

Mr Clayton Barr, MP
Chair
Legislative Assembly Committee on Environment and Planning
NSW Parliament House
6 Macquarie Street
Sydney NSW 2000

18 October 2023

Dear Chair,

Minerals Legislation (Offshore Drilling and Associated Infrastructure Prohibition) Bill 2023

Advent Energy welcomes this opportunity to respond to a Question on Notice taken during public hearings held on 9 October 2023 and two supplementary questions asked by letter on 11 October 2023.

Question on Notice: Willingness of other States to meet NSW gas needs

During the hearings, as recorded on page 36 of the Hansard, I made reference to comments from the South Australian and Queensland governments on the willingness of their states to provide New South Wales' gas needs.

I undertook to provide those comments.

On 4 November 2022, South Australian Minister for Energy and Mining Tom Koutsantonis said:

- "... in the middle of a national energy crisis you've got the NSW government deflecting and blaming everyone but themselves. Why should other states have to solve their problem?"

Those comments were reported here: [SA calls NSW go-slow on Narrabri gas a "national disgrace" \(afr.com\)](#)

On 20 October 2022, Minister Koutsantonis said:

- "This government will not participate in allowing governments like NSW to lock up their resources and then demand that our community, that our state, will send our gas away from customers – who got the exploration in, who got the investment in to meet their needs – because they don't have the courage to do what we did."

Those comments were reported here: [South Australia won't supply gas to NSW during shortages, minister warns | The Guardian](#)

On 29 November 2022, Queensland Premier Annastacia Palaszczuk was quoted by AAP as saying:

- "Queensland is always doing the heavy lifting and we need to make sure that if there are any, any steps by the Commonwealth in this direction that Queenslanders are fully compensated."
- Ms Palaszczuk suggested NSW and Victoria could "open up some of their gas fields" to curb supply issues in the south.

That article can read here: ['Hands off our generators': Qld premier | Newcastle Herald, NSW](#)

Supplementary questions

On 11 October you write to us to ask two supplementary questions.

Some of the language and phrasing in your submission might be interpreted as intended any gas resource from PEP-11 for onshore, domestic consumption. Given that currently more than 70% of Australia gas extracted is sold to international markets, do you currently have an intended market from any PEP-11 gas extracted?

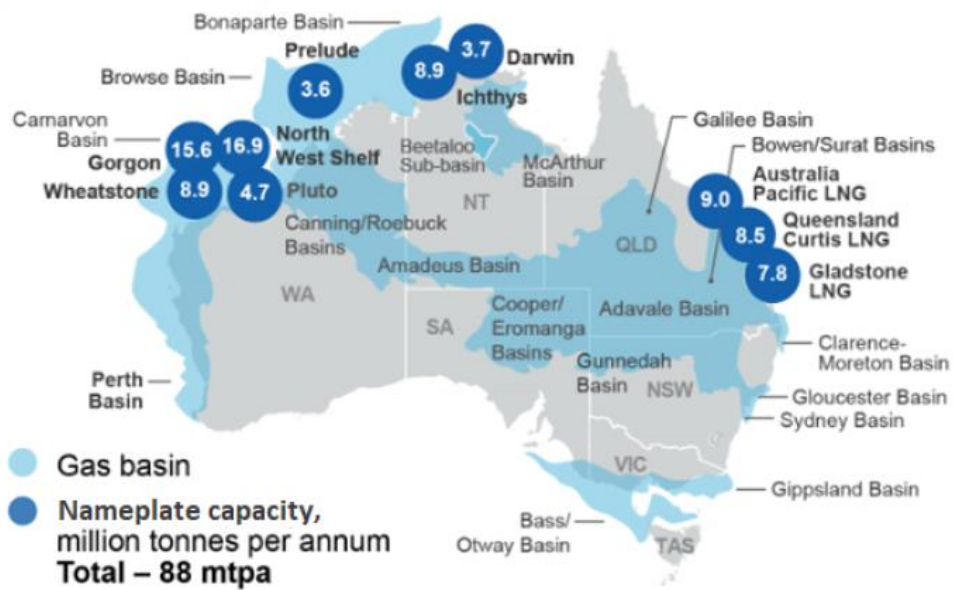
- Advent Energy has stated on several occasions, including in our submission to the ADGSM <https://consult.industry.gov.au/securing-australias-domestic-gas-supply/submission/view/9> that it is our intention to supply any gas produced from the PEP-11 permit to the Australian domestic market. We have no plans to export gas any produced in the permit area.

At page 12 of your submission, paragraph 2, you state that "the Offshore Sydney Basin is a proven gas basin". Given that there is currently no commercial extraction of gas from this immediate PEP-11 precinct, what does this turn of phrase mean?

- Extensive geoscience worked conducted offshore New South Wales, including by Geoscience Australia, CSIRO, Santos and Ampolex has estimated there is a significant gas resource offshore NSW. Tim Berge has estimated that the prospective recoverable gas resource offshore the Hunter region at 5.7 Trillion Cubic Feet – potentially enough gas to provide clean energy to NSW people and businesses for over 20 years. The DISR 'Future Gas Strategy consultation paper' provided to you in the hearing includes a map ,at page21, (below) extracted from a current DISR quarterly report showing the gas basins of Australia which illustrates the Offshore Sydney Basin as a proven gas basin.

We have also included a paper on the Offshore Sydney produced by the CSIRO and released on ASX. (Attached)

Figure 11: LNG projects and gas basins⁴⁴



⁴³ DISR, [Resources and Energy Quarterly June 2023](#).

⁴⁴ DISR, [Resources and Energy Quarterly June 2023](#).

We thank you for the opportunity to provide this additional information.

Advent Energy would be available at any reasonable time to discuss these responses with the Committee.

If you require further information, please contact me on [REDACTED] or at [REDACTED]

Yours sincerely,

[REDACTED]

David Breeze
 Executive Director



BPH Corporate Ltd

12 May 2010

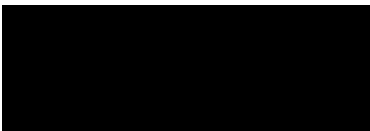
Companies Announcements Office
Australian Securities Exchange Limited
[REDACTED]
SYDNEY NSW 2000

Dear Sir/Madam

Advent Energy Update

A technical update for BPH investee Advent Energy Ltd is attached.

Yours sincerely,



David Breeze
Chairman

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12 May 2010

Companies Announcement Office
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SYDNEY NSW 2000

Dear Sir,

CSIRO STUDY – PRESENTATION TO EUROPEAN GEOSCIENCES UNION

MEC Resources (ASX:MMR) is pleased to advise that a study by its investee Advent Energy Ltd and CSIRO regarding the PEP11 offshore Sydney Basin project has resulted in publication and presentation of information at the European Geosciences Union General Assembly 2010 in Vienna, Austria.

The presentation, by Dr Asrarur Talukder, has been provided in the session discussing Fluid Flow in Continental Margins.

A copy of the abstract, reproduced from <http://meetingorganizer.copernicus.org/EGU2010/EGU2010-6262.pdf> is attached to this announcement.

Importantly, the study describes a laterally extensive prominent reflector that presents reverse polarity with respect to the seafloor seismic reflection. This indicates a widespread horizon that potentially represents an accumulation of hydrocarbons.

Further interpretation of the seismic data was undertaken in the study to determine whether the anomalous feature could be attributed to causes other than gas:

“AVO analysis and subsequent inversion of selected seismic lines show that some parts of the reversed polarity are characterized by bright spots, especially on the hanging wall side of the major faults, caused by the presence of gas.”

Significantly for Advent's forward exploration program, the investigation has determined that a prominent stratigraphic horizon has revealed direct hydrocarbon indications in the seismic data analysis due to the interpreted presence of gas.

Executive Director, David Breeze, commented: “In our view, this publication and presentation demonstrates the significant potential of Advent Energy's PEP11 project. The identification of this gas presence indication reduces a key geological risk for our exploration program, due to commence in the third quarter this year.”

Yours faithfully,

[REDACTED]
David Breeze
Executive Director
MEC Resources Ltd

Media Enquiries:

[REDACTED]

About MEC Resources

ASX listed MEC Resources (ASX: MMR) invests into exploration companies targeting potentially large energy and mineral resources. The Company has been registered by the Australian Federal Government as a Pooled Development Fund enabling most MEC shareholders to receive tax free capital gains on their shares and tax free dividends.

About Advent Energy

Advent Energy Ltd is an unlisted oil and gas exploration company, held by major shareholders MEC Resources (ASX: MMR), BPH Corporate (ASX: BPH) and Ta bot Group Holdings. Advent holds a strong portfolio of exploration and near-

term production assets throughout Australia. Advent's cornerstone project lies off the coast of NSW in Petroleum Exploration Permit 11 (PEP11), and comprises gas prospects of multi-Tcf capacity. Advent Energy's wholly owned subsidiary Asset Energy Pty Ltd will increase its interest from 25% to 85% of PEP11 by drilling the first well. Bounty Oil and Gas (ASX:BUY) will thereby reduce their interest from 75% to 15%.

Notes:

In accordance with ASX listing requirements, the geological information supplied in this report has been based on information provided by geologists who have had in excess of five years experience in their field of activity.

MEC is an exploration investment company and relies on the resource and ore reserve statements compiled by the companies in which it invests. All Mineral Resource and Reserve Statements have been previously published by the companies concerned. Summary data has been used. Unless otherwise stated all resource and reserve reporting complies with the relevant standards. Resources quoted in this report equal 100% of the resource and do not represent MEC's investees' equity share.

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Significance of the basin wide reverse polarity reflector in the Offshore Sydney Basin, East Australian Margin

Asrarur Rahman Talukder (1), Dariush Nadri (1), Sanjeev Rajput (1), Ben Clennell (1), Cedric Griffiths (1), and David Breeze (2)

(1) CSIRO Earth Science and Resource Engineering (CESRE), Perth, Australia (asrar.talukder@csiro.au), (2) Advent Energy, Perth, Australia

The Offshore Sydney Basin is located between latitudes 32°30'S and 34°30'S between the coastal cities of Newcastle in the north and Wollongong in the south, covering a total area of ~15,000 square km. The structural framework of the offshore portion of the basin comprises five principal elements: the Offshore Syncline, an extension of the New England Fold Belt, an offshore extension of the Newcastle Syncline, the Offshore Uplift and the Outer Continental Shelf. The present easterly extent of the basin is the result of Cretaceous rifting and commencement of seafloor spreading in the adjacent Tasman Sea. The continental shelf is approximately 50 km wide offshore Sydney and is edged by relatively steep continental slope. This study has been carried out with 2D multichannel seismic data covering the northern half of the offshore basin.

The Cenozoic sedimentary cover of the basin is characterized by two regional unconformities: one at the base of Cenozoic and another intra-Cenozoic. The unconformity at the base of Cenozoic is known as the Top Sydney Basin unconformity. In places the surface is displaced by faults and also characterized by possible mounds producing an overall highly irregular topography. Though most of the faults remained buried beneath the surface some continued up to seafloor. They seem to have NW-SE direction with significant lateral extension.

The intra-Cenozoic unconformity forms a prominent reflector at about 80 to 200 msbs (TWT). It is characterized by an angular unconformity with the reflectors terminating onto it from beneath. It is also associated with prograding sequences beneath, terminating with toplap geometry, suggesting that it forms the boundary between a transgressive and regressive phase. This is interpreted as a prograding carbonate dominated shelf-edge. The most interesting aspect of this seismic reflector is that the major part of it presents reverse polarity with respect to the seafloor reflection. The amplitude of the reflector changes laterally and is characterized by patches of high amplitude (bright spots). Contour mapping shows that this reverse polarity reflector is continuous and regionally distributed. The depth of the reflector with respect to the sea surface is too shallow to be a BSR, typically caused at the interface between hydrate containing sediments above and free gas below. Reverse polarity is a common indicator of the accumulation of hydrocarbons. However, alternatively in such shallow depth it can also be caused by the presence of a soft sediment layer. Another important point to note is that no chimney or any other gas escape features have been observed in the vicinity originating from the reverse polarity reflector. However, in the adjacent continental slope, giant pockmarks have been observed on the bathymetry data. They most probably originated from gas sources in Permian coal measures. In order to understand what is causing this reverse polarity further quantitative analysis such as AVO and inversion has been done.

AVO analysis and subsequent inversion of selected seismic lines show that some parts of the reversed polarity are characterized by bright spots, especially on the hanging wall side of the major faults, caused by the presence of gas. The stratigraphic position of the reflector suggests that the anomalous horizon could have been formed during the low-stand that followed the high-stand progradation event seen on dip sections. The gas accumulation could then be associated with "back reef" carbonates that during the low stand have been subjected to karstification causing the gas entrapment in vugular pore spaces.