GRIFFIN ENERGY

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Committee Secretary
Senate Standing Committee on Economics
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600
Australia

Dear Committee Secretary,

RE: Submission to the Inquiry into the exposure drafts of the legislation to implement the Carbon Pollution Reduction Scheme of the Carbon Pollution Reduction Scheme's likely impact on energy (electricity) supply in WA

Griffin Energy welcomes the opportunity to make a submission to your inquiry. Our submission, and interest in the inquiry, focuses on the terms of reference specific to investigating the impact of the Carbon Pollution Reduction Scheme (CPRS), as set out in the exposure draft legislation, on the Western Australian electricity sector. To do this, we first discuss the deficiencies in the allocation of assistance under the Electricity Sector Assistance Scheme (ESAS) in a general (i.e. national) context. We then apply this to the WA environment, where we feel the influence of WA-specific issues, unaccounted for in the Treasury modelling and White Paper policy position, may lead to poor economic outcomes.

Background to Griffin Energy

Griffin Energy, part of the diversified Griffin Group of companies, was established with a view to providing a secure and reliable source of electricity into the Western Australian market. This was a direct response to recent reforms in the WA electricity generation and supply sector aimed at encouraging private generation investment and retail entry. Griffin Energy is developing a balanced portfolio of generation assets within the isolated WA market. Production of electricity is due to commence shortly from the first of 2 x 229MW (gross) coal fired units at the Bluewaters Power Station in Collie. In joint venture with the Stanwell Corporation, Griffin operates an 80MW wind farm near Cervantes. Other generation developments include: the scheduled expansion of the Bluewaters Power Station; a proposed gas fired power station north of Perth; as well as further renewable energy developments including a second wind farm (coupled to a wind following peaker) and innovative wave power and hydro technologies.

General Comments on the CPRS

The Griffin Group has consistently supported the concept of introducing an Australian Emissions Trading Scheme as part of an international effort to price the emission of greenhouse gases (GHG) from otherwise productive industry. We have maintained that such a scheme should be broad based where practicable; offer a high level of certainty to investors; and strike an appropriate balance between the benefit of Australia's likely contribution to the global emissions reduction effort and the potential disruption to Australia's relatively emissions intensive economy. It should also recognise that, to maintain Australia's reputation for investment certainty, investments made prior to any policy implementation in this area must be protected where practicable.

With diverse business activities across a range of sectors impacted by the CPRS, including agriculture, coal mining and our electricity generation investments, Griffin maintains a keen interest in the development of policy in this area. While Griffin has consistently supported the concept of an Australian Emissions Trading Scheme, we are equally adamant that policy should be robust and uncompromised. Importantly, it must be understood that transitioning away from a carbon intensive economy takes time. While we firmly believe that, over time and given the appropriate incentives, innovation will move Australia from a relatively high to a low carbon economy, the scheme design in the interim period must give regard to the physical and financial constraints in implementing low emission technologies during this period. Griffin believes that at all times, the integrity of the scheme and the best interests of Australia should be the priorities when making decisions on the final CPRS design.

Assistance for Strongly Affected Industries

The principal pillar of the Government's Electricity Sector Adjustment Scheme (ESAS) is that of direct transitional assistance to eligible coal fired generators. A rationale for assistance stems from the enormous amount of capital required to be invested into the Australian stationary energy sector over the coming decades and at mitigating the perception of regulatory risk attached to the attraction of this capital. It should be noted that, in the absence of a CPRS under a business-as-usual scenario, a lesser though still significant investment would similarly be required in the Australian energy sector. However, given Australia's relative international standing as an investment safe haven; as well as the reputation of our advanced and transparent energy markets, it could be concluded that this investment would be forthcoming, even if under more onerous conditions (e.g. a higher cost of debt financing due to the impacts of the global liquidity crisis). The introduction of the CPRS, as well as the expanded Renewable Energy Target (RET), serves to increase the expected capital investment required over the business-as-usual case[1]. By applying a layer of regulatory risk over this increased investment challenge, where current equity investors face significant write downs to investments; and even some debt providers face the prospect of unprecedented losses to principle[2], attracting the requisite capital to meet the energy investment challenge of the carbon constrained world will not only be difficult, but likely to attract a considerable additional risk premium than would otherwise be the case. A way to mitigate the perception of regulatory risk is to compensate generators that suffer significant losses attributable to the

[1] ACIL Tasman analysis estimates that $30 billion to $35 billion will need to be invested in Australian energy markets over the next decade.
[2] See 'Emissions trading, toxic debt and the Australian power market', Simshauser, 2008

CPRS policy[3]. This shows that while the Government of the day may be inclined to undertake bold and far reaching economic reform in order to transition an inherently high emission intensive economy to a low emission intensive one, it does not do so at the expense of capital providers that have, in good faith and under a different paradigm, invested in growing the capital stock of Australia's electricity industry and the productive capacity of the nation.

Griffin believes that the application of the ESAS under the exposure draft legislation will be inadequate to deliver the desired result of mitigating the perception of regulatory risk. As a consequence, the Australian economy will suffer from a lack of available capital, or a higher cost attributed to capital, for investment in the electricity sector. The exposure draft legislation allocates 130.7 million permits (valued at approximately $3.9 billion) over a five year period under the proposed ESAS. While this sounds a large sum, it represents around a third of what is generally believed to be the loss in value to coal fired generators in Australia[4]. Importantly, the vast majority of this (around 90% according to industry analysis), is earmarked for Victorian and South Australian brown coal generators. While it is fair to surmise that brown coal generators suffer the largest impacts from the CPRS; and indeed are the most impacted in the initial years of the scheme due to their high emission intensities relative to other plant, black coal generators also suffer significant losses. This is evidenced by the Treasury modelling itself, which forecasts impacts over the first 10 years of the scheme[5]. Additionally, there are no brown coal generators in the Western Australian Electricity Market (WEM). Coupled with other factors specific to the WEM, discussed in detail below, this suggests that WA black coal generators will suffer the brunt of WA-based losses to revenue from the outset of the CPRS. The Treasury modelling forecast for asset value losses seems conservative (whether intentional or not) compared to other credible industry modelling[6]. Understating the potential losses that might be expected by rational investors only serves to undermine the credibility of the ESAS in mitigating the perception of regulatory risk. By extension, applying an inadequate pool of assistance only to the "most adversely impacted asset owners"[7] in order to mitigate regulatory risk does not offer comfort or clarity. After carefully considering which group of assets comprise Strongly Affected Industries, the Government then imposes an arbitrary cut-off intensity level for which the assistance to these assets applies. This suggests a regulatory layer (the decision on the cut-off intensity) on top of the underlying regulatory risk itself. Capital providers have a right to be

[3] Significant loss is an arbitrary notion, however much work has been done, and indeed signals sent to investors prior to the development of the current policy positions, around the concept of compensation equal to a disproportionate loss in asset value. See the NETTs Final framework report on [ETS] scheme design and the final report of the Prime Ministerial Task Group on Emissions Trading.

[4] The loss in value (or wealth transfer) for coal fired generators is expected to total approximately $12 billion. This is based on independent economic modelling by the major economic advisory firms in Australia – such as ACIL Tasman (2008), CRAI (2007), Frontier Economics (2008), MMA (2006), ROAM (2008) and IES (2009).

[5] Griffin argues that restricting the modelling to 10 years is also inappropriate. Generators tend to have a lifespan greatly in excess of 10 years. Griffin's own Bluewaters unit 1 and unit 2, both new power stations and 'committed' projects, have at least a 30 year life ahead of them under business as usual conditions. While making assumptions and hence relying on modelled output that extends for 10 years and beyond is bound to be inaccurate, the trends of credible modelling are none-the-less clear and consistent and give cause to err on the side of caution when allocating assistance.

[6] The ROAM and ACIL modelling seems generally consistent with other industry modelling (and consistent with a recent IES assessment of the White Paper modelling results made under engagement to the NGF). However the MMA modelling seems an outlier and should not form a basis for allocation of assistance.

[7] White Paper, Chapter 13, pg13-11 "The Government concluded that providing direct assistance to the most adversely impacted asset owners reduces the likelihood that the Scheme would increase assessments of the risk of investing in the Australian electricity generation sector."

confused as to how new investments might be treated in the event of future economic reform. Additionally, the 0.86 cut-off intensity level arrived at in the White Paper and embedded in the exposure draft legislation has little significance to the Western Australian context. It is the brown coal generators of the NEM that most influence this figure.

The Western Australian Context

Griffin wishes to bring to the attention of the Inquiry some specific issues relating to the impacts of the CPRS and the application of the ESAS in Western Australia. The WA Electricity Market (WEM) is significantly different to the NEM. The WEM is a capacity and energy market, rather than being an energy only market. Importantly, it is a net pool market rather than the gross pool market of the NEM. This means that the overwhelming majority of energy is traded under bilateral contracts[8]. This leads to a very important outcome when developing and financing new generation plant. Without a liquid energy market, or even a credible signal as to what the clearing price of a market might look like, a generation developer is required to underpin the financing of the plant with a long term bilateral offtake contract with a creditworthy counterparty. That is, there are no 'merchant energy' plants in the WA market[9]. In order to develop a new coal fired generator, a capital intensive plant, the developer must first secure a long term offtake contract, typically in excess of 15 years. So instead of the impacts of the CPRS being modelled based on a real-time gross pool market (using historic electricity prices and the associated pass through of carbon costs applicable to each generator, where plants of differing emissions intensity compete to dispatch energy with differing comparative advantage – as is the case in the NEM), assessing the impacts of the CPRS in the WEM necessarily requires an understanding of long term bilateral contracts struck well before any policy position of the current government was known[10]. However the Treasury modelling does not recognise this. Treasury modelling has assumed the same market conditions as exist in the NEM – and has based its forecast of likely impacts on these assumptions. These forecasts bear no resemblance to reality. In reality, it is likely that bilateral counterparties, in anticipation of some form of regulatory intervention in this area, would have included contractual provisions for dealing with carbon risk. It is intuitive however, that absent any indication of how this risk may eventuate (i.e. without knowledge of the final carbon pricing scheme), such provisions would be unlikely to appropriately apportion this risk. Considering that contracts would have been struck at a time when the overarching local commentary around compensation to existing assets centred on the concept of a 'disproportionate loss of asset value'; and the only other experience in the treatment of existing generators under an emissions trading regime was in the EU where 95% of a generators expected output was grandfathered, it might be concluded that contracts were entered into on an implicit understanding (and risk analysis) that generators faced some form of regulatory relief from the full effects of carbon prices. Griffin's Bluewaters unit 1 and unit 2 fall squarely into this category, with several contracts of 15 years duration (or greater)

[8] Historically, around 95% of the energy traded in the WEM is done through bilateral contracts, with around 2% traded in a spot market and the remainder in the balancing market. Also, 100% of capacity is traded bilaterally.
[9] At least there are no 'energy producing' plants financed on a merchant basis. The contrived capacity market makes it possible for plants that are unlikely to produce a lot of energy (and hence emissions), such as liquid fired peaking plant, to be financed on the merchant risk associated with a long term forecast of the administered capacity price.
[10] As discussed, a coal fired generator is unlikely to be financed until a significant offtake contract is executed. Since it takes around 3-5 years to gain approvals and construct a coal fired power station; and the current Government was elected in November 2007, then bilateral contracts would have been negotiated well before any CPRS policy position became known. In fact, it is likely they would have been agreed before the 03 June 2007 cut off date where the former Government finally committed to an ETS.

entered into prior to any indication on the current Government's policy position with regard to assistance to strongly affected industries. Griffin believes that the Government must address the discrepancy of treating Western Australian generators in the same manner as those in the NEM.

There is an additional aspect specific to the Western Australian context that should be highlighted to policy makers. The WEM is an 'energy island'; that is, not interconnected to any other electricity system. As such, the WEM needs to be self sufficient when managing its long term system security. The WEM is also characterised by a high reliance on gas relative to other Australian jurisdictions[11]. The gas fuel used to generate electricity is sourced primarily from gas fields 1,600km away and connected to the south west by a single pipeline[12] (the DBNGP). These fields are mostly controlled by international oil and gas majors, with a predominant focus on the export LNG market. There are two important points to make from this scenario. The first is that wholesale electricity prices have traditionally remained competitive as coal and gas fired generation compete with each other. Competition between these fuel types typifies many energy markets. A reduction in the competitiveness of coal fired power or an inability to attract adequate investment to replace aging coal assets as they retire may reduce the competitive tension on prices. This may not be so problematic if there was a competitive domestic gas market; however this does not exist in WA to any great extent and – with the continued push to LNG exports – is unlikely to materialise in the near future. The second, more important issue is that the WEM is already exposed to significant security of supply risk, evidenced in 2008 by the Varanus Island explosion in June[13] and the North West Shelf JV supply interruption in January. While there will be an increase in renewable generation capacity in the coming decade, this is unlikely to be capable of offsetting any significant decrease in the proportion of capacity supplied by coal generation in the context of maintaining security of supply in the event of a significant gas curtailment. Much of Verve Energy's existing coal fleet consists of aging assets. Muja AB (240MW) was scheduled to be closed in 2007 (though was brought back into service after the Varanus incident) and is currently mothballed. A further 240MW (Kwinana A) is scheduled to be retired next year. Of the remaining coal fired plant, Kwinana C (400MW) was commissioned in 1978, Muja C (400MW) in 1981 and Muja D (454MW) in 1986. Only the Collie power station (340MW) is a relatively new coal asset, commissioned in 1999. This means that, unless replaced[14], the proportion of coal capacity in the market will decline over the coming decade[15]. A significant loss of gas supply to an electricity network with up to 70% or 80% reliance on gas fired generation would cause a catastrophic loss to the economy. So while one of the principle goals of the CPRS is to ultimately replace emission intensive generation assets (i.e. coal) with low or zero emission technology, the long lead times required to change the fundamental makeup of an energy market, coupled with the WEM being an energy island with an inherently high reliance on gas, makes the WA scenario a tricky policy issue. The ability of developers to continue to invest in coal fired assets, either conventional or clean coal technology, is very much impacted by the perception of regulatory risk faced by equity

[11] Approximately 60% of installed capacity is gas fired (or dual fuel). Additionally, much of the (non electrical) energy requirements of the heavy industry base in the south west of the state is reliant on gas.
[12] The Goldfields gas pipeline supplies a small amount of gas fired generation in the Kalgoorlie region.
[13] The WACCI estimates the eventual likely cost of this loss of gas supply, equal to around 30% of the domestic gas market, at around $6.7 billion.
[14] Griffin's Bluewaters unit 1 and unit 2, with a capacity of 416MW, falls short of replacing the 480MW of imminently retiring Verve plant (Muja AB and Kwinana A). Also, the higher relative efficiency of the new replacement plant serves to reduce the overall system emissions factor.
[15] The proportion will decline even if replaced, as continued load growth is met by new gas plant and/or renewables.

and debt providers. If, for instance, the current ESAS position contained in the exposure draft legislation remains and little or no assistance is offered to affected black coal generators in WA – which have long term contracts (struck prior to the Government's current policy position was known) that lock in significant equity losses; and which face the possible breaching of debt covenants that will likely lead to a further erosion in equity value – then those black coal developers will be required to convince the same debt and equity providers to again invest in generation assets in the WA market, based on an article of faith that the investments will not be similarly impaired by further economic reform or Government intervention in what is normally a very well understood investment sector. While willing offtake counterparties might be accessible[16], commercially viable finance simply may not be available.

Griffin has been an active participant in the robust consultation process that has so far preceded the release of the CPRS exposure draft legislation. We have a significant stake in ensuring that the design and implementation of the CPRS leads to efficient outcomes that are in the best interests of Australia and that specifically do not result in unintended impacts on Western Australia. We intend to continue to be actively involved in further consultation between government and industry. Should you have any questions regarding our comments, please contact: Shane Cremin, GM – Policy & Strategy, Griffin Energy, 08 9261 2908.

Yours sincerely

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Wayne Trumble
EGM – Power Generation

[16] Retailers with large supply obligations will be seeking to reduce their contracted exposure through diversification of fuel supply where possible.