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Dear Ms Walters

**REGULATORY TEST APPLICATION:  
WESTERN POWER MID WEST ENERGY PROJECT (SOUTHERN SECTION)**

The City of Geraldton-Greenough notes that the current ERA consultation process addresses the Regulatory Test Application for the project solution proposed by Western Power for Stage 1 (southern section) of the Mid West Energy Project. This covers the proposal to establish a new double circuit 330kV line from Neerabup to Eneabba, and establish a new 330/132kV terminal substation at Three Springs. The solution embraces integration of the 330kV line to be established by Karara Mining from Eneabba via Three Springs to their mine site.

The City strongly supports the Southern Stage solution as proposed by Western Power, and endorses the assertion put by Western Power that the solution must be based on consideration of the central and high load forecasts for the region. The City endorses the Western Power view that the 'high' forecast scenario has high probability of being realised, and that the proposed solution delivers the best economic outcome, creating essential scale-up ability in prudent anticipation of the high forecast scenario.

Significantly, the City believes that failure to base the solution for the Southern Stage on the central (and recognising the high) load forecasts will jeopardise essential delivery of a 330kV Northern Stage solution, recognised as necessary before 2015/16 to support in-progress and planned infrastructure and mining developments the Mid West.

The City notes Western Power views that the proposed Southern Stage 330kV solution will enable progress with some 1300MW of wind power projects currently at initial proposal stage in the southern section, and that subsequent extension of 330kV capacity north of Eneabba to Geraldton and Oakajee will enable progress of a further 500MW of renewable power projects, including new projects and extension to existing wind farms at Walkaway. These projects are essential for meeting the 20% Renewable Energy Target.

In relation to the particular matters identified in the ERA Issues Paper dated 20 December 2010 on the Southern Section proposal for which Western Power has submitted the



Regulatory Test Application, based on publicly available information (including copies of Western Power responses to all submission from interested parties), additional information provided by Western Power (including consultant reports), and forum discussions with Western Power representatives, the City holds the following views:

- Western Power *has* identified a relevant set of alternative options for the Southern Section and has given reasonable consideration to alternative options proposed by interested parties;
- The forecasting methods adopted by Western Power are not materially inconsistent with good industry practice (as reported on by consultants), take into account current work by State agencies and the City on population growth forecasts, and form an appropriate basis for considering alternative options for increasing transmission system capacity in the Mid West region;
- Western Power's feasibility analysis of alternative options for the Southern Stage *is reasonable and robust*, with adequate justification for elimination of alternative options; and
- Western Power's approach to assessment of net benefits of the proposed Southern Stage solution *is appropriate*.

## **Stage 2 Northern Section Issues**

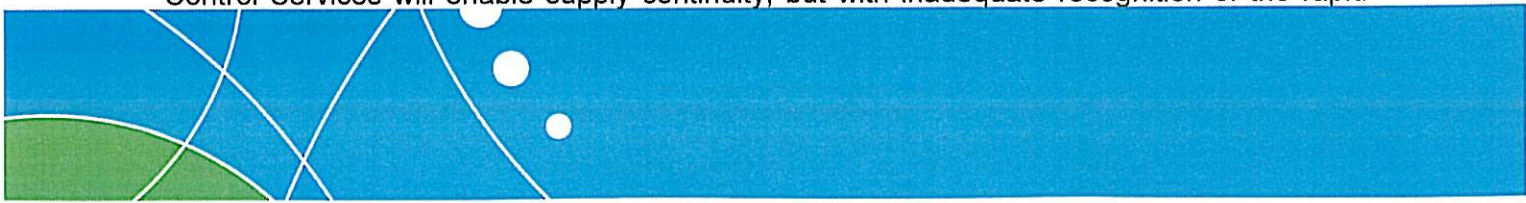
While understanding that the current consultation process is only addressing the Southern Stage project, the City is obliged to highlight concerns regarding the consequent timing impact on the Northern Stage of the Mid West Energy Project, the interim strategies for addressing energy requirements in the Northern section, and the bases for Western Power assessments that:

- Current predictions of underlying natural load growth (existing customer base) in the Geraldton area can be met by the existing transmission lines until 2015/16, with only minor works required to meet voltage constraints; and
- Additional northern section load growth can be satisfied by 132kV reinforcement after 330kV connection from the SWIS is achieved to Three Springs, until 2015/16.

The City understands that, provided all necessary approvals to commence are received in January 2011, the target completion date for the Stage 1 project is March 2013.

In the absence of specific details as to interim technical solutions proposed, their timing, and firm commitment of funding, the City view is that 'minor works' solutions, and distribution reinforcement in some localised areas for specific developments, are unlikely to meet forecast growth demands in the period 2011-2013, and that the northern region therefore has an unacceptable exposure to electricity supply risks in terms of both adequacy and continuity/security, having regard to recognition of voltage stability and thermal loading problems.

The City is concerned at the perpetuation of northern section demand assessments that do not reflect increasingly adverse symptoms of a capacity-constrained northern section, including instances of load-shedding when one of the 132kV lines trips, brown/black-outs in the Narngulu and Geraldton northern suburbs, current inability of Western Power to provide for *any* new block loads other than on an interruptible basis, their assumption that Network Control Services will enable supply continuity, but with inadequate recognition of the rapid





progress associated with major regional developments, including Gindalbie and Extension Hill, and related export capacity expansions at Geraldton Port. These developments are happening *now*.

On 15 July 2010, at a closed meeting with stakeholders following the public consultation session in Geraldton, Western Power provided summary information in a handout to participants, including population forecast information, and demand forecasts for four key substations located within greater Geraldton. Forecast demand growth rates for these substations were in the range 0.4 to 0.8 MVA per year.

For Geraldton-only, a summary graph suggested that with a low growth forecast, existing capacity would be sufficient until 2016-17, while the central and high forecasts both suggest existing capacity would be exceeded by early 2013, with Karara and Extension Hill exports commencing in 2012, then high growth associated with Oakajee Port stage one subsequently and rapidly exceeding available capacity.

The City is concerned that, should commencement of Stage 2 be delayed until the Stage 1 target completion date of March 2013, and assuming that Karara and Extension Hill exports through Port of Geraldton commence beforehand, then supplies to Geraldton *will be inadequate*, and there may be a protracted delay before that problem is solved.

Hence the City is anxious for advice from the State on the specific nature of available interim solutions, their timing, and firm commitment of necessary funding.

It is not clear how 132kV reinforcement alone can meet forecast demand beyond early 2013. This will have to be supported by Network Control Services, associated Peak demand management methods, access enabled to the local grid for additional Peak Generators, and – of necessity, to mitigate supply risks - onus resting on industry/ commerce to implement rigorous energy efficiency programs.

Advice from Western Power suggests that until the network is reinforced to Geraldton, new growth may be met from new 11kV feeders in some localities, but all new block load consumers will be required to finance any associated Network Control Services, and block load consumers may participate in provision of those services via interruptible loads or local generation solutions. Costs of minor network enhancements such as transformer upgrades will inevitably fall to consumers.

These are patently finger-in-dike interim solutions, and there is real danger that the same thinking may lead to an economically sub-optimal incremental approach to bolstering supply over time, with industry and commerce largely left to install their own generation capacity, at high cost and least environmental value, due to inability of Western Power to enhance the network properly to a higher high-forecast need that recognises the real demand growth. Clearly, augmentation of northern section supply is already necessary.

As part of its submission to Western Power during the consultation process for the Southern Section projects, on behalf of the regional business community, the City was obliged to highlight the urgent need for transmission system investment and the significant loss of potential jobs and industry due to lack of energy supply and security in the northern section.





The City contends that:

- The real economic costs (including costs of major and local economic development projects deferred pending availability of essential electricity supplies) of *not* simultaneously developing the northern stage of the 330kV solution for the Mid West Energy project should be assessed and taken into account when appraising the southern stage proposal, with the view to determining feasibility of re-combining the stages into a single project, aimed at delivering 330kV capacity to the northern section far earlier than 2015/16.
- Costs of the Stage 1 southern project should include full costs of all essential enhancements required to the transmission and distribution systems in the northern section, including all NCS and local generation solutions - very particularly including requirements for Geraldton, and augmentation requirements for Northampton and Kalbarri – arising as a result of deferral of the Stage 2 northern section.

### **Connection to Oakajee**

In relation to Stage 2, the City notes that the original proposals for 330kV lines envisaged connection only to Moonyoonooka. More recent information suggests that Western Power recognises the need to extend the 330kV connection to Oakajee – assuming that that port and rail infrastructure project proceeds.

The City regards this as essential for the Port going forward, but more particularly for enabling development of the adjacent Industrial Estate. Establishment of down-stream processing capabilities associated with the mineral export industry and related support and manufacturing capacity is dependent on 330kV supply to Oakajee. The City will continue to press this issue with Western Power.

### **Imperative to Avoid Delays**

The July 2010 information sheet on the project indicates Western Power intention to conduct a more detailed planning assessment of solutions and timing to meet northern section requirements. The City has urged Western Power to commence this assessment and begin consultation with stakeholders sooner rather than later. Support of the ERA is sought, to encourage Western Power to commence northern section planning immediately.

### **Conclusion**

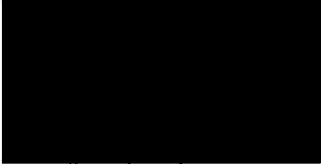
City of Geraldton-Greenough is highly supportive of the solution proposed by Western Power for the Mid West Energy Project Southern Section, looking at the feasibility of that project proposal of itself.

However – the City contends that earlier development of the Northern Section, extending 330kV capacity from Eneabba to Geraldton and Oakajee is essential, and urges the ERA to re-visit the previous review of the overall project that led to Government decisions to separate the project into separate southern and northern stages.



Recently developed population growth estimates, prepared by Housing agencies, and forecasts of growth now utilised by the Planning Commission, as reflected in the recently revised Greater Geraldton Structure Plan, provide a better base for energy demand forecasting than was previously available.

Yours sincerely



Tony Brun  
**CHIEF EXECUTIVE**

