karara Stage 1 is not required, this scenario is not relevant to the assessment of the augmentation;
- a Central Growth scenario, which include all committed block loads and a small number of the most likely prospective block loads, in addition to Karara Stage 1; and
- a High Growth scenario, which includes high natural and block growth (including a number of speculative block loads) predominantly from (or via) Geraldton such as Port of Oakajee and Oakajee Industrial Estate. In addition, the High Growth scenario includes demand from Karara Stage 2 and Extension Hill.

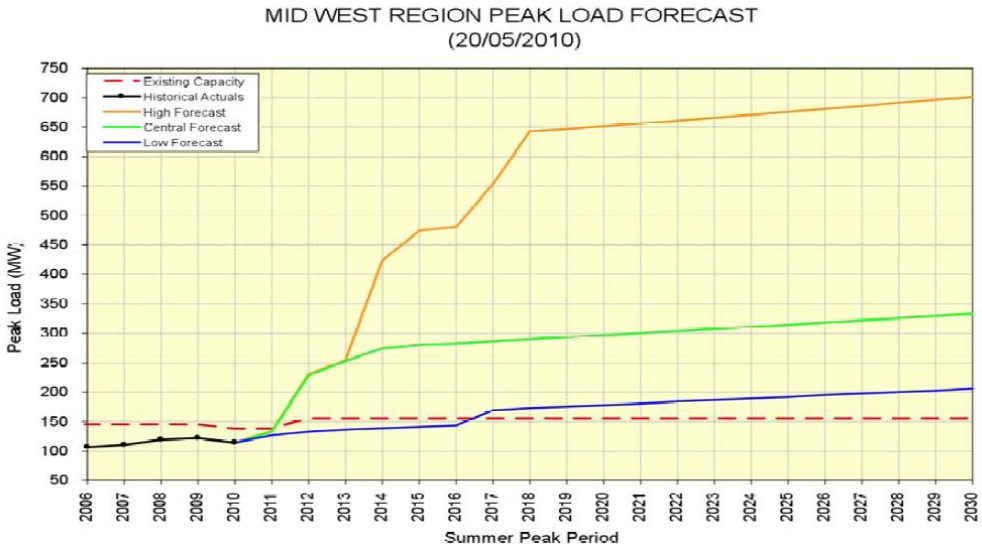
The demand scenarios are depicted in Table 1 and Figure 1.

Table 1: Western Power's forecast scenarios for the year 2020

	Low	Central	High
2010 Peak	115	115	115
Natural Growth	36	42	51
Small Block	27	38	113
Karara 1		102	102
Karara 2			152
Extension Hill			119
Diversified System Peak	**178**	**297**	**652**

Source: Western Power submission, Table 4, Page 16

Figure 1: Western Power's peak load scenarios to 2030



Source: Western Power Major Augmentation Proposal (p. 2)

2.1 Large block loads

By their nature, large block load demands cannot be predicted with certainty. Western Power has reviewed prospective large block loads and has proposed several scenarios in which large block loads are either included or excluded.

In response to questions raised by MJA and the Authority, Western Power has indicated that commitment from the Karara Stage 1 project will be a prerequisite before the proposed augmentation is undertaken. Therefore, for our analysis, we have considered the "Low Growth" scenario to include Karara Stage 1 and no further large block loads. In our "High Growth" scenario, we have utilised Western Power's High Growth estimates, including demand from Karara Stage 2 and Extension Hill. Finally, we have included a "Central" scenario that includes Western Power's central estimate of natural and small block load growth plus either Karara Stage 2 or Extension Hill.

2.2 "Natural" growth

In reviewing "natural" growth, Western Power's submission considers historical data for both population and personal income growth for Geraldton, Perth and Western Australia as shown in Table 2.

Table 2: Historical and projects growth, Geraldton, Perth and WA

	Geraldton	Perth	Western Australia	Northern SWIN
Population Growth 2001-2009[1]	1.8%	2.2%	2.1%	
Population Growth 2004-2009[1]	2.6%	2.4%	2.3%	
Personal Income Growth 2004-2008[1]	6.2%	6.2%	6.2%	
ABS Population forecast 2010-2020[2]	1.6%			
Western Power "Central" estimate 2010-2020[1]				3.2%
Western Power "High" estimate 2010-2020[1]				3.7%

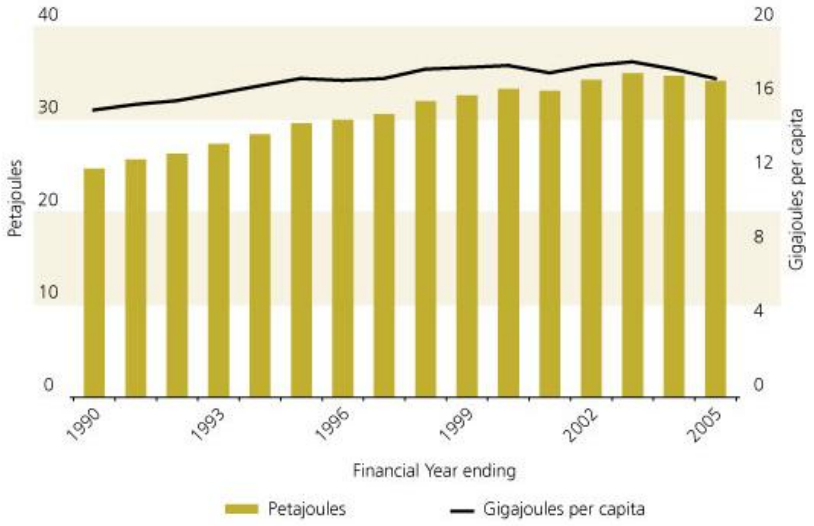
Notes:

1. *Western Power submission, Table 2, p. 14*
2. *Customised projections prepared for the Australian Government Department of Health and Ageing by the Australian Bureau of Statistics*

Western Power's submission notes that load growth results not only from increased population, but also from expanding economic activity and the resultant enhanced economic status of the population.[1] It is appears that the higher energy consumption rate Western Power has assumed into the future (3.2%-3.7%) is in part intended to reflect increasing affluence in the region. However, it is not clear that increasing affluence will automatically translate into increased per capita energy use. In 2007, the Environmental Protection Agency produced a chart of per capita residential energy use, shown in Figure 1. The chart shows per capita use in WA increasing by around 15% from 1990-1995, but then rising and falling to remain almost unchanged by 2005.

[1] Western Power Submission, Page 13

Figure 2: Total and per capita energy use in Western Australia



Source: Environmental Protection Agency, State of the Environment Report 2007

In the future, ongoing demand management efforts and increases in the price of retail electricity may also have a downward impact on per capita demand. For the purposes of this analysis, we have assumed that the "Low Growth" scenario includes energy use equal the predicted rate of population growth (1.6% pa). The difference between this "low" natural growth scenario and Western Power's "high" natural growth rate (3.7% pa) is approximately 30 MW in 2020 or (if extrapolated further) 80 MW in 2030.

2.3 Small block loads

Western Power has developed a list of prospective small block load customers and has assumed that Low, Central and High estimates are 27 MW (committed), 38 MW (central estimate) and 113 MW (all prospective loads) respectively.

Demand from small block loads canvasses a number of customer types and locations, but the bulk of the load relates to demand from the Geraldton area, including the Oakajee port and industrial area project.

As the existing lines north of Eneabba are approaching capacity, the high load estimate is likely to require the development of the Northern Section of the Mid-West Energy Project (Stage 2). Western Power makes the case that the Stage 2 infrastructure will be required to meet the increased demand and will be underpinned by the mining projects east of Three Springs. However, the need for Stage 2 infrastructure also assumes that that no local power generation will be developed to service the port and industrial area and that demand management or other options cannot be utilised to service these demand requirements. These issues would need to be addressed in a separate Regulatory Test submission for the northern infrastructure.

Western Power has made a submission to Infrastructure Australia for funding toward Stage 2, however no decision on this funding has been finalised.

3. Assessment of options

Western Power's submission to the Authority considers several network and non-network supply options that meet the "Central" and "High" demand scenarios.

Western Power do not explicitly consider the costs and benefits of a scenario in which no network augmentation occurs nor any scenario that would not adequately meet the forecast increase in demand. MJA understands that such options would not comply with the Technical Rules and therefore do not require economic assessment under the Regulatory Test.

The supply options examined by Western Power include:

1. Demand Side Management;
2. Isolated Local Generation (non grid supply); and
3. Local Generation (network support);
4. Network augmentation options.

We consider each of these in turn below.

3.1 Demand Side Management

In 2009, Western Power commissioned a study into the feasibility of Demand Side Management (NCR DM Investigation Summary, December 2009). The report identified a total of 23.5 MW of potential demand management. As the minimum increase in demand will be 102 MW associated with the Karara Stage 1 project, this option would be insufficient to meet the forecast load but could be utilised to meet a portion of future demand.

3.2 Isolated Local Generation (non grid supply)

Western Power commissioned ACIL Tasman to review the cost of providing isolated (non-network) generation for a block load of 140 MW with a reliability of 99.9%. The ACIL Tasman report makes a significant number of self-referenced assumptions and refers to modelling that is not elaborated in the report itself, presumably for reasons of confidentiality and/or brevity. While the report lacks transparency, MJA's review provides no reason to doubt the integrity of the results.

ACIL Tasman determined that a combination of combined cycle and open cycle gas turbines would be the most appropriate infrastructure to meet the required demand load. MJA undertook an independent analysis of the load requirements using ACIL Tasman's cost per MWh for isolated generation and concluded that isolated generation would cost approximately the same as the proposed network augmentation under MJA's "Low" growth scenario (including Karara Stage 1) and 17% more than the proposed augmentation under MJA's "Central" scenario. For the "Central" scenario, this result is similar to Western Power's claim that isolated generation would cost 20% more than connection to the network. Higher demand scenarios would favour Western Power's preferred option to a greater extent.

The proposed network option is therefore preferred to isolated generation as the network option is similar in cost to, or less than, isolated generation under all scenarios.

3.3 Local Generation (network support)

In response to questions raised by the Authority, Western Power provided a list of generator proposals in the region (the generator access queue). A substantial number of these proposals are based on wind generation, which Western Power note would not be adequate to meet the supply reliability requirements of customers. MJA has assumed that the Authority and its technical consultant have satisfied themselves of the adequacy of these claims and therefore have not assessed wind generation as a viable option.

With regard to non-wind generation, there are two substantial non-wind generation proposals:

- Centauri 1 (Eneabba Gas); and
- Coolimba power station (Aviva).

Western Power note that due to the capacity limitations within the existing network, the new generators could only operate as network support control services and not as market generators. This assertion has not been confirmed (or denied) by the proponents.

Centauri 1: With regard to Centauri 1 (Eneabba Gas), the Western Power submission states in a foot note that:

> *Eneabba Gas has indicated that its project – Centauri 1 168MW gas fired power station near Dongara has all the required approvals to proceed. However this power station would require a transmission line connection to the SWIN as the existing Mid West transmission system cannot accept additional unconstrained generation.*[2]

In a later response, Western Power indicate that the additional cost of connecting Centauri 1 (100km of 330kV line route and 330kV switchyard/switchgear) is greater than the incremental cost of the proposed augmentation option. Based on this assumption, Western Power do not examine supply from Centauri 1 in detail. While the assumption is plausible, Western Power do not provide any evidence in support of their assertion.

The cost of isolated generation provided by ACIL Tasman does not provide an adequate reflection of the cost of the Centauri plant as, for example, the ACIL Tasman results assume that gas will be sourced from the Dampier to Bunbury natural gas pipeline rather than through UCG extraction from coal reserves.

Coolimba: With regard to Aviva (Coolimba power station) online news services indicate that:

- Coolimba power station has gained environmental approval (March 2010);[3]
- in September 2010, Aviva and Sigiriya Capital entered into a Term Sheet that provides for the establishment of a Coolimba special purpose vehicle to take the project forward[4]; and

[2] Western Power submission, footnote 12, page 25

[3] http://www.watoday.com.au/wa-news/midwest-power-station-must-bypass-rare-plants-20100311-q16j.html

- in December 2010 Aviva agreed to extend the Exclusivity Period with Sigiriya Capital until 31 March 2011.

Based on publicly available information, the Coolimba power station appears to be a viable supply alternative. Western Power has provided no details of the costs or benefits of local supply utilising the Coolimba power station.

In conclusion, Western Power has provided a plausible but unsupported claim regarding the Centauri 1 power station, and has provided no evidence regarding the costs and benefits of the Coolimba power station.

We note that a full analysis of either power station would require an examination of the full costs of constructing and connecting the power station compared with the full costs of sourcing energy through the network, including generation and augmentation costs.

3.4 Network supply options

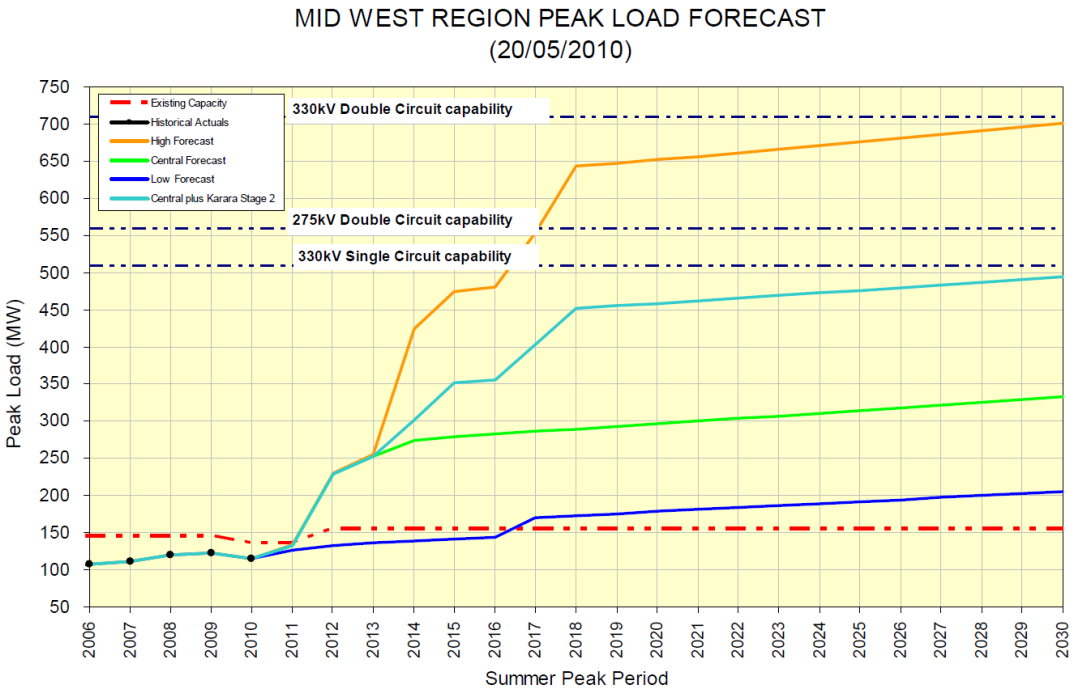
Western Power consider four network supply options in detail:

- a 220 kV double circuit option;
- a 330 kV single circuit option;
- a 275 kV double circuit option;
- a 330 kV double circuit option.

Figure 3 overlays the capacity of each network supply options with Western Power's demand scenarios.

[4] http://www.bourseinvestor.com/bi4/pdfnews/default.asp?d=01133411&f=20101216

Figure 3: Western Power's forecast scenarios



Source: Western Power Major Augmentation Proposal – page 38

As discussed in Section 2, the "Low" forecast is not relevant to the Regulatory Test as it does not include Karara Stage 1, which Western Power indicate will be a prerequisite for progressing the augmentation. The "Central" forecast, which includes Karara Stage 1 and moderate natural/small block load growth, is therefore similar to the "Low" forecast used in MJA's analysis. MJA's analysis utilises a low estimate that is 17 MW below Western Power's "Central" estimate, representing the difference between the low and central estimates of natural/small block load growth.

While we have used a lower estimate of natural load growth than Western Power for the low growth scenarios (as documented in Section 2.2), the impact of these estimates on the choice of augmentation option is small when compared with the significant impact of the large block loads and, to a lesser extent, the small block load forecasts.

3.5 Analysis of expected costs for each network supply option

While Western Power do not assign a likelihood to each of the high, central and low growth scenarios, a threshold analysis can be used to calculate the probabilities required to impact the ranking of each option. This analysis is based on the Net Present Cost estimated for each supply option under MJA's "Low", "Central" and "High" scenarios.

The present value cost of each scenario is shown in Table 3. Note that MJA's "Central" scenario includes Western Power's central estimate of natural and small block load growth plus either Karara Stage 2 or Extension Hill. Based on the capacity information shown in Figure 3, no additional infrastructure would be required to meet MJA's "Central" scenario compared with the Low scenario.

Table 3: Summary of supply options under central and high forecasts

	MJA Low Scenario	MJA Central Scenario	MJA High Scenario	Comments
2030 peak load (approx.)	300 MW	450-500 MW	700 MW	
Option 1	$421 m	not available	$732 m	Option 2 has lower cost under both Low and High scenarios. Preferred to Option 4 if 97%+ likely that High Scenario will not eventuate.
Option 2	$401 m	$401 m	$592 m	Preferred to Option 4 if 82%+ likely that High Scenario will not eventuate.
Option 3	$441 m	$441 m	$663 m	Not preferred to Option 4 under either scenario
Option 4	$430 m	$430 m	$455 m	Western Power preferred option.

Source: MJA analysis

Option 1 (220kV double circuit): Option 1 is marginally less expensive than Option 4 under MJA's "Low" forecast, but significantly higher if the high forecast eventuates. The costs of each option imply that the likelihood of the "High" forecast would need to be extremely low (<3%) for Option 1 to be preferred to Option 4 on a probability weighted basis. Option 1 is also more expensive than Option 2 under both the Low and High scenarios (the capacity of Option 1 was not provided in Figure 3 and therefore a "Moderate" estimate is unavailable). On this basis, Option 1 is not considered a viable alternative to the preferred option or Option 2.

Option 2 (330 kV single circuit): A probabilistic analysis of Option 2 indicates that this option would be preferred if the likelihood of the high forecast is low (<18% likely). More precisely, the probability of requiring peak load capacity of 510 MW or more by 2016 must be less than 18%. As the present value cost of Option 2 diminishes if line upgrades are not required by 2016, the likelihood that Option 2 will be the preferred option will correspondingly increase.

Importantly, the likelihood of the high demand forecast is influenced not only by customer demand, but also by whether those customers will require access to the SWIN and more specifically (for the purposes of the Regulatory Test) to the Mid-West Energy (Southern Section) infrastructure. The likelihood is therefore influenced by:

- whether Stage 2 of the Mid West Energy project proceeds and therefore whether the line between Eneabba and Geraldton is augmented. We note that the business case for Stage 2 has not been (and will not be) provided as part of this Regulatory Test;
- as discussed previously, Western Power's application assumes that no local generation will be connected under any of its load scenarios. If reliable local generation (such as gas or coal based plants) is commissioned, the load on the Mid-West Energy (Southern Section) infrastructure will be reduced.

Based on the uncertainty regarding customer demand, the development of Stage 2 of Western Power's Mid-West Energy Project and the possibility that some new demand can be supplied by local

generation, MJA consider that while Western Power has provided a plausible case, it has not (and cannot) definitively demonstrate that the higher line capacity of Option 4 will be required within the next 20 years. Therefore a probabilistic analysis is required. If the likelihood of the high scenario is less than 18%, then Option 2 would be selected on an economic basis.

Option 3 (275 kV double circuit): As the cost of Option 3 is higher than Western Power's preferred option (Option 4) under both demand scenarios, the option can be ruled out without further assessment.

Option 4 (330 kV double circuit): Option 4 is Western Power's preferred option and is therefore the base line for comparison with Options 1 to 3, as detailed in the above assessments.

4. Conclusions

Western Power's Regulatory Test submission provides a plausible argument for their preferred solution (a 330kV double circuit network augmentation), but in a number of instances does not provide detailed supporting information and analysis.

The submission provides little detail regarding the potential to supply energy requirements from locally connected gas or coal fired power stations. This includes no quantification of the costs and benefits of options such as the Centauri 1 (Eneabba Gas) proposal and the proposed Coolimba (Aviva) power station. We do note that neither Eneabba Gas nor Aviva has opposed the development of the proposed network augmentation and do, conversely, support its further expansion to Geraldton. This does not constitute definitive evidence but, combined with the fact that Karara has not negotiated a supply directly from either proponent, provides some qualified support for Western Power's claim that these power stations do not currently provide a feasible alternative.

With regard to other forms of non-network supply, including demand side management and isolated generation, MJA supports Western Power's conclusions that these options would be either insufficient to meet the expected demand or would be more expensive than the proposed network augmentation.

With regard to network augmentation, MJA's analysis in Section 3.5 reveals that the two preferred options are Western Power's Option 2 (330kV single circuit) and Option 4 (330kV double circuit).

Assuming that the costs provided in their submission are correct, Western Power's preferred option (Option 4) is the most economically attractive option provided the likelihood of requiring more than 510 MW by 2016 is greater than 18%. As MJA's "Central" load forecast (which includes Karara Stage 1) is approximately 250 MW by that time, a further load of 260 MW would be required to breach the 510 MW threshold. The additional load could potentially derive from:

- Karara Stage 2 (152 MW);
- Extension Hill (119 MW);
- additional small block load customers (up to 75 MW); or
- other unidentified customers.

For Option 4 to remain the preferred option, the likelihood of each option must increase substantially if the timing is delayed beyond 2016. For example, if it were not expected that the 510 MW threshold would be breached until 2021, the breach would require a probability of 29% or more.

Offsetting the demand, a number of factors may also reduce the load requirement, even under the high growth scenario, including:

- increased demand side management;
- the commissioning of local generation that would reduce the load on the Mid West Energy Project's southern section infrastructure;
- the Mid West Energy Project Northern Section infrastructure may not be approved.

Despite the preceding points, it is plausible that a demand of 260 MW could have a probability of greater than 18%, and therefore it can be argued that Western Power's preferred network augmentation option is defensible. This conclusion does not imply that the economic case has been definitively demonstrated, only that a plausible case has been provided that cannot be shown to be false.

We note for completeness that Western Power also identified a number of other benefits that were not included in their Net Present Cost analysis. These benefits include:[5]

- reducing the cost of losses, in particular when the second circuit is upgraded and the Three Springs Substation loads are shared amongst the two circuits;
- better use of available easements. Western Power estimated that environmental approvals and additional community and landowner engagement for the 330kV single circuit proposal (Option 2) could delay the project by 2 to 3 years and cost and additional $3.5 to $4 million. The accuracy of these estimates could not be verified in time for this report. However, if additional costs were required to implement Option 2, the comparative case for Western Power's preferred option (Option 4) would be further improved;
- providing higher security for customers. In addition to the upgrade capability, the double circuit would also provide "N-1" security, particularly at Three Springs for prospective mining loads;
- contributing to Government's renewable target by facilitating the connection of renewable generation (such as wind generation) in the Mid West; and
- savings in maintenance costs if old wood pole line are replaced. Other cost and safety benefits would also be expected due to the lower number of transmission structures, increased ground clearance and double overhead earth wire. At this stage, Western Power had not calculated the direct financial impact in sufficient detail to include these benefits as part of the Net Present Cost calculation.

4.1 Assessment of the major augmentation proposal

The requirements of a major augmentation proposal submitted under section 9.15 are set out in section 9.16 (see Appendix 1 for details). MJA's assessment of the proposal against these requirements is summarised in Table 4.

[5] Western Power letter to the Authority, 6 January 2011, reference DM#7827317.

Table 4: MJA's assessment of the proposal against the requirements of section 9.16 of the code

Requirement	MJA's assessment
(a) must describe in detail each major augmentation to which the major augmentation proposal relates; and	Requirement met
(b) must state that, in the service provider's view, each proposed major augmentation maximises the net benefit after considering alternative options; and	The proposal considers the net present cost of each option however, the net benefit is not calculated.[1] Western Power assert that the preferred option has the greatest benefit of the options presented and therefore that calculation of net benefits is not required.
(c) must demonstrate that the service provider has conducted a consultation process in respect of each proposed major augmentation which:	Not assessed by MJA.
i. included public consultation under Appendix 7; and	
ii. gave all interested persons a reasonable opportunity to state their views and to propose alternative options to the proposed major augmentations, and that the service provider had regard to those views and alternative options; and	
iii. involved the service provider giving reasonable consideration to any information obtained under sections 9.16(c)(i) and 9.16(c)(ii) when forming its view under section 9.16(b); and	
(d) must comply with the current requirements published under section 9.17.	Not assessed in detail, but appears to comply with the Authority's Document *Chapter 9 Electricity Access Networks Code 2004, Guideline for Application of the Regulatory Test 22 February 2008*
(e) may include a request that the Authority give prior approval under section 6.72 in respect of the new facilities investment for one or more proposed major augmentations.	Not requested

Note 1: The definition of "net benefit after considering alternative options" is provided in section 9.3: "net benefit after considering alternative options" means a net benefit (measured in present value terms to the extent that it is possible to do so) to those who generate, transport and consume electricity in the covered network and any interconnected system, having regard to all reasonable alternative options, including the likelihood of each alternative option proceeding."

4.2 Assessment of the Regulatory Test

The requirements of the Regulatory Test for a major augmentation proposal submitted under section 9.15 are as set out in section 9.20. MJA's assessment of the proposal against these requirements is summarised in Table 5.

Table 5: MJA's assessment of the Regulatory Test against the requirements of section 9.20 of the code

Requirement	MJA's assessment
(a) the service provider's statement under section 9.16(b) is defensible; and	Provided the Authority is satisfied that local, network connected generation is not feasible or will not progress, Western Power's submission provides a defensible, but not definitive, argument in support of 9.16(b).
(b) the service provider has applied the Regulatory Test properly to each proposed major augmentation:	
i. using reasonable market development scenarios which incorporate varying levels of demand growth at relevant places; and	Requirement met
ii. using reasonable timings, and testing alternative timings, for project commissioning dates and construction timetables for the major augmentation and for alternative options; and	Alternative timings have not been tested, however we note that the primary driver of timing is the Karara Stage 1 project, which is a prerequisite for progressing with the augmentation. The key impact of timing will be on the "threshold" analysis relating to Option 2 and Option 4, as discussed in Section 3.5.
(c) the consultation process conducted by the service provider meets the criteria in section 9.16(c).	Not assessed by MJA.

Appendix 1: Extract from Electricity Networks Access Code 2004

'Regulatory Test' defined

9.3 The "Regulatory Test" is an assessment under this Chapter 9 of whether a proposed major augmentation to a covered network maximises the net benefit after considering alternative options.

9.4 A "net benefit after considering alternative options" means a net benefit (measured in present value terms to the extent that it is possible to do so) to those who generate, transport and consume electricity in the covered network and any interconnected system, having regard to all reasonable alternative options, including the likelihood of each alternative option proceeding.

Regulatory Test not as part of access arrangement approval process

9.15 A service provider may submit a major augmentation proposal other than as part of the access arrangement approval process, in which case sections 9.16 to 9.22 apply

9.16 A major augmentation proposal submitted under section 9.15:

(f) must describe in detail each major augmentation to which the major augmentation proposal relates; and

(g) must state that, in the service provider's view, each proposed major augmentation maximises the net benefit after considering alternative options; and

(h) must demonstrate that the service provider has conducted a consultation process in respect of each proposed major augmentation which:

iv. included public consultation under Appendix 7; and

v. gave all interested persons a reasonable opportunity to state their views and to propose alternative options to the proposed major augmentations, and that the service provider had regard to those views and alternative options; and

vi. involved the service provider giving reasonable consideration to any information obtained under sections 9.16(c)(i) and 9.16(c)(ii) when forming its view under section 9.16(b); and

(i) must comply with the current requirements published under section 9.17.

(j) may include a request that the Authority give prior approval under section 6.72 in respect of the new facilities investment for one or more proposed major augmentations.

9.20 The test in this section 9.20 is satisfied if the Authority is satisfied that:

(a) the service provider's statement under section 9.16(b) is defensible; and

(b) the service provider has applied the Regulatory Test properly to each proposed major augmentation:

i. using reasonable market development scenarios which incorporate varying levels of demand growth at relevant places; and

ii. using reasonable timings, and testing alternative timings, for project commissioning dates and construction timetables for the major augmentation and for alternative options; and

(c) the consultation process conducted by the service provider meets the criteria in section 9.16(c).

9.21 If the Authority is unable to determine whether the test set out in section 9.20 is satisfied or is not satisfied because the service provider has not provided adequate information (despite the Authority having notified the service provider of this fact and given the service provider a reasonable opportunity, having regard to the time periods specified in section 9.18, to provide adequate information), then the Authority may determine that the test in section 9.20 is not satisfied.

9.22 If the Authority has not published a determination under section 9.18 within the time limits specified in that section, then the Authority is deemed to have determined that the test in section 9.20 is satisfied.