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Committee Secretary
Senate Select Committee on Fuel and Energy
PO Box 6100
Parliament House
Canberra ACT 2600

AGEA's View on the Impact of Recommendations of the Henry Tax Review

The Australian Geothermal Energy Association (AGEA) is the national industry body representing the major geothermal energy explorers, developers and equipment and service providers.

AGEA is pleased to comment on the impact of the Recommendations of the Henry Tax Review on our industry. In doing so AGEA notes that geothermal energy is possibly the only energy technology currently on the horizon in Australia or indeed, anywhere in the world with the following combination of national interest benefits:

- Massive world class resources dispersed throughout Australia
- Lowest cost generation technology (in a carbon constrained economy)
- Emissions free
- Baseload
- Integration with other technologies (e.g. solar and gas)
- Scalable (up to massive) for on and off grid projects
- Australian R&D leadership – jobs - export expertise
- Direct Use – massive potential to displace use of grid power, particularly in the Perth Basin
- Lowest environmental footprint per megawatt output

It is on this basis that AGEA believes that support for the early stages of the industry's development is in the national interest.

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AGEA's response to the specific questions asked by the Committee is as follows:

Question 1: *What is your assessment of the proposed 'Resources Super Profits Tax' (RSPT) on your field?*

The geothermal energy industry would have developed in Australia over time even without the imperative of climate change becoming a major national issue and driving force for the development of clean energy technologies. The global geothermal energy industry has been developing conventional geothermal projects for decades and the increasing refinement of deep drilling and reservoir creation technologies in the oil and gas industry would have ultimately been taken up by the geothermal industry to assist in the development of Enhanced Geothermal System (EGS or Hot Rock) and Hot Sedimentary Aquifer (HSA) projects. It is likely that the geothermal energy industry in Australia would have developed to supply power into mining operations across the country, particularly in the areas where we understand the geothermal resource to be world class. The imperative of climate change has added impetus to the industry's development here in Australia however the mining sector remains an important early customer for the industry, particularly in the absence of a broader policy framework and an effective level of public funding to grow the geothermal industry here in Australia.

While it is AGEA's understanding that the proposed RSPT will not apply to the geothermal energy sector, the industry is concerned about any dampening of activity in the broader mining industry as it will be an important early customer of geothermal energy. This is particularly the case in central South Australia and the Pilbara and Mid-West regions of Western Australia where geothermal energy is the ideal source of renewable energy for mining projects given its abundance and base load character.

Question 2: *Specifically what is your assessment of the impact of the 'Resource Super Profit Tax' on fuel and energy security in your field?*

The RSPT is unlikely to have a significant impact on fuel and energy security in the geothermal sector.

Question 3: *Specifically what is your assessment of the impact of the 'Resource Super Profit Tax' on jobs in your field?*

AGEA's members are concerned that any negative impact on development in the mining sector will have a dampening effect on their project development timelines and thus delay the capacity of the industry to develop projects and provide jobs.

AGEA produced a Report on employment in the geothermal sector in 2009 in conjunction with The WWF and with assistance from the Department of Primary Industries in South Australia entitled *Power to Change: Australia's Geothermal Future*. The Report predicted that the sector could be employing in the region of 17,300 people by 2050 and 3,800 by 2020. While most of these jobs can reasonably be expected to be associated with research and development activities in the

sector and projects that are not dependant on the demand from off grid or mining projects, it is reasonable to expect that there will be some impact on these jobs in the shorter term.

Question 4: How do you foresee the proposed resource exploration rebate (RER) impacting on your field?

This is the issue of most importance to the geothermal energy industry from the Henry Tax Review.

The geothermal energy industry believes that the proposed RER will provide important assistance to our industry but raises two concerns that will determine whether it is a major boost to the industry or in fact whether it will delay development in the industry.

Timing

At present the RER is due to commence on July 1 2011. This start date has major and serious implications for the industry at a precarious point in its development. In the aftermath of the Global Financial Crisis (GFC), the industry is finding it challenging to attract finance from the private sector. The geothermal resource remains untested in Australia at scale and investors have little or no appetite for risk post GFC. The major risk associated with geothermal projects is whether the resource can generate enough energy to produce a commercially competitive energy project. Investors and the industry see that it is the role of government to provide funds to offset that risk in the early stages of the industry's development here in Australia and yet the funding horizon is uncertain.

Further, most of the investors in geothermal companies are not expecting an immediate return and see advantages in investing in the early stages of the industry to either share in the early learnings or gain larger financial rewards over the longer term. The current policy environment does not reward those waiting for longer term rewards and in fact favours those seeking immediate rewards through the Renewable Energy Target (RET) Scheme.

A number of the leading companies now have joint venture agreements with other energy companies who have choices about where to spend funds for a quicker return and these decisions are outside of the control of the geothermal companies. Our members with these investors have warned that neither their own finances nor those of their investors/partners will be spent on any activity likely to gain a benefit from the proposed RER before July 1 2011. As most of the activity undertaken by the industry is considered to be in the exploration stage, little or no activity is likely to occur in the industry over the coming 12 months if the start date is not brought forward.

AGEA therefore seeks an immediate bringing forward of the commencement date to July 1 2010 in order to ensure that the unintended consequence of this important potential initiative is not added to the challenges faced by the industry is gaining investor support over the next 12 months and delay industry development.

Definition of Exploration Activity

Clarification around the definition of exploration activity is vital in order for the proposed RER to provide effective assistance to the geothermal industry.

Exploration activity in the geothermal sector is all activity prior to the commencement of commercial expansion or that point in the project where a reserve can be announced. Before that point a decision to expand to commercial scale development on the basis of the capacity of the available resource to support a commercially viable project is not made. The activity prior to this point would typically include traditional geoscience work, shallow drilling, deep drilling, rig mobilisation and demobilisation, proof of concept testing, demonstration drilling, reserves delineation drilling and reservoir enhancement testing . For a typical EGS or HSA project this can incur tens of millions of dollars in expenditure to get to this point with most of these funds being raised from the private sector.

Question 5: Do you have any other issues you wish to raise with the Committee about the recommendations set out in the Henry Tax Review and/or the Government's response to those recommendations?

The geothermal industry has no other comments about the recommendations set out in the Henry Tax Review.

AGEA appreciates the opportunity to contribute to the Committee's consideration of impact of the Recommendations of the Henry Tax Review and would be happy to discuss any part of this Submission or provide any further clarification or information should it be helpful to the Committee's consideration of the matters raised herein.

Yours sincerely

Susan Jeanes
Chief Executive