

Terms of Reference AGEG/TIG3 Induced Seismicity

Objective

Technical Interest Group 3 (TIG3) established under the Australian Geothermal Energy Group (AGEG) has a primary objective to deliver an informed understanding to AEGE, industry, government and the general community on the causes and management of the effects of induced seismicity relating to geothermal activities in Australia.

Goals

To deliver this objective the specific goals of TIG3 are to understand:

- *Causes of Induced Seismicity*: Including geo-mechanical parameters such as rock properties, natural seismicity, existing faults and stress regimes. Relationship between geo-mechanical parameters and reservoir creation or production activities such as injection rates during stimulation.
- *Consequences of Induced Seismicity*: Including assessment of seismic hazards triggered through human activity compared to hazards triggered by natural seismicity. This would incorporate understanding relationship between earthquake events and potential damage caused by subsequent ground shaking.
- *Mitigation of Induced Seismicity*: Including monitoring parameters such as ground acceleration or peak particle velocity (PPV) and establishment of suitable thresholds against these parameters to trigger mitigative controls where relevant.

Membership

Geothermal industry, AEGE members, relevant academic institutions, relevant industry bodies such as the Australian Earthquake Engineers Society and Commonwealth and State Government departments.

Modus of Operandi

TIG3 will seek to achieve its goals through:

- Co-ordinating and facilitating research on relevant topics in close consultation with industry, government and academic institutions.
- Co-ordinating and linking its research efforts with other national and international initiatives.
- Establishing where appropriate issue groups to address specific research topics. Membership of such issue groups can come from within and outside the TIG membership as appropriate.
- Supporting as appropriate external research projects consistent with the objective and goals of TIG3