Submission on:

Issues Paper

Economic Regulation Authority

New Facilities Investment Test for a 330kV Transmission Line and Associated Works

By

Mid West Development Commission

on behalf of the

Mid West Strategic Infrastructure Group

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The **Mid West Development Commission** is a statutory authority which aims to promote the social and economic development of Western Australia's Mid West. Its operations are overseen by a regionally based Board and it reports directly to the Minister for the Midwest and Wheatbelt, the Hon K M Chance. Its offices are located in Geraldton.

With the support of the Department for Planning and Infrastructure, the **Mid West Strategic Infrastructure Group** was established as a Working Group of MWDC in mid 2005. Its key aim is to facilitate the timely development of the region's strategic infrastructure to support major project development. The MWSIG meets bi-monthly and plays a key role in planning and coordination for major projects within the Mid West.

MWSIG members include:

- MWDC Chair and Executive Officer support
- Department of Environment and Conservation
- Department for Planning and Infrastructure
- Department of Industry and Resources
- Department of Water
- Geraldton Iron Ore Alliance
- Landcorp
- Oakajee Project Team
- Office of Development Approvals Coordination
- Main Roads WA
- Mid West Gascoyne Area Consultative Committee
- Geraldton Port Authority
- Western Power
- Water Corporation
- Batavia Coast Regional Council
- Murchison Zone of WALGA
- Mid West Regional Council
- Shire of Wiluna
- Mid West Chamber of Commerce and Industry
- Chamber of Minerals and Energy WA
- Westnet Rail

The attached Mid West Major Projects Update clearly illustrates the growth occurring and planned for the Mid West region, not only for major resources projects but also for other major developments which will stimulate further population and business growth. This planned growth needs to be supported by the 330 kV augmentation.

Currently the load for the upper Muchea grid (the Mid West region) is 140 MW which is near the system capacity of 155 MW. This is insufficient to meet the region's future power needs on a business as usual scenario let alone the significant new mining projects being proposed. Indeed, none of the proposed Mid West magnetite mining projects can proceed until the capacity of the grid is significantly upgraded. In addition, the Geraldton Iron Ore Alliance has estimated that Geraldton's population will increase by around 20,000 people within 25 years on the back of its member projects alone, further increasing the need for power and other services.

The proposed development at Oakajee (20 kms north of Geraldton) of a deepwater port and rail link, will also facilitate major industry development at the adjacent Oakajee industrial estate. In the first instance Murchison Metals and Midwest Corporation plan to export hematite through this infrastructure with the latter estimating it will require 40 - 80 MW of power for its operations at Oakajee.

Power supply bottlenecks have the potential to dramatically stifle industrial development, economic expansion and growth in the Mid West by killing or delaying many of the planned major projects or causing them to relocate out of the region or country.

A well planned, strategically coordinated and timely upgrade to the electricity supply is vital for the prosperity of not only the Mid West region but for Western Australia and the nation as a whole. A poorly planned, uncoordinated and piecemeal approach will spell disaster for many potential projects and stifle the economic prosperity of the region.

Given the current gas crisis in Western Australia, the 330 kV augmentation, with good supportive policy, has the potential to stimulate further power generation within the Mid West region, thereby significantly reducing future such disruptions to power supplies and therefore to business and the broader community.

With the 330 kV in place, it is conceivable that the Mid West could be a net exporter of power in future, helping to insulate the State from a reliance on relatively few power sources. Currently Aviva Corporation, Eneabba Gas and numerous wind farm projects are being proposed for the Mid West. There is also interest in the region's solar and geothermal resources. The 330 kV power line will facilitate these and other generation projects.

FUTURE DEMAND FOR POWER IN THE MID WEST

The Mid West Major Projects Update documents the significant number of current and future Mid West projects where hundreds of millions of dollars have already been spent on development.

The two Mid West resources projects with the largest power needs are Asia Iron's Extension Hill project and Gindalbie's Karara project. These magnetite projects, along with many other mining projects will not proceed without the 330 kV augmentation.

It is forecast that Gindalbie's Karara project will require 100MW by 2010 and will increase to 200 MW by 2015 and Asia Iron's magnetite project will require 110 MW on full commissioning in 2010 and increase to 200 MW in 2015 or 280 MW if a desalination plant is constructed as well in the Geraldton area by 2015.

Gindalbie Metals announced on 14 November, 2007 that it had signed a long term power supply contract with Verve Energy for 100 MW for its Karara project. MWDC is advised that without a 330kV augmentation, Verve Energy would be unable to fulfill this contract.

Asia Iron Extension Hill project is perhaps the most advanced major iron ore project in the Mid West. Production is due to get under way in mid 2010 at a rate of around 10 mtpa. This project will require up to 110 MW of power by mid 2011 and possibly more than double that figure by 2015 as it moves to the next phase of its project.

It should be noted that the two major magnetite projects (Asia Iron – Extension Hill; Gindalbie – Karara) will need to construct, at their cost, 330 kV feeder lines from Three Springs to their respective projects.

MWDC estimates that there are about 15 or more potential renewable energy projects (predominantly wind farms) and 5 or more non renewable energy (coal and gas) projects proposed for the Mid West As private companies in WA currently cannot enter into the electricity transmission business, these proposed power supply projects are dependent on Western Power's dual circuit 330kV augmentation to progress.

CONCLUSION

The Mid West Development Commission does not profess to have a detailed technical understanding of the NFIT test.

However, we believe the 330 kV augmentation meets the NFIT on the basis that the 330 kV augmentation is necessary to meet the Mid West's future power requirements in a safe and reliable way.

Pole top fires and severely limited current capacity and reliability have been major constraints to the region's development for a number of years. Not surprisingly the 330 kV power line has long been identified by the Mid West Development Commission and the Mid West Strategic Infrastructure Group as a key piece of strategic infrastructure necessary for the future growth and development of the Mid West including the resources sector.

Accordingly, the recent announcement in the 2008/09 State Budget confirming the States and Western Power's commitment (funding and timeframe) to the 330 kV line has been very well received by the Mid West community.

It needs to be re-emphasised that the line will not only support major resources projects planned for the Mid West (particularly the two magnetite projects), but is necessary to enable the region to move ahead on a 'business as usual' scenario catering for new residential, commercial and industrial land developments.

Importantly, and perhaps not yet fully appreciated, is that the 330 kV line will also support and encourage third party power generation within the Mid West helping the region and State to insulate itself against a reliance on relatively few energy sources such as gas from the north-west.

The Mid West Development Commission on behalf of the Mid West Strategic Infrastructure Group strongly supports the 330 kV power line to be constructed by Western Power by 2010; and giving consideration to issues of demand, safety, reliability and ability to stimulate further third party power generation within the Mid West, the Commission also is of the view that the investment into the 330 kV augmentation meets the NFIT.

APPENDIX 1 Summary of Current and Proposed Mid West Resources Projects

There are seventeen mining projects in operation in the region

There are more than 22 mining projects in various stages of evaluation / development in the region including Murchison Metals (Crosslands Resources) - Jack Hills Stage 2 hematite; Midwest Corporation – Koolanooka/Blue Hills hematite, Weld Range hematite, Jack Hills hematite, Robinson Range manganese/hematite and Koolanooka magnetite; Mt Gibson Extension Hill hematite; Ferrowest merchant pig iron; Golden West Wiluna West hematite; Windimurra vanadium; Reed Resources Barrambie vanadium; Extension Hill magnetite; Iluka Resources Jacinth Ambrosia project; Atlas Iron magnetite and Gindalbie Metals' Mt Karara hematite/magnetite). Ten of these proposed projects have a projected life of around 20 years reflecting a move from low tonnage to high tonnage production projects that requires a significant investment in infrastructure.

There are also nine Oil and Gas projects in operation including: Hovea, Erima, Jingemia, Cliff Head, Xyris, Dongara, Beharra Springs, Tarantula and Yardarino with ongoing exploration and a number of projects being evaluated

Currently planned projects have an estimated capital value of more than \$7 billion with and estimated construction employment of between 4,000 & 6,000 and an estimated on going employment of between 2,000 & 3,000. These figures do not include jobs created indirectly in the service industry. The Geraldton Iron Ore Alliance (April '07) estimates that Geraldton's population alone could increase by 20,000 people within 25 years.

The attached Mid West Major Projects Update provides more detail on these and other major projects planned and proposed for the Mid West. The graph below highlights the magnitude of the iron ore projects proposed for the Mid West.

