



29 September 2011

Senator the Hon John Hogg
President of the Senate
Parliament House
Canberra ACT 2600

Via email: senator.hogg@aph.gov.au

Dear Mr President

Lock the Gate submission to the Senate Inquiry into the management of the Murray-Darling Basin

A number of Australian Petroleum Production and Exploration Association (APPEA) members and APPEA itself have made submissions and given evidence to the Senate Rural Affairs Inquiry into the management of the Murray Darling Basin. As part of our participation in the Committee's activities, we have carefully reviewed the submissions and evidence of other parties.

While we do not agree with some of the evidence provided to the Committee, we accept that that evidence has been provided in good faith and represents the views and opinions of the parties who have provided it.

However, we are concerned that the submission made by the Lock the gate Alliance Inc. (LTGA) misrepresents the views of a third party. In their submission, LTGA refers to a study undertaken by Cornell University (Cornell).

This study sought to measure the life cycle greenhouse emissions of shale gas in the US and is not relevant to either shale or coal seam gas in Australia. The LTGA submission draws heavily on the Cornell study, to the extent that it transcribes parts of the Cornell study into the submission (largely without appropriate reference).

Our concern is that in making this transcription from the Cornell study, the LTGA has substituted the words "coal seam gas" for the words "shale gas" as used in the Cornell study and inferred a direct relevance with coal seam gas extraction in Australia. We have attached a comparison between excerpts from the Cornell study and the LTGA submission to the Committee to highlight the changes that have been made to the Cornell study in the LTGA submission.

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There are a number of technical differences between the extraction of methane from coal seams in Australia and the extraction of methane from shale in the US. The inaccurate use of the Cornell study could lead individuals and the Committee to believe that the emissions attributed to “shale gas” in the Cornell study are the same as for the Australian gas industry.

The lifecycle greenhouse emissions of all gas extracted in Australia are measured and reported by the Australian Energy Market Operator which was established by the Council of Australian Governments. Their report *Fuel resource, new entry and generation costs in the NEM*¹ details lifecycle greenhouse emissions associated with every power station in Australia and shows that the coal seam gas powered Darling Downs plant in Queensland is some 73% cleaner than brown coal powered Hazelwood plant in Victoria.

The LTGA have now publicly conceded that they got this wrong and that their submission was misleading (please see attached articles that appeared on 21 September 2011 in the Brisbane Courier Mail and the Sydney Morning Herald).

We ask that the LTGA submission not be allowed to shape the findings of the Committee in any way.

APPEA and its members look forward to your response on this important matter.

Yours sincerely



Belinda Robinson
Chief Executive

¹ <http://www.aemo.com.au/planning/419-0035.pdf>, see tables from p 31 onward

Attachment: Comparison between Lock the Gate submission and Cornell University Study

<p><i>Lock the Gate Alliance submission 225 to the Senate inquiry into the management of the Murray Darling Basin</i></p>	<p><i>Methane and the greenhouse-gas footprint of natural gas from shale formations, Robert W. Howarth, Renee Santoro, Anthony Ingraffea</i></p>
<p>Page 9</p> <p>The GHG footprint of coal seam gas consists of the direct emissions of CO₂ from end-use consumption, indirect emissions of CO₂ from fossil fuels used to extract, develop, and transport the gas, and methane fugitive emissions and venting.</p>	<p>Page 2</p> <p>The GHG footprint of shale gas consists of the direct emissions of CO₂ from end use consumption, indirect emissions of CO₂ from fossil fuels used to extract, develop, and transport the gas, and methane fugitive emissions and venting.</p>
<p>Page 9</p> <p>Summing all estimated losses, during the life cycle of an average coal seam gas well, 3.6 to 7.9% of the total production of the well is emitted to the atmosphere as methane. This is at least 30% more and perhaps more than twice as great as the life-cycle methane emissions estimated for conventional (natural) gas of 1.7% to 6%.</p>	<p>Page 7</p> <p>Summing all estimated losses, we calculate that during the life cycle of an average shale-gas well, 3.6 to 7.9% of the total production of the well is emitted to the atmosphere as methane (Table 2). This is at least 30% more and perhaps more than twice as great as the life-cycle methane emissions we estimate for conventional gas, 1.7% to 6%.</p>
<p>Page 9</p> <p>Methane dominates the GHG footprint for coal seam gas on a 20-year time horizon, the one we should be most concerned about given the urgent need to reduce emissions. At this time scale, the GHG footprint for coal seam gas is 22% to 43% greater than that for conventional gas.</p>	<p>Page 8</p> <p>Methane dominates the GHG footprint for shale gas on the 20-year time horizon, contributing 1.4- to 3-times more than does direct CO₂ emission (Fig. 1a). At this time scale, the GHG footprint for shale gas is 22% to 43% greater than that for conventional gas.</p>