Mr John Pierce Chairman Australian Energy Market Commission PO Box A2449 SYDNEY SOUTH NSW 1235

Dear Mr Pierce,

Thank you for the opportunity to provide comment on the Australian Energy Market Commission's (AEMC) Issues Paper 'Energy Market Arrangements for Electric and Natural Gas Vehicles'.

The Energy Markets and Programs Division (the Division) believes that Electric Vehicles (EV) will offer a range of economic and environmental benefits that some consumers will be willing to pay for. The Division is mindful that the increased load as a result of charging EVs could potentially exacerbate peak demand issues currently experienced in South Australia primarily during Summer periods. The severity of these effects will largely depend on the uptake of EVs across the National Electricity Market (NEM) and South West Interconnected System (SWIS).

The Issues Paper includes a forecast of uptake of EVs in the NEM and SWIS as a proportion of new car sales which suggests that uptake will rise from 2% in 2015 to approximately 44% by 2030 under a central scenario.

We would question the extent of the uptake under the central scenario modelling, particularly when it is also not clear whether EV uptake takes into account continual improvement in conventional liquid-fuel vehicle becoming more fuel-efficient (and therefore more appealing) and whether other technologies (such as hydrogen vehicles) would make an impact.

A restrained uptake of EVs would reduce concerns regarding any immediate adverse impact on the security and reliability of the network. Furthermore, in the event of a high uptake of EVs we note they would be but one of a variety of loads that would influence a customer's electricity usage patterns. Other loads, such as air-conditioners and small scale solar generation are already changing consumer's electricity demand.

Therefore, any decision to introduce pricing regimes to manage a consumer's electricity demand profile should not focus solely on EVs, rather such work should take all emerging pressures into account.

That said, we would support working with Distribution Network Service Providers to ensure suitable incentives are developed in the short term for EV owners to primarily recharge during off-peak periods.

On the issue of commercial charging, the Division considers this to be a form of on-selling of electricity. Under the provisions in the National Energy Customer Framework, they would need to apply to the Australian Energy Regulator for an exemption from the requirement to hold a national retailer authorisation.

The Division does not have any significant comments to add regarding Natural Gas Vehicles although we agree with modelling that forecasts low uptake.

In conclusion, the Division welcomes the uptake of electric vehicles but considers any reforms to manage the electricity demand of these vehicles should be considered as part of a wider review into emerging pressures on the NEM. Should you wish to discuss this submission please contact Ms Rebecca Knights, Director Energy Markets, Energy Markets and Programs Division on (08) 8204 1715.

Yours sincerely,

Vince Duffy

Æxecutive Di∕rector

Energy Markets and Programs Division

Resources and Energy Group

March 2012