Determination on an Application from Western Power to Waive the Regulatory Test for New Transmission Works to Supply the Binningup Desalination Plant

4 January 2010

Economic Regulation Authority



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For further information, contact:

Economic Regulation Authority Perth, Western Australia Phone: (08) 9213 1900

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DETERMINATION

- 1. The Economic Regulation Authority (**Authority**) has decided to:
 - exercise its power pursuant to section 9.23(f) of the *Electricity Networks* Access Code 2004 (Access Code); and
 - waive the application of the regulatory test for Western Power's proposed major augmentation for new transmission works to supply power to the Binningup desalination plant.

REASONS

- 2. On 7 October 2009, Western Power made an application to the Authority requesting it to waive the regulatory test in respect of a proposed major augmentation, for new transmission works to supply power to the Binningup desalination plant.¹ The application was made under section 9.24 of the Access Code.
- 3. Western Power's application states that the proposed major augmentation will cost an estimated \$50.4 million and will involve the installation of a second 330/132 kV transformer at Kemerton Terminal, the establishment of a 132 kV switchyard at Kemerton Terminal, and the installation of approximately 10 km of 132 kV transmission line from Kemerton Terminal to the Binningup desalination plant.
- 4. In its application, Western Power claims that the proposed major augmentation meets the requirements of section 9.23(d) of the Access Code because the nature of the funding of the proposed augmentation will not cause a net cost to those who generate, transport and consume electricity in the covered network and any interconnected system.
- 5. Western Power indicates that \$26.4 million of the total augmentation cost will be allocated to the Water Corporation for reason that the augmentation works associated with this amount are a direct result of load requirements at the Binningup desalination plant. The augmentation works include the:
 - Binningup 132 kV substation works (\$3.3 million);
 - Binningup substation to Kemerton Terminal transmission line (\$16.6 million);
 - Kemerton Terminal works for connection of the transmission line (\$1.5 million); and
 - brought forward costs of planned Kemerton Terminal works (\$5.0 million).
- 6. The remaining augmentation cost of \$24 million is associated with planned augmentation works that, under normal load growth scenarios, Western Power would have been required to undertake at the Kemerton Terminal in November 2013.

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Western Power, 7 October 2009, Request for Waiver of Regulatory Test: Installation of a second 330/132 kV transformer at Kemerton Terminal and construction of a 132 kV transmission line to supply Binningup Desalination Plant.

- 7. The Authority has considered the information in Western Power's application, as well as further information that was provided on request, and is satisfied that the proposed major augmentation meets the requirements of section 9.23(d) of the Access Code for the following reasons.
 - Western Power, in partnership with the Water Corporation, investigated various alternative options to address the forecast load requirements of the Binningup desalination plant. The alternative options included demand-side management, on-site generation and network augmentation. All options assessed included works for the establishment of a 132 kV switchyard at Kemerton Terminal, as this is required to connect the Binningup desalination plant. The preferred and recommended solution (that is, the option being assessed under this determination) is considered to be the best technical and economic solution in this particular instance.
 - The Water Corporation has confirmed its understanding of the augmentation works required to supply power to the Binningup desalination plant and acknowledges that a capital contribution will be required for this work. Specifically, the Water Corporation has acknowledged that the capital contribution will consist of both connection costs and shared network costs, with the shared network costs based on the advancement ("brought forward") cost of the shared infrastructure at Kemerton Terminal. An *Interconnection Works Contract* between Western Power and the Water Corporation has been completed detailing these costs and the contribution payment.
 - Western Power has confirmed that it undertakes network planning over a 20 year planning horizon. The network plans that are developed incorporate both natural load growth and also take into account potential larger developments, with low, central and high load forecasts used in the evaluations. Western Power's load studies indicate that under natural load growth and with the capacity of the existing network, works at Kemerton Terminal will need to be completed in the summer of 2013/2014 (that is, forecast load is expected to exceed supply capacity by summer 2013/14). Under natural load growth, with the addition of the Binningup desalination plant (assuming Stage 1 of the desalination plant only at 25 MW³), works at Kemerton Terminal will be needed in the summer of 2011/2012 to meet supply capacity.
- 8. For the reasons as set out above, the Authority has determined that the nature of the funding of the proposed augmentation will not cause a net cost to those who generate, transport and consume electricity in the covered network and any interconnected system.
- 9. Consequently, in accordance with the provisions of section 9.23 of the Access Code, the Authority has formed the view that the application of the regulatory test in

Letter from the Water Corporation (Mr P. Ferguson) to Western Power (Mr M. de Laeter) of 20 October 2009. Email from Western Power to the Economic Regulation Authority of 29 October 2009. Western Power, 29 October 2009, Binningup Desalination Plant Planning Report (DMS#6254223). Letter from Mr Phil Southwell, General Manager Regulation & Sustainability of 14 December 2009. Email from Western Power to the Economic Regulation Authority of 15 December 2009.

Western Power has advised that on 3 December 2009, the Water Corporation formally requested to increase the load requirements of the desalination plant from 25 MW to 30 MW (Letter from Mr Phil Southwell, General Manager Regulation & Sustainability of 14 December 2009).

- respect of the proposed major augmentation would be contrary to the objectives of Chapter 9 of the Access Code.
- 10. The Authority has decided to publish a notice, pursuant to section 9.24(a) of the Access Code, which meets the requirements in relation to the Authority exercising its power to waive the application of the regulatory test for the proposed major augmentation under section 9.23(f) of the Access Code.
- 11. In making its determination the Authority has had regard to the provisions dealing with the regulatory test as set out under Chapter 9 of the Access Code, as well as Western Power's application and supporting information.