



## GRIFFIN ENERGY

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Ms Sarah Walsh  
A/Manager Projects Access Arrangement Review  
Electricity Access  
Economic Regulation Authority  
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Perth Business Centre  
PERTH WA 6849

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Dear Ms Walsh,

### **RE: Submission on Western Power's 2008 Access Arrangement Revision**

Griffin Energy ('Griffin') welcomes the opportunity to comment on the ERA's Issues Paper relating to Western Power's proposed revisions to the Access Arrangement for the SWIN. Griffin is an active developer of significant new generation facilities in WA and has an interest in the efficient and effective operation of Western Power's regulated business. Griffin comments on the following issues:

#### Standard Access Contracts

The main objectives of the *Electricity Network Access Code 2004* (Code) are given as:

##### ***Code objective***

*2.1 The objective of this Code ('Code objective') is to promote the economically efficient:*

*(a) investment in; and*

*(b) operation of and use of,*

*networks and services of networks in Western Australia in order to promote competition in markets upstream and downstream of the networks.*

The SWIN is characterised by very long and lightly loaded transmission lines with a few large load and generation centres near the middle of the network. Additionally, a very high reliability regime has been imposed on the network – perhaps unsuited to the physical characteristics of the network itself. These characteristics naturally result in a high cost per

capita transmission system. To meet the objectives of the Code, thought should be given to how future investments in this system is made – and whether these investments send the appropriate signals to encourage new loads and the new generation facilities required to meet load growth.

The regulatory settings overlaying the management of the network are often at odds with the Code objectives. Two important market constraints are the impending increase of mandated renewable electricity required to be produced; and the requirement for generation facilities to have unconstrained access to participate in the capacity market. The first of these constraints will likely lead to network investments that otherwise would be inefficient absent the renewable requirement. However, given the social mandate to increase the proportion of renewable generation consumed by the economy, this investment can be deemed warranted and necessary. The rationale behind the second constraint is less justified. In a capacity market, the availability of each MW of capacity is an important factor in deriving the intrinsic value of that capacity. Availability is comprised of several factors, including facility, fuel and the network. The network, while subject to very high reliability standards, cannot provide 100% availability. Also, the network will necessarily be less reliable in some locations, due to physical constraints such as age, environment (fire etc), location (remote from maintenance) and the characteristics of the loads and generation facilities connected to it. This is important; because it illustrates that the availability of generation facilities – due to network factors – is not consistent throughout the network<sup>1</sup>. This raises the question: What is the optimum trade-off in efficient network investment versus maximising the availability of capacity in our market? By decreasing the criteria for the availability of a generation facility, we necessarily alter the intrinsic value of the capacity attached to that facility (and to the capacity market as a whole). But we simultaneously decrease the level of investment required in our large and lightly loaded system to meet the stringent requirements of unconstrained access. Griffin believes there is (some considerable) scope to relax the criteria for unconstrained network access while still maintaining adequate reliability within the capacity market. We contend that this will allow more cost reflective locational price signals *over the long term* and lead to a more efficient market. Griffin contends that this can be managed in a manner which is consistent with both the objectives of the Code and the objectives of the Market Rules.

In its proposed revisions to the Access Arrangement, Western Power has included the capability to offer a ‘modified service’ on a temporary basis. This could imply that an applicant for network access might be granted access for its entire installed capacity subject to network availability. In the event that a network fault restricted the capability of the network to accept the generation capacity attached to it, the applicant would be required to turn down (or off) its output<sup>2</sup>. While there is a requirement for generation facilities applying for capacity credits to prove they have a network access agreement<sup>3</sup> there is no stipulation under the Market Rules (governing the WEM) for applicants to have unconstrained network access. The negotiation of an access agreement is thus a matter between the applicant and Western Power. Subject to the Regulations surrounding such access offers (and the Technical Rules), Western Power and the applicant should be free to negotiate the type service to be provided, with the applicant taking on the risks associated with any inability to meet its

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<sup>1</sup> Indeed, there are areas of the network where the reliability criteria are lower than others, creating definitive reliability discrepancies.

<sup>2</sup> This is one example of a ‘modified service’. There are likely to be many scenarios where Western Power could offer services which are not unconstrained network access agreements.

<sup>3</sup> Or at a minimum, letter of offer for network access from Western Power.

contractual obligations for the supply of energy and capacity. As such, Griffin supports the concept of a ‘modified service’.

Another significant inclusion in the proposed revisions to the Access Arrangement is the granting of the unilateral right to Western Power to reduce a user’s contracted capacity at a connection point. A similar provision, supported by Griffin, was proposed for the current Access Arrangement but removed at the request of the Authority. Griffin contends that such a provision is absolutely consistent with the Code objectives and associated legislation. The *Electricity Transmission Regulations 1996* states:

**36. *Effect of access to capacity***

*By executing or complying with its obligations under an access agreement or making any capital contribution under an access agreement, a user does not acquire any right, title or interest in or to the electricity transmission network.*

This implies that while a user holds an agreement which allows its facility to send its output, at a connection point, into Western Power’s transmission network, that user holds no rights over any other user, applicant or otherwise, over the transmission network itself. When the user is no longer able to send its output (at a connection point) into the network; and if there are other applicants seeking to utilise the network<sup>4</sup>, then the contracted capacity of the user should be reduced and that capacity should be made available to another user. The alternative would be to allow the user to maintain its unused capacity and for Western Power to invest in additional capacity for the new applicant. In order to meet its obligations under the Code objectives, Western Power should favour the reduction of unused contracted capacity over the investment in new capacity – as the latter is clearly not promoting the economically efficient investment in and use of the network; nor is it promoting competition in markets upstream and downstream of the networks.

Griffin again supports the concept of reducing unused contracted network capacity. However, we also recognise the issues some users might raise with the vesting of this authority in Western Power itself<sup>5</sup>. Griffin proposes that the right to reduce unused contracted network capacity be vested in the Authority, where Western Power, on application to the Authority, is required to meet a ‘burden of evidence’ test to activate this provision; and the relevant user is given the right to make submissions into the determination process.

A particular issue of concern to Griffin relating to the current Access Arrangement is the application of the NFIT to new network augmentations associated with new generation investment. Griffin believes that the transparency of decisions on when and how the NFIT is applied is poor and the guidelines influencing these decisions are confused. Western Power seem content to allocate new network augmentation costs required to connect new generation facilities to generators (as deep connection costs), yet smear network augmentation costs associated (ostensibly) with meeting new load growth across all users. Griffin considers this differentiation to be at odds with the Code and with the operation of an efficient market. The objective of economic efficiency means that investment decisions should produce the lowest cost electricity for end users. The network component of this electricity cost is equally

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<sup>4</sup> And the network does not contain sufficient spare capacity to accommodate all users and applicants.

<sup>5</sup> Though we fail to understand this rationale. As a state-owned enterprise with a regulated return; bound by a set of regulatory principles aimed economic efficiency; and with a unique understanding of the network, Western Power seems an ideal candidate to be making such decisions.

attributable to both ensuring the most cost effective augmentation of the network to ensure demand can be met (at the specified reliability standards); as well as ensuring that the most cost effective generation option is enabled by appropriate network augmentation. The Regulatory Test should determine whether a network investment is the most cost effective solution for meeting the electricity demand requirements of loads (which is the driver for investment in generation assets). For example, consider two hypothetical projects – a 400MW combined cycle power station in Kalgoorlie, where network access is unconstrained and no augmentation costs need be incurred, or a 400MW geothermal power station remote from the SWIN, where up to \$200M of network augmentation is required. Absent other options, the Regulatory Test should be used to determine the investment leading to the most efficient long term supply of electricity. Assume it is the geothermal plant. Who bears the cost of constructing the \$200M worth of transmission lines should not influence the cost of electricity seen by consumers from the geothermal plant. It will either appear as an increase to the wholesale electricity price, or a higher network cost component. However by allocating this capital cost to the geothermal development proponent, the risks associated with this development are increased. A similar development could ‘free ride’ on the new transmission connection and be more cost effective than the original plant. Or the increased capital component may be a disincentive to invest in the project. In such a case, the higher cost option (the CCGT plant) is progressed, leading to reduced market efficiency<sup>6</sup>.

Griffin believes that scenarios similar to these are currently being played out in the market. Decisions relating to the application of NFIT and the smearing of *all* efficient network augmentation costs should be transparent and obvious to potential new entrant generators.

### Treatment of Capital Contributions

Griffin recognises that, financially, there is not much difference between the current and proposed treatment of capital contributions. Economically however, the ‘front end loading’ of the recouping of capital contributions; and the subsequent short term increase in tariffs, is probably an additional increase to electricity tariffs that is both unnecessary and unwise at this point in time given the price pressure on electricity tariffs from other quarters.

### Rate of Return

Griffin believes that, generally, the financial and economic principles behind calculating the parameters of regulated returns (the Capital Asset Pricing Model - CAPM) are well understood; and that the application of regulated rates of return are well managed by regulators. However we would argue that Western Power manages its commercial risk inconsistent with that implied by its regulated returns. This leads to difficulties for counterparties that are required to negotiate with Western Power for access to their regulated network. The CAPM comprises a number of factors, including the capital structure, the cost of debt, the risk free rate and the Market Risk Premium (MRP). These parameters are generally available via the capital markets or can be inferred through the application of appropriate analysis. For example, in Australia, a MRP of around 6% is typical. The MRP is the expected return over the risk free rate. In regulated businesses, the expected return is one

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<sup>6</sup> While this is a very simplistic example, it contains parallels to the recent consultant report on the application of the Regulatory Test for the South West transmission line augmentation, where the SWGEN with transmission augmentation option was compared to the METROGEN with no transmission augmentation option (ACIL Tasman – September 2007).

that is expected to be achieved from a prudent manager of that regulated business. The return above the risk free rate is to compensate for the investment risk inherent in the business – and is required to be regulated to prevent a manager in a monopoly market seeking monopoly rents. This implies that the manager takes on some commercial risks commensurate with its return. Griffin believes that, latterly, Western Power has sought to marginalise its investment risk through obfuscating its obligations to negotiate and contract with counterparties until it more fully understands the cost implications. Western Power is in the business of investing in the electricity network. Like any investor in capital assets, signing an EPC contract to purchase or construct assets comes with a degree of price risk. In a competitive market, if the price risk is particularly low or high, the price of the commodity or service offered reflects this. Regulated markets mimic this outcome. However, when a regulated manager reduces its price risk while still earning the regulated premium, at the expense of the service offered to its customers, then this manager is effectively extracting monopoly rents. Griffin believes that Western Power could focus more on delivering timely commercial outcomes to its customers (including price certainty on network augmentation and connections) and incorporate a prudent amount of commercial risk into its negotiations.

Western Power's Access Arrangement actually employs a number of adjustment mechanisms that insulates Western Power from differences in forecast and actual costs. Western Power's real risk becomes a regulatory risk – or whether the regulator approves its prudent expenditure. This creates an inherent tendency for Western Power to err on the side of caution. For example, if the Authority was not to approve a cost incurred by Western Power (and add it to its capital base), then Western Power's return on investments decreases. To mitigate this, Western Power may be inclined to charge the customer the cost of network investments (via capital contributions), even if the investment would normally meet the NFIT requirements. This way, Western Power reduces its exposure to its regulatory risk. Griffin believes these drivers lead to poor market outcomes.

### Applications and Queuing Policy

The Applications and Queuing Policy has been problematic since its inception. The 'first come first served' principle encourages proponents to lodge as many applications as early in the development cycle as possible in order to gain a favourable queue position. This then creates a significant administrative burden for Western Power, resulting in serious network access applications being delayed by fanciful (or spurious) applications. Western Power has sought to rectify this through increasing the information threshold required to successfully lodge an application. The proposed Access Arrangement includes the definition of the new term 'complete', which appears aimed at achieving this. While acknowledging the inadequacy of the current Applications and Queuing Policy, Griffin has concerns with this method of attempting to reduce the number of applications. Obtaining network access for a new generation facility is one of the longest lead time items of the development timeline. Often, at the stage when a proponent needs to begin the application process, the final configuration of the actual project is not known. A proponent may be trying to maintain a degree of competitive tension on rival suppliers – or the commercial environment may change such that a revised operating duty requires a revised technical configuration. All this leads to difficulties for developers that are required to specify very specific data relating to their proposed facility at such an early stage of its development cycle. Increasing this data requirement in order to secure a proponents place in the access queue may have the effect of locking in a sub-optimal configuration for a specific development – or at least lead to costly changes to scope at a later stage (where such changes may trigger the loss of queue position).

Griffin suggests a way around this issue might be to require the lodgement of a bond with an application for network access. For a bona fide project, a position in the queue for network access should ultimately lead to contracted capacity. This will incur connection costs normally in the millions (or tens of millions) of dollars. So an application for network access should be treated as a material commitment to progress the project<sup>7</sup> (as an application for certified reserve capacity is). Over the course of the application, as it progresses to actual contracted capacity, other study costs will be incurred. These might be subtracted from the bond as agreed with the proponent. While the bond would not be forfeited on the termination of an access application, the tying up of a material sum presents a financial commitment from an applicant to Western Power and might dissuade other applicants that are less than committed to spend the amount required to ultimately connect to the network.

The Access Arrangement represents an extremely important component of our unique market structure and should be closely regarded when considering reform to our market design (and vice versa). Griffin Energy believes it is important to continue to engage in the ongoing reform process required in our electricity market. We would be happy to further discuss any of the issues raised in our submission.

Yours Sincerely,

**Shane Cremin**  
**Market Development Manager**

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<sup>7</sup> For example: the amount of the bond could be set at the expected cost to be incurred in system studies plus a proportion (say 2% to 5%) of the expected (or average) network connection costs.